



Rijksdienst voor Ondernemend  
Nederland

# *Nederland*

## *De industriële eigendom*

**Inleiding****Hoofdblad**

Het Hoofdblad de Industriële Eigendom verschijnt iedere donderdag op de website van het Octrooicentrum Nederland.

***Bezoekadres: Octrooicentrum Nederland***

Prinses Beatrixlaan 2

2595 AL Den Haag

Postadres:

Postbus 10366

2501 HJ Den Haag

Telefoon: 088-0424002

Bankrekeningnummer:

ING 0705001296

IBAN: NL41INGB070500129

BIC: INGBNL2A

**Introduction****Patent Bulletin**

The Patent Bulletin appears every Thursday on the Netherlands Patent Office website.

***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 0424002

Bank Account Number:

ING 0705001296

IBAN: NL41INGB070500129

BIC: INGBNL2A

| <b>Inhoudsopgave</b>                                                                                                                                                         | <b>Content</b>                                                                                                                                                               | <b>Blz./Page</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>Rubriek NP1</b><br>Nederlandse octrooiaanvragen die zijn ingeschreven ex Rijksoctrooiwet 1995.                                                                            | <b>Heading NP1</b><br>Netherlands patent applications which have been entered in the patent register ex NL Patent Law 1995.                                                  | 8                |
| <b>Rubriek NP2</b><br>Ingeschreven en verleende Nederlandse octrooien ex Rijksoctrooiwet 1995.                                                                               | <b>Heading NP2</b><br>Netherlands patents which have been entered in the patent register ex NL Patent Law 1995.                                                              | 12               |
| <b>Rubriek NP3</b><br>Nederlandse octrooien na gedeeltelijke afstand ex artikel 63 van de Rijksoctrooiwet 1995.                                                              | <b>Heading NP3</b><br>Netherlands patents after partial limitation ex Article 63 of the NL Patent Law 1995.                                                                  | 15               |
| <b>Rubriek EP1</b><br>Vertaalde conclusies van Europese octrooiaanvragen.                                                                                                    | <b>Heading EP1</b><br>Translations of the claims of European patent applications.                                                                                            | 16               |
| <b>Rubriek EP2</b><br>Voor Nederland verleende Europese octrooien.                                                                                                           | <b>Heading EP2</b><br>European patents granted for the Netherlands.                                                                                                          | 17               |
| <b>Rubriek EP3</b><br>Voor Nederland verleende Europese octrooien waarvoor een vertaling is ingediend ex artikel 52 lid 1 van de Rijksoctrooiwet 1995.                       | <b>Heading EP3</b><br>European patents granted for the Netherlands in which a translation was filed ex Article 52 par. 1 of the NL Patent Law 1995.                          | 203              |
| <b>Rubriek EP4</b><br>Voor Nederland verleende gewijzigde Europese octrooien.                                                                                                | <b>Heading EP4</b><br>European patents granted in amended form for the Netherlands.                                                                                          | 232              |
| <b>Rubriek EP5</b><br>Voor Nederland verleende gewijzigde Europese octrooien waarvoor een gewijzigde vertaling is ingediend ex artikel 52 lid 6 van de Rijksoctrooiwet 1995. | <b>Heading EP5</b><br>European patents granted in amended form for the Netherlands in which an amended translation was filed ex Article 52 par. 6 of the NL Patent Law 1995. | 233              |

|                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                            |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>Rubriek SPC</b><br>Aangevraagde en verleende aanvullende beschermingscertificaten (of de verlengingen van de aanvullende beschermingscertificaten).                                                    | <b>Heading SPC</b><br>Applications and granted Supplementary Protection Certificates (or the extensions of the Supplementary Protection Certificates).                                                                                                                     | 234 |
| <b>Rubriek VB1</b><br>Herstelverzoeken, bezwaarschriften, beroepschriften of hoger beroepschriften ingediend ex Rijksoctrooiwet 1995. Oppositie(s) ingediend ex Europees Octrooiverdrag.                  | <b>Heading VB1</b><br>Requests for restoration and notices of objection, notices of objection to Court, notices of objection to appellate court ex NL Patent Law 1995. Opposition(s) filed ex European Patent Convention.                                                  | 235 |
| <b>Rubriek VB2</b><br>Beslissingen genomen op herstelverzoeken, bezwaarschriften, beroepschriften of hoger beroepschriften ex Rijksoctrooiwet 1995. Oppositie(s) beslissingen ex Europees Octrooiverdrag. | <b>Heading VB2</b><br>Requests for restoration and notices of objection, notices of objection to Court, notices of objection to appellate court ex NL Patent Law 1995 in respect of which a decision has been taken. Oppositon(s) decisions ex European Patent Convention. | 236 |
| <b>Rubriek MED</b><br>Overige mededelingen.                                                                                                                                                               | <b>Heading MED</b><br>Other communications.                                                                                                                                                                                                                                | 237 |
| <b>Rubriek VRV</b><br>Verval of nietigverklaring.                                                                                                                                                         | <b>Heading VRV</b><br>Lapse or annulment.                                                                                                                                                                                                                                  | 238 |
| <b>Rubriek VRB</b><br>Correcties op eerdere publicaties.                                                                                                                                                  | <b>Heading VRB</b><br>Corrections on earlier publications.                                                                                                                                                                                                                 | 260 |
| <b>Rubriek CO</b><br>Wijzigingen in het Nederlands Octrooiregister.                                                                                                                                       | <b>Heading CO</b><br>Changes in the Netherlands Patent Register.                                                                                                                                                                                                           | 261 |
| <b>Rubriek TVH</b><br>Topografieën van halfgeleiderproducten.                                                                                                                                             | <b>Heading TVH</b><br>Depots of topographies of semi-conductor products.                                                                                                                                                                                                   | 266 |

|                                                                                                                                                                                 |                                                                                                                                                                          |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>Rubriek UP1</b><br>Europese octrooien met<br>geregistreerde eenheidswerking.                                                                                                 | <b>Heading UP1</b><br>European patents with registered<br>Unitary Effect.                                                                                                | 267 |
| <b>Rubriek UP2</b><br>Europese octrooien met<br>geregistreerd verzoek ex. artikel 52a<br>Rijksoctrooiwet 1995 (herstel recht<br>op validatie).                                  | <b>Heading UP2</b><br>European patents with registered<br>request ex Article 52a NL Patent<br>Law 1995 (restoration of validation<br>right).                             | 272 |
| <b>Rubriek UP3</b><br>Europese octrooien met een<br>geaccepteerd verzoek ex. artikel 52a<br>Rijksoctrooiwet 1995 (herstel recht<br>op validatie) en complete validatie.         | <b>Heading UP3</b><br>European patents with accepted<br>ex Article 52a NL Patent Law 1995<br>(restoration of validation right) and<br>validation completed.              | 273 |
| <b>Rubriek UP4</b><br>Europese octrooien met een<br>geaccepteerd verzoek ex. artikel<br>52a Rijksoctrooiwet 1995 (herstel<br>recht op validatie) en geen complete<br>validatie. | <b>Heading UP4</b><br>European patents with accepted<br>request ex Article 52a NL Patent<br>Law 1995 (restoration of validation<br>right) and incomplete validation.     | 274 |
| <b>Rubriek UP5</b><br>Europese octrooien met een<br>afgewezen verzoek ex. artikel 52a<br>Rijksoctrooiwet 1995 (herstel recht<br>op validatie).                                  | <b>Heading UP5</b><br>European patents with rejected<br>request ex Article 52a NL Patent<br>Law 1995 (restoration of validation<br>right).                               | 275 |
| <b>Rubriek UP6</b><br>Europese octrooien met een<br>ingetrokken verzoek ex. artikel 52a<br>Rijksoctrooiwet 1995 (herstel recht<br>op validatie).                                | <b>Heading UP6</b><br>European patents with withdrawn<br>request ex Article 52a NL Patent<br>Law 1995 (restoration of validation<br>right).                              | 276 |
| <b>Rubriek Orde van<br/>Octrooigemachtigden</b><br><br>Inschrijvingen en uitschrijvingen ex<br>art. 27 lid 5 Uitvoeringsbesluit van de<br>Rijksoctrooiwet 1995.                 | <b>Heading Netherlands Institute of<br/>Patent Attorneys</b><br><br>Registrations and deregistrations ex<br>Article 27 par. 5 Patent Rules of the<br>NL Patent Law 1995. | 277 |

## Overzicht van Inid codes

### INID CODES

"INID" codes worden gebruikt op het voorblad van octrooigeschriften en in octrooibulletins. INID is een acronym van Internationally agreed Numbers for the Identification of Data. De definities van INID codes worden gegeven in WIPO standaard ST. 9 (situatie van juni 2023) en staan hieronder weergegeven.

- (11) Octrooinummer
- (13) Soort document volgens WIPO standaard ST.16
- (15) Informatie over correctie van het octrooi
- (21) Octrooiaanvraagnummer
- (22) Datum (datums) van indiening van de aanvra(a)g(en)
- (23) Overige datums
- (25) Taal waarin de gepubliceerde aanvraag oorspronkelijk werd ingediend
- (26) Taal waarin de aanvraag is gepubliceerd
- (30) Voorrangsgegevens
- (31) Nummer(s) toegekend aan de voorrangs aanvra(a)g(en)
- (32) Datum (datums) van indiening van de voorrangs aanvra(a)g(en)
- (33) WIPO Standard ST.3 code die het land van herkomst identificeert dat het nummer van de voorrangs aanvraag toekent; voor internationale octrooiaanvragen die onder de PCT worden ingediend, wordt de code "WO" gebruikt.
- (34) Voor indieningen van voorrangs aanvragen onder de regionale of internationale regelingen, duidt de WIPO Standard ST.3 code ten minste één land aan dat is aangesloten bij het Unieverdrag van Parijs waarvoor de regionale of internationale aanvraag werd ingediend (het oorspronkelijke land van indiening).
- (40) Datum (datums) van inschrijving van de aanvraag.
- (41) Datum van inschrijving van een niet onderzochte en niet verleende octrooiaanvraag
- (42) Datum van inschrijving van een onderzochte octrooiaanvraag.

### INID CODES

"INID" Codes are used on the front pages of patent documents and in official gazettes. "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 June 2023) and are listed below.

- (11) Patent number
- (13) Kind-of-document code according to WIPO standard ST.16
- (15) Patent correction information
- (21) Application number
- (22) Date(s) of filing the application(s)
- (23) Other date(s)
- (25) Language in which the published application was originally filed
- (26) Language in which the application is published
- (30) Priority Data
- (31) Number(s) assigned to priority application(s)
- (32) Date(s) of filling of priority application(s)
- (33) WIPO Standard ST.3 code identifying 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) For priority filings 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) Date(s) of making available to the public.
- (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) 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.

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(43) Datum waarop de octrooiaanvraag is gepubliceerd.</p> <p>(44) Datum van publicatie van een onderzochte octrooiaanvraag die nog niet verleend is.</p> <p>(45) Datum waarop het octrooigeschrift is uitgegeven.</p> <p>(47) Datum van verlening van het octrooi.</p> <p>(48) Datum waarop een correctie van een octrooi is uitgegeven.</p> <p>(51) Internationale Octrooi classificatie</p> <p>(54) Korte aanduiding</p> <p>(62) Nummer en indien mogelijk, de indieningsdatum van de eerdere (octrooi) aanvraag waarvan de voorliggende (octrooi) aanvraag is afgesplitst.</p> <p>(68) Nummer van het basisoctrooi behorende bij het ABC.</p> <p>(71) Na(a)m(en) van de aanvrager(s)</p> <p>(72) Na(a)m(en) van de uitvinder(s) indien ze als zodanig bekend zijn</p> <p>(73) Na(a)m(en) van de octrooihouder(s)</p> <p>(74) Na(a)m(en) van de gemachtigde(n)</p> <p>(75) Na(a)m(en) van uitvinder(s) die tevens aanvrager(s) zijn</p> <p>(81) Aangewezen landen volgens de PCT</p> <p>(83) Informatie over depots van micro-organismen</p> <p>(84) Aangewezen landen bij regionale octrooien</p> <p>(92) Nummer en datum van de eerste nationale vergunning voor een ABC voor een geneesmiddel of gewasbeschermingsmiddel.</p> <p>(93) Nummer en datum (en indien van toepassing land van oorsprong) van de eerste EU vergunning voor een ABC voor een geneesmiddel of gewasbeschermingsmiddel.</p> <p>(94) Berekende expiratedatum van het ABC.</p> <p>(95) Het product beschermd door het basisoctrooi en waarvoor (de verlenging van) het ABC is aangevraagd of verleend.</p> | <p>(43) Date of making available to the public by printing or similar process of an unexamined patent document, on which no grant has taken place on or before the said date.</p> <p>(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.</p> <p>(45) Date of making available to the public by printing or similar process of a patent document on which grant has taken place on or before the said date.</p> <p>(47) Date of making available to the public by viewing, or copying on request, a patent document on which grant has taken place on or before the said date.</p> <p>(48) Date of issuance of a corrected patent document.</p> <p>(51) International Patent Classification</p> <p>(54) Title of the invention</p> <p>(62) Number and, if possible, filing date of the earlier application from which the present document has been divided out.</p> <p>(68) For an SPC, number of the basic patent and/or, where appropriate, the publication number of the patent document.</p> <p>(71) Name(s) of the applicant(s)</p> <p>(72) Name(s) of the inventor(s) if known to be such</p> <p>(73) Name(s) of grantee(s), holder(s), assignee(s) or owner(s)</p> <p>(74) Name(s) of the attorney(s) or agent(s)</p> <p>(75) Name(s) of inventor(s) who is (are) also applicant(s)</p> <p>(81) Designated States(s) according to the PCT</p> <p>(83) Information concerning the deposit of microorganisms</p> <p>(84) Designated Contracting States under regional patent conventions</p> <p>(92) For an SPC, number and date of the first national authorization to place the product on the market as a medicinal product or plant protection product.</p> <p>(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 or plant protection product within a regional economic community.</p> <p>(94) Calculated date of expiry of the SPC or the duration of the SPC.</p> <p>(95) The product protected by the basic patent and in respect of which the SPC or the extension of the SPC has been applied for or granted.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Rubrieken/Headings

### NP1

#### Nederlandse octrooiaanvragen die zijn ingeschreven ex Rijsoctrooiwet 1995. Netherlands patent applications which have been entered in the patent register ex NL Patent Law 1995.

|                                                                                                   |                                                                                                                                                     |                                                                                                               |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| (51) A01F 25/13                                                                                   | (71) Inner Mongolia Medical University                                                                                                              | B01D 53/78                                                                                                    |
| (21) 2035005                                                                                      | (74) dr. T. Wittop Koning PhD                                                                                                                       | B01D 53/84                                                                                                    |
| (22) 06.06.2023                                                                                   | (72) Qin Na                                                                                                                                         | B01D 53/96                                                                                                    |
| (54) COVER SHEET AND METHOD FOR COVERING A FEED STACK                                             | Murilige Chao                                                                                                                                       | C01C 1/22                                                                                                     |
| (71) Jan Sake Bosch Holding B.V.                                                                  | Rihan Wu                                                                                                                                            | C01C 1/247                                                                                                    |
| (74) dr. ir. G.J.C. Verdijck c.s.                                                                 | Qila Sa                                                                                                                                             | C10L 3/10                                                                                                     |
| (72) Jan Sake Bosch                                                                               | Riguleng Si                                                                                                                                         | C12M 1/00                                                                                                     |
| (41) 12.12.2024                                                                                   | Zhi Gui                                                                                                                                             | B01D 53/52                                                                                                    |
|                                                                                                   | Qin Si                                                                                                                                              | (21) 2034980                                                                                                  |
| (51) A01G 18/70                                                                                   | (41) 12.12.2024                                                                                                                                     | (22) 02.06.2023                                                                                               |
| (21) 2035014                                                                                      | (51) A61B 90/53                                                                                                                                     | (54) METHOD FOR THE COMBINED REMOVAL OF HYDROGEN SULFIDE FROM A RAW GAS MIXTURE AMMONIA FROM A WASTE LIQUID   |
| (22) 06.06.2023                                                                                   | (21) 2034981                                                                                                                                        | (71) Bonno Koers                                                                                              |
| (54) Harvesting conveyor belt for mushrooms                                                       | (22) 02.06.2023                                                                                                                                     | (74) ir. F.A. Geurts c.s.                                                                                     |
| (71) Jacobus Alexander Jozef Lemmen                                                               | (54) Knee arthroscopy leg support arrangement                                                                                                       | (72) Bonno Koers                                                                                              |
| (74) ir. M. van der Velden                                                                        | (71) Tubantia Zeeland B.V.                                                                                                                          | (41) 11.12.2024                                                                                               |
| (72) Jacobus Alexander Jozef Lemmen                                                               | (74) ir. H.A. Witmans c.s.                                                                                                                          | (51) B05B 7/14                                                                                                |
| (41) 12.12.2024                                                                                   | (72) Jacob Siepko Luttjeboer                                                                                                                        | B05B 1/30                                                                                                     |
| (51) A01K 1/01                                                                                    | (41) 11.12.2024                                                                                                                                     | B05B 7/12                                                                                                     |
| (21) 1044622                                                                                      | (51) A61F 5/01                                                                                                                                      | B05B 12/00                                                                                                    |
| (22) 03.06.2023                                                                                   | (21) 2037884                                                                                                                                        | B05B 12/12                                                                                                    |
| (54) SPRINKLER SYSTEM FOR REDUCING AIRBORNE EMISSION OF NITROGEN FROM ANIMAL HUSBANDRY            | (22) 06.06.2024                                                                                                                                     | E04F 21/08                                                                                                    |
| (71) Maraxis B.V.                                                                                 | (54) Orthosis to avoid lateral patellar dislocations                                                                                                | B05B 7/24                                                                                                     |
| (74) Wijha B.V.                                                                                   | (71) Sebastian Debatin                                                                                                                              | B05B 13/06                                                                                                    |
| (72) Andrew Tokmakoff                                                                             | (74) O. Ridderbusch                                                                                                                                 | (21) 2035004                                                                                                  |
| Daan Velthausz                                                                                    | (72) Sebastian Debatin                                                                                                                              | (22) 06.06.2023                                                                                               |
| Herman ter Wijlen                                                                                 | (31) 20 2023 103 123.4                                                                                                                              | (54) Vulpistool voor het aanbrengen van isolatie in een spouwmuur                                             |
| Jan Hendrik Grootoonk                                                                             | (32) 06.06.2023                                                                                                                                     | (71) S. Nooijens Beheer B.V.                                                                                  |
| (41) 11.12.2024                                                                                   | (33) Germany                                                                                                                                        | (74) ir. A. Blokland c.s.                                                                                     |
| (51) A23L 19/00                                                                                   | (51) A61K 35/741                                                                                                                                    | (72) Henk Bakker                                                                                              |
| A23L 33/105                                                                                       | C12N 1/20                                                                                                                                           | Stefan Jozef Maria Nooijens                                                                                   |
| A61K 36/899                                                                                       | C12R 1/07                                                                                                                                           | (41) 12.12.2024                                                                                               |
| A23L 33/16                                                                                        | A61P 31/04                                                                                                                                          | (51) B29C 43/24                                                                                               |
| A23L 33/18                                                                                        | C12P 21/02                                                                                                                                          | B29C 43/46                                                                                                    |
| A61P 19/00                                                                                        | (21) 2038831                                                                                                                                        | B29C 33/30                                                                                                    |
| (21) 2037330                                                                                      | (22) 15.10.2024                                                                                                                                     | B29C 43/22                                                                                                    |
| (22) 26.03.2024                                                                                   | (54) STRAIN OF BACILLUS ALTITUDINIS AK BAC-1, CULTURE, FERMENTATION SUPERNATANT, BACTERIOCIN, ALONG WITH THEIR PREPARATION METHODS AND APPLICATIONS | (21) 2034982                                                                                                  |
| (54) FERMENTED BAMBOO SHOOT EXTRACT AND AMINO ACID CALCIUM COMPOSITION AND ITS USE IN BONE GROWTH | (71) Anhui Science And Technology University                                                                                                        | (22) 02.06.2023                                                                                               |
| (71) Mom's Garden GmbH                                                                            | (74) ir. W.J.J.M. Kempes                                                                                                                            | (54) System for producing a panel, method, and panel                                                          |
| (74) dr. T. Wittop Koning PhD                                                                     | (72) Zhenxiang Lu                                                                                                                                   | (71) I4F LICENSING NV                                                                                         |
| (72) Naeyoung Kang                                                                                | Yangyang Li                                                                                                                                         | (74) ir. H.Th. van den Heuvel c.s.                                                                            |
| (41) 12.12.2024                                                                                   | Guofa Zhong                                                                                                                                         | (72) Eddy Alberic Boucké                                                                                      |
| (51) A23L 33/105                                                                                  | Shenghe Li                                                                                                                                          | (41) 11.12.2024                                                                                               |
| A23L 2/60                                                                                         | Lei Li                                                                                                                                              | (51) B29C 45/17                                                                                               |
| A23L 2/52                                                                                         | Weina Guo                                                                                                                                           | B29C 45/14                                                                                                    |
| A23L 2/56                                                                                         | Chang Liu                                                                                                                                           | B29C 33/04                                                                                                    |
| A23L 2/68                                                                                         | Ruiqi Ye                                                                                                                                            | B29C 45/73                                                                                                    |
| (21) 2037409                                                                                      | (31) 202410408707.X                                                                                                                                 | B29C 45/78                                                                                                    |
| (22) 08.04.2024                                                                                   | (32) 07.04.2024                                                                                                                                     | (21) 2034976                                                                                                  |
| (54) Functional Beverage of Polygonatum Odoratum and Preparation Method Thereof                   | (33) China                                                                                                                                          | (22) 02.06.2023                                                                                               |
|                                                                                                   | (51) B01D 53/58                                                                                                                                     | (54) Method and system for pre-conditioning a mould cavity of a mould for encapsulating electronic components |



|                                               |                                             |                                    |
|-----------------------------------------------|---------------------------------------------|------------------------------------|
| (71) BESI NETHERLANDS B.V.                    | (33) China                                  | G16H 50/70                         |
| (74) ir. H.Th. van den Heuvel c.s.            | (51) C08J 11/24                             | G16H 50/30                         |
| (72) Joannes Leonardus Jurrian Zijl           | (21) 2034965                                | (21) 2037423                       |
| Wilhelmus Gerardus Joseph Gal                 | (22) 01.06.2023                             | (22) 10.04.2024                    |
| Sebastianus Hubertus Maria Kersjes            | (54) A PROCESS SUITABLE FOR                 | (54) CONSTRUCTION METHOD AND       |
| Albertus Franciscus Gerardus van Driel        | RECYCLING TEXTILE WASTE                     | APPLICATION OF ESOPHAGEAL          |
| Jan Roelofsen                                 | (71) CURE TECHNOLOGY BV                     | SQUAMOUS CELL CARCINOMA            |
| (51) B65H 19/28                               | (74) ir. P.J.P. Janssen                     | PROGNOSIS RISK PREDICTION          |
| (21) 2035131                                  | (72) Marco Brons                            | MODEL                              |
| (22) 20.06.2023                               | Layo van het Goor                           | (71) Tangshan People's Hospital    |
| (54) Web winding assembly for a roll printer  | Johan Albert Frans Kunst                    | (74) ir. W.J.J.M. Kempes           |
| (71) CANON PRODUCTION PRINTING                | Ramon Pragt                                 | (72) Dan Li                        |
| HOLDING B.V.                                  | (41) 11.12.2024                             | Jingwu Li                          |
| (74) ir. M.J. Groen                           | (51) C08L 67/04                             | Xuan Zheng                         |
| (72) Petrus H.G. Slabbers                     | (21) 2034975                                | Jun Zhang                          |
| Sidney J.L. Heslen                            | (22) 02.06.2023                             | Jiangong Wang                      |
| Lars H.L. Korsten                             | (54) Home compostable container             | Lei Wang                           |
| Kyra van den Ham                              | (71) The Water Company B.V.                 | Zhuo Wang                          |
| (41) 11.12.2024                               | (74) mr.ir. F.N. Ferro                      | Zhiwu Wang                         |
| (31) 23176813.6                               | (72) Marnix van Gurp                        | Xiaoru Zhang                       |
| (32) 01.06.2023                               | Martin Jean José Vrösch                     | Yufeng Li                          |
| (33) European Patent Office (EPO)             | Jozef Maria Hubertus Lemmens                | (31) 202310679266.2                |
| (51) C02F 1/00                                | Sjoerd Jan Bos                              | (32) 09.06.2023                    |
| A47J 31/00                                    | (41) 11.12.2024                             | (33) China                         |
| A47J 31/60                                    | (51) C09K 21/14                             | (51) C12Q 1/6888                   |
| B01F 21/00                                    | E21F 5/00                                   | (21) 2037668                       |
| B01F 33/501                                   | (21) 2038769                                | (22) 11.05.2024                    |
| C02F 1/44                                     | (22) 03.10.2024                             | (54) METHOD FOR PREDICTING THE     |
| C02F 1/68                                     | (54) NATURAL INHIBITION-                    | MILK PRODUCTION PERFORMANCE        |
| (21) 2035002                                  | EMULSIFICATION FOAM FOR                     | OF HOLSTEIN COWS BASED             |
| (22) 05.06.2023                               | SUPPRESSING SPONTANEOUS                     | ON MITOCHONDRIAL SINGLE            |
| (54) Drinking container for filtering water   | COMBUSTION OF COAL AND                      | NUCLEOTIDE POLYMORPHISMS           |
| (71) Vestal Holdings B.V.                     | PREPARATION METHOD THEREOF                  | (71) China Agricultural University |
| (74) ir. H.A. Witmans c.s.                    | (71) Hunan University of Science and        | (74) dr. J. van Straaten           |
| (72) Alexis Adrian Felipe Wadman              | Technology                                  | (72) Xingbo Zhao                   |
| (41) 12.12.2024                               | Central South University                    | Junlin Zou                         |
| (51) C02F 1/00                                | (74) P.J. Pollard B.Eng                     | Yaning Hu                          |
| C02F 1/68                                     | (72) Xinping Cai                            | Lin Jiang                          |
| A47J 31/60                                    | Wei Pan                                     | (41) 12.12.2024                    |
| A47J 31/00                                    | Wangxin Gu                                  | (31) 2024104086895                 |
| B01F 21/20                                    | Qingqiong Yan                               | (32) 07.04.2024                    |
| B01F 21/00                                    | Shuzhen Shao                                | (33) China                         |
| B01F 33/501                                   | Yi Lu                                       | (51) D01D 5/38                     |
| (21) 2035003                                  | Zhi Li                                      | D01D 5/34                          |
| (22) 05.06.2023                               | (31) 2024103927056                          | (21) 2034998                       |
| (54) Regulator for providing an additive to a | (32) 02.04.2024                             | (22) 05.06.2023                    |
| beverage                                      | (33) China                                  | (54) Production of hydrogel fibers |
| (71) Vestal Holdings B.V.                     | (51) C12N 9/00                              | (71) Mosa Meat B.V.                |
| (74) ir. H.A. Witmans c.s.                    | C12P 21/02                                  | (74) ir. H.A. Witmans c.s.         |
| (72) Alexis Adrian Felipe Wadman              | (21) 2038973                                | (72) Erik Wolfgang Wieland         |
| (41) 12.12.2024                               | (22) 31.10.2024                             | Tessa Merle van Haaften            |
| (51) C02F 1/04                                | (54) BI-FUNCTIONAL GLUTATHIONE              | Amit Chandrakar                    |
| B01D 3/00                                     | SYNTHASE MUTANT AND                         | (41) 12.12.2024                    |
| G09B 25/00                                    | APPLICATION THEREOF                         | (51) E02D 7/18                     |
| (21) 2038473                                  | (71) Beijing Lifewe Biotechnology Institute | (21) 2037904                       |
| (22) 21.08.2024                               | Co., Ltd.                                   | (22) 07.06.2024                    |
| (54) GROUNDWATER RECHARGE                     | Shaanxi Lifewe Bioengineering Co., Ltd.     | (54) VIBRATION DEVICE, METHOD      |
| SIMULATION EXPERIMENT                         | Gansu Lifewe Bioengineering Co., Ltd.       | FOR INSERTING OR REMOVING A        |
| PLATFORM                                      | (74) ir. W.J.J.M. Kempes                    | FOUNDATION ELEMENT INTO/FROM       |
| (71) Inner Mongolia Agricultural University?  | (72) Chengwei Ma                            | THE GROUND, AND ASSEMBLY WITH      |
| IMAU                                          | Xiang Jin                                   | FOUNDATION ELEMENT                 |
| (74) dr. J. van Straaten                      | Mengfei Cui                                 | (71) Cape Holland Holding B.V.     |
| (72) Tingxi Liu                               | (31) 2024106272573                          | (74) dr. ir. G.J.C. Verdijck c.s.  |
| Zihang Wang                                   | (32) 21.05.2024                             | (72) Hendrik Cejus de Roo          |
| Xiaomin Liu                                   | (33) China                                  | Laurens de Neef                    |
| Wenguang Wang                                 | (51) C12Q 1/6886                            | (31) 2035028                       |
| (31) 202410875399.1                           | G16B 40/20                                  | (32) 07.06.2023                    |
| (32) 01.07.2024                               |                                             | (33) Netherlands                   |

|                                               |                                           |                                            |
|-----------------------------------------------|-------------------------------------------|--------------------------------------------|
| (51) E04D 5/14                                | LIQUID ENVIRONMENT AND SYSTEM             | (54) LED BACKGROUND LIGHT CONTROL          |
| (21) 2034970                                  | THERE FOR                                 | METHOD AND SYSTEM BASED ON                 |
| (22) 01.06.2023                               | (71) Acquaint B.V.                        | DIGITAL CONTROL                            |
| (54) Bevestigingssysteem, dakconstructie met  | (74) dr. ir. G.J.C. Verdijk c.s.          | (71) Shenzhen Rongchuang Jiaye Technology  |
| bevestigingssysteem en werkwijze voor         | (72) Ruixuan Qi                           | Co., Ltd.                                  |
| het bevestigen van dakbedekking aan           | Ming Cao                                  | (74) dr. T. Wittop Koning PhD              |
| een dak                                       | Doekle Reinder Yntema                     | (72) Chia-Hsien Chen                       |
| (71) ABS Infradvies B.V.                      | (51) G06F 30/13                           | Dongming Niu                               |
| (74) ir. F.A. Geurts c.s.                     | G06Q 50/08                                | Zhong-Yang Huang                           |
| (72) Albert Bruins Slot                       | (21) 2035011                              | (31) 202310685041.8                        |
| (41) 11.12.2024                               | (22) 06.06.2023                           | (32) 09.06.2023                            |
| (51) E04H 1/12                                | (54) METHOD FOR GENERATING A              | (33) China                                 |
| A47B 13/06                                    | BUILDING INFORMATION MODEL FOR            | (51) H01L 31/0248                          |
| A47B 13/08                                    | A PREFAB SEGMENT                          | H01L 31/04                                 |
| A47B 9/00                                     | (71) Bouwgroep Dijkstra Draisma B.V.      | (21) 2035738                               |
| A47B 5/06                                     | (74) dr. ir. G.J.C. Verdijk c.s.          | (22) 04.09.2023                            |
| (21) 2034995                                  | (72) Job Koehoorn                         | (54) SOLAR CELL AND METHOD FOR             |
| (22) 05.06.2023                               | (41) 12.12.2024                           | PRODUCING THE SAME                         |
| (54) Closable cabin                           | (51) G06Q 10/20                           | (71) JINKO SOLAR CO., LTD.                 |
| (71) Koninklijke Ahrend B.V.                  | B61L 27/53                                | ZHEJIANG JINKO SOLAR CO., LTD.             |
| (74) mr. ir. J. van Breda c.s.                | G06Q 50/06                                | (74) ir. H.Th. van den Heuvel c.s.         |
| (72) Jesse Kamps                              | G06Q 50/40                                | (72) Yifan Chen                            |
| Mahmoud Ghaderi                               | (21) 2034990                              | Wenqi Li                                   |
| (41) 12.12.2024                               | (22) 05.06.2023                           | Minghui Xie                                |
| (51) E04H 17/00                               | (54) A method for sectioning a conduit    | Guochun Zhang                              |
| E02D 19/18                                    | network for monitoring and maintenance    | (31) 202310678819.2                        |
| A01M 29/30                                    | (71) FNV IP B.V.                          | (32) 08.06.2023                            |
| (21) 2034996                                  | (74) R.J. Burnaby Lautier                 | (33) China                                 |
| (22) 05.06.2023                               | (72) Karim El Laham                       | (51) H01M 4/134                            |
| (54) Inbrenginrichting voor het Inbrengen van | Neda Sepasian                             | H01M 4/1395                                |
| een Barrierscherm in de Bodem, en             | (41) 12.12.2024                           | (21) 2034979                               |
| overeenkomstige Inbrengwerkwijze              | (51) G08B 21/18                           | (22) 02.06.2023                            |
| (71) Martens en Van Oord Groep B.V.           | (21) 2036290                              | (54) Durable and efficient anode material  |
| (74) dr. ir. G.J.C. Verdijk c.s.              | (22) 17.11.2023                           | design for metal-air batteries             |
| (72) Joeri Edmond Johannes Cornelis van       | (54) SEEDING DRONE PIPE BLOCKAGE          | (71) Technische Universiteit Delft         |
| Hees                                          | ALARM AND ALARM METHOD                    | (74) dr. A. Ellens c.s.                    |
| (41) 12.12.2024                               | (71) Yangtze University                   | (72) Yaiza Gonzalez-Garcia                 |
| (51) E21D 9/08                                | (74) ir. F.A. Geurts c.s.                 | Jilt Sietsma                               |
| (21) 2038966                                  | (72) Xun Jiang                            | Aytac Yilmaz                               |
| (22) 31.10.2024                               | Aiping Wu                                 | (41) 11.12.2024                            |
| (54) SHIELD TUNNELING MACHINE MODEL           | Dahong Zhang                              | (51) H01M 50/434                           |
| TEST SYSTEM                                   | Qingqing Fu                               | H01M 10/28                                 |
| (71) Henan Polytechnic University             | Fuhui Rong                                | H01M 50/403                                |
| China Railway First Survey and Design         | Yangyang Mei                              | C04B 33/04                                 |
| Institute Group CO., LTD.                     | Kun Chi                                   | H01M 10/058                                |
| (74) P.J. Pollard B.Eng                       | Bilin Lu                                  | H01M 50/466                                |
| (72) Guangyi Yan                              | (31) 202310667656.8                       | (21) 2035013                               |
| Xin Huang                                     | (32) 06.06.2023                           | (22) 06.06.2023                            |
| Jiaqi Guo                                     | (33) China                                | (54) A CERAMIC SEPARATOR FOR               |
| Xiaorui Liu                                   | (51) G09G 3/32                            | ENERGY STORAGE DEVICE AND                  |
| Chong Xu                                      | G09G 3/34                                 | METHOD OF MANUFACTURE THE                  |
| Qi Lang                                       | (21) 2037823                              | SAME                                       |
| Zhaolun Wen                                   | (22) 30.05.2024                           | (71) Real Scientists Limited               |
| Fan Chen                                      | (54) DIGITAL CONTROL LED ARRAY            | (74) ir. A. van der Maarl                  |
| (31) 2023114478111                            | (71) Shenzhen Rongchuang Jiaye Technology | (72) Alena Shumskaya                       |
| (32) 02.11.2023                               | Co., Ltd.                                 | Siarhei Kostevitch                         |
| (33) China                                    | (74) dr. T. Wittop Koning PhD             | Alexander Kornev                           |
| (51) G01N 27/24                               | (72) Chia-Hsien Chen                      | (41) 12.12.2024                            |
| G01N 29/06                                    | Dongming Niu                              | (51) H02G 3/04                             |
| G01M 1/00                                     | Zhong-Yang Huang                          | H02G 3/22                                  |
| G01M 3/08                                     | (31) 202310684893.5                       | (21) 2034993                               |
| G01N 27/22                                    | (32) 09.06.2023                           | (22) 05.06.2023                            |
| G01N 29/22                                    | (33) China                                | (54) Cable guide, assembly of at least two |
| G01N 29/265                                   | (51) G09G 3/34                            | stand construction frames and a cable      |
| (21) 2035007                                  | (21) 2037860                              | guide, method for constructing a stand     |
| (22) 06.06.2023                               | (22) 04.06.2024                           | (71) Henry van Boekel B.V.                 |
| (54) METHOD FOR MEASURING INTERNAL            |                                           | (74) ir. A. Blokland c.s.                  |
| DEFECTS IN STRUCTURES IN A                    |                                           |                                            |

(72) Hermanus Adriana Petrus Maria van  
Boekel

(41) 12.12.2024

---

(51) H02K 11/25

H02K 49/10

H02K 49/04

(21) 2034985

(22) 02.06.2023

(54) MAGNETIC COUPLING ASSEMBLY

(71) Qupling Group B.V.

(74) W.J. Slikker

(72) Uitvinder ziet af van tenaamstelling.

---

(51) H02K 49/04

(21) 2034984

(22) 02.06.2023

(54) MAGNETIC COUPLING ASSEMBLY

(71) Qupling Group B.V.

(74) W.J. Slikker

(72) Uitvinder ziet af van tenaamstelling.

---

(41) 11.12.2024

---

(51) H02K 49/04

(21) 2034983

(22) 02.06.2023

(54) MAGNETIC COUPLING ASSEMBLY

(71) Qupling Group B.V.

(74) W.J. Slikker

(72) Uitvinder ziet af van tenaamstelling.

---

(41) 11.12.2024

---

(51) H04L 12/407

H04L 25/03

H04L 25/08

(21) 2037864

(22) 05.06.2024

(54) Zendmodule voor een zend-/  
ontvangstinrichting van een  
deelnemerstation in een serieel  
bussysteem en werkwijze voor het  
zenden van een bericht met differentiële  
signalen in een serieel bussysteem

(71) Robert Bosch GmbH

(74) ir. H.A. Witmans c.s.

(72) Christian Mages

Steffen Walker

(31) 102023205267.9

(32) 06.06.2023

(33) Germany

---

## NP2

**Ingeschreven en verleende Nederlandse octrooien ex Rijksoctrooiwet 1995.****Netherlands patents which have been entered in the patent register ex NL Patent Law 1995.**

|                                             |                                            |                                               |
|---------------------------------------------|--------------------------------------------|-----------------------------------------------|
| (51) A01F 25/13                             | Qila Sa                                    | (74) ir. H.Th. van den Heuvel c.s.            |
| (11) 2035005                                | Riguleng Si                                | (51) B29C 45/17                               |
| (47) 12.12.2024                             | Zhi Gui                                    | B29C 45/14                                    |
| (22) 06.06.2023                             | Qin Si                                     | B29C 33/04                                    |
| (54) COVER SHEET AND METHOD FOR             | (74) dr. T. Wittop Koning PhD              | B29C 45/73                                    |
| COVERING A FEED STACK                       | (51) A61B 90/53                            | B29C 45/78                                    |
| (73) Jan Sake Bosch Holding B.V.            | (11) 2034981                               | (11) 2034976                                  |
| (72) Jan Sake Bosch                         | (47) 11.12.2024                            | (47) 11.12.2024                               |
| (74) dr. ir. G.J.C. Verdijck c.s.           | (22) 02.06.2023                            | (22) 02.06.2023                               |
| (51) A01G 18/70                             | (54) Knee arthroscopy leg support          | (54) Method and system for pre-conditioning a |
| (11) 2035014                                | arrangement                                | mould cavity of a mould for encapsulating     |
| (47) 12.12.2024                             | (73) Tubantia Zeeland B.V.                 | electronic components                         |
| (22) 06.06.2023                             | (72) Jacob Siepko Luttjeboer               | (73) BESI NETHERLANDS B.V.                    |
| (54) Harvesting conveyor belt for mushrooms | (74) ir. H.A. Witmans c.s.                 | (72) Joannes Leonardus Jurrian Zijl           |
| (73) Jacobus Alexander Jozef Lemmen         | (51) B01D 53/58                            | Wilhelmus Gerardus Joseph Gal                 |
| (72) Jacobus Alexander Jozef Lemmen         | B01D 53/78                                 | Sebastianus Hubertus Maria Kersjes            |
| (74) ir. M. van der Velden                  | B01D 53/84                                 | Albertus Franciscus Gerardus van Driel        |
| (51) A01K 1/01                              | B01D 53/96                                 | Jan Roelofsen                                 |
| (11) 1044622                                | C01C 1/22                                  | (74) ir. H.Th. van den Heuvel c.s.            |
| (47) 11.12.2024                             | C01C 1/247                                 | (51) B32B 13/04                               |
| (22) 03.06.2023                             | C10L 3/10                                  | B28B 1/00                                     |
| (54) SPRINKLER SYSTEM FOR REDUCING          | C12M 1/00                                  | E01C 5/06                                     |
| AIRBORNE EMISSION OF NITROGEN               | B01D 53/52                                 | B32B 18/00                                    |
| FROM ANIMAL HUSBANDRY                       | (11) 2034980                               | (11) 2036972                                  |
| (73) Maraxis B.V.                           | (47) 11.12.2024                            | (47) 16.12.2024                               |
| Wijha B.V.                                  | (22) 02.06.2023                            | (22) 05.02.2024                               |
| (72) Andrew Tokmakoff                       | (54) METHOD FOR THE COMBINED               | (54) Bouwelement                              |
| Daan Velthausz                              | REMOVAL OF HYDROGEN SULFIDE                | (73) Biobound B.V.                            |
| Herman ter Wijlen                           | FROM A RAW GAS MIXTURE                     | (72) Jacobus Gerhard Nicolaas Schotanus       |
| Jan Hendrik Grootoonk                       | AMMONIA FROM A WASTE LIQUID                | (74) dr. T. Wittop Koning PhD                 |
| (51) A23L 19/00                             | (73) Bonno Koers                           | (31) 2034088                                  |
| A23L 33/105                                 | (72) Bonno Koers                           | (32) 03.02.2023                               |
| A61K 36/899                                 | (74) ir. F.A. Geurts c.s.                  | (33) Netherlands                              |
| A23L 33/16                                  | (51) B05B 7/14                             | (51) B62D 55/075                              |
| A23L 33/18                                  | B05B 1/30                                  | B62D 55/265                                   |
| A61P 19/00                                  | B05B 7/12                                  | (11) 2037778                                  |
| (11) 2037330                                | B05B 12/00                                 | (47) 17.12.2024                               |
| (47) 12.12.2024                             | B05B 12/12                                 | (22) 24.05.2024                               |
| (22) 26.03.2024                             | E04F 21/08                                 | (54) WALL-CLIMBING ROBOT FOR                  |
| (54) FERMENTED BAMBOO SHOOT                 | B05B 7/24                                  | CLEANING BULKHEADS IN BULK                    |
| EXTRACT AND AMINO ACID CALCIUM              | B05B 13/06                                 | CARRIERS                                      |
| COMPOSITION AND ITS USE IN BONE             | (11) 2035004                               | (73) Bihe Bifang Robot (Tianjin) Co., LTD     |
| GROWTH                                      | (47) 12.12.2024                            | (72) Minglu Zhang                             |
| (73) Mom's Garden GmbH                      | (22) 06.06.2023                            | Lei Yang                                      |
| (72) Naeyoung Kang                          | (54) Vulpistool voor het aanbrengen van    | Shilong Jiao                                  |
| (74) dr. T. Wittop Koning PhD               | isolatie in een spouwmuur                  | Xuan Zhang                                    |
| (51) A23L 33/105                            | (73) S. Nooijens Beheer B.V.               | Jiliang Zhang                                 |
| A23L 2/60                                   | (72) Henk Bakker                           | (74) ir. M.B. Plaggenborg                     |
| A23L 2/52                                   | Stefan Jozef Maria Nooijens                | (51) B65H 19/28                               |
| A23L 2/56                                   | (74) ir. A. Blokland c.s.                  | (11) 2035131                                  |
| A23L 2/68                                   | (51) B29C 43/24                            | (47) 11.12.2024                               |
| (11) 2037409                                | B29C 43/46                                 | (22) 20.06.2023                               |
| (47) 12.12.2024                             | B29C 33/30                                 | (54) Web winding assembly for a roll printer  |
| (22) 08.04.2024                             | B29C 43/22                                 | (73) CANON PRODUCTION PRINTING                |
| (54) Functional Beverage of Polygonatum     | (11) 2034982                               | HOLDING B.V.                                  |
| Odoratum and Preparation Method             | (47) 11.12.2024                            | (72) Petrus H.G. Slabbers                     |
| Thereof                                     | (22) 02.06.2023                            | Sidney J.L. Heslen                            |
| (73) Inner Mongolia Medical University      | (54) System for producing a panel, method, | Lars H.L. Korsten                             |
| (72) Qin Na                                 | and panel                                  | Kyra van den Ham                              |
| Murilige Chao                               | (73) I4F LICENSING NV                      | (74) ir. M.J. Groen                           |
| Rihan Wu                                    | (72) Eddy Alberic Boucké                   | (31) 23176813.6                               |

|                                                                                                                           |                                                                                                                                    |                                                                         |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| (32) 01.06.2023                                                                                                           | (74) ir. W.J.J.M. Kempes                                                                                                           | (72) Joeri Edmond Johannes Cornelis van Hees                            |
| (33) European Patent Office (EPO)                                                                                         | (31) 202311754883.0                                                                                                                | (74) dr. ir. G.J.C. Verdijck c.s.                                       |
| (51) C02F 1/00                                                                                                            | (32) 19.12.2023                                                                                                                    | (51) E21B 17/10                                                         |
| A47J 31/00                                                                                                                | (33) China                                                                                                                         | (11) 2037425                                                            |
| A47J 31/60                                                                                                                | (51) C12Q 1/6888                                                                                                                   | (47) 17.12.2024                                                         |
| B01F 21/00                                                                                                                | (11) 2037668                                                                                                                       | (22) 10.04.2024                                                         |
| B01F 33/501                                                                                                               | (47) 12.12.2024                                                                                                                    | (54) CONTINUOUS CONTACT RADially PHASED CENTRALIZER                     |
| C02F 1/44                                                                                                                 | (22) 11.05.2024                                                                                                                    | (73) Halliburton Energy Services, Inc.                                  |
| C02F 1/68                                                                                                                 | (54) METHOD FOR PREDICTING THE MILK PRODUCTION PERFORMANCE OF HOLSTEIN COWS BASED ON MITOCHONDRIAL SINGLE NUCLEOTIDE POLYMORPHISMS | (72) Bruce A. Moore                                                     |
| (11) 2035002                                                                                                              | (73) China Agricultural University                                                                                                 | (74) dr. ir. F.M. van Bouwelen                                          |
| (47) 12.12.2024                                                                                                           | (72) Xingbo Zhao                                                                                                                   | (31) 18/197,512                                                         |
| (22) 05.06.2023                                                                                                           | Junlin Zou                                                                                                                         | (32) 15.05.2023                                                         |
| (54) Drinking container for filtering water                                                                               | Yaning Hu                                                                                                                          | (33) United States of America                                           |
| (73) Vestal Holdings B.V.                                                                                                 | Lin Jiang                                                                                                                          | (51) E21B 33/12                                                         |
| (72) Alexis Adrian Felipe Wadman                                                                                          | (74) dr. J. van Straaten                                                                                                           | (11) 2037428                                                            |
| (74) ir. H.A. Witmans c.s.                                                                                                | (31) 2024104086895                                                                                                                 | (47) 16.12.2024                                                         |
| (51) C02F 1/00                                                                                                            | (32) 07.04.2024                                                                                                                    | (22) 10.04.2024                                                         |
| C02F 1/68                                                                                                                 | (33) China                                                                                                                         | (54) PROTECTIVE LAYER OVER SWELLABLE COMPOUND                           |
| A47J 31/60                                                                                                                | (51) D01D 5/38                                                                                                                     | (73) Halliburton Energy Services, Inc.                                  |
| A47J 31/00                                                                                                                | D01D 5/34                                                                                                                          | (72) Ramya Priyadarsini Selvamurugan                                    |
| B01F 21/20                                                                                                                | (11) 2034998                                                                                                                       | Geir Gjeldstad                                                          |
| B01F 21/00                                                                                                                | (47) 12.12.2024                                                                                                                    | Brandon T. Least                                                        |
| B01F 33/501                                                                                                               | (22) 05.06.2023                                                                                                                    | Rutger Evers                                                            |
| (11) 2035003                                                                                                              | (54) Production of hydrogel fibers                                                                                                 | Prem Jakkula                                                            |
| (47) 12.12.2024                                                                                                           | (73) Mosa Meat B.V.                                                                                                                | (74) dr. ir. F.M. van Bouwelen                                          |
| (22) 05.06.2023                                                                                                           | (72) Erik Wolfgang Wieland                                                                                                         | (31) 63/501,589                                                         |
| (54) Regulator for providing an additive to a beverage                                                                    | Tessa Merle van Haaften                                                                                                            | 18/601,728                                                              |
| (73) Vestal Holdings B.V.                                                                                                 | Amit Chandrakar                                                                                                                    | (32) 11.05.2023                                                         |
| (72) Alexis Adrian Felipe Wadman                                                                                          | (74) ir. H.A. Witmans c.s.                                                                                                         | 11.03.2024                                                              |
| (74) ir. H.A. Witmans c.s.                                                                                                | (51) E04D 5/14                                                                                                                     | (33) United States of America                                           |
| (51) C08J 11/24                                                                                                           | (11) 2034970                                                                                                                       | United States of America                                                |
| (11) 2034965                                                                                                              | (47) 11.12.2024                                                                                                                    | (51) E21D 9/00                                                          |
| (47) 11.12.2024                                                                                                           | (22) 01.06.2023                                                                                                                    | E21D 11/10                                                              |
| (22) 01.06.2023                                                                                                           | (54) Bevestigingssysteem, dakconstructie met bevestigingssysteem en werkwijze voor het bevestigen van dakbedekking aan een dak     | (11) 2037735                                                            |
| (54) A PROCESS SUITABLE FOR RECYCLING TEXTILE WASTE                                                                       | (73) ABS Infradvies B.V.                                                                                                           | (47) 17.12.2024                                                         |
| (73) CURE TECHNOLOGY BV                                                                                                   | (72) Albert Bruins Slot                                                                                                            | (22) 21.05.2024                                                         |
| (72) Marco Brons                                                                                                          | (74) ir. F.A. Geurts c.s.                                                                                                          | (54) ANTI-GUSHING DEVICE FOR SHIELD TUNNEL BOTTOM GROUTING IN SAND SEAM |
| Layo van het Goor                                                                                                         | (51) E04H 1/12                                                                                                                     | (73) China Railway South Investment Group Co., Ltd.                     |
| Johan Albert Frans Kunst                                                                                                  | A47B 13/06                                                                                                                         | China Railway Eighth Division Group Co., Ltd.                           |
| Ramon Pragt                                                                                                               | A47B 13/08                                                                                                                         | (72) Jingfeng Peng                                                      |
| (74) ir. P.J.P. Janssen                                                                                                   | A47B 9/00                                                                                                                          | Song Luo                                                                |
| (51) C08L 67/04                                                                                                           | A47B 5/06                                                                                                                          | Yuan Gao                                                                |
| (11) 2034975                                                                                                              | (11) 2034995                                                                                                                       | Yonghong Lu                                                             |
| (47) 11.12.2024                                                                                                           | (47) 12.12.2024                                                                                                                    | Enze Zhao                                                               |
| (22) 02.06.2023                                                                                                           | (22) 05.06.2023                                                                                                                    | Kai Deng                                                                |
| (54) Home compostable container                                                                                           | (54) Closable cabin                                                                                                                | Siming Chen                                                             |
| (73) The Water Company B.V.                                                                                               | (73) Koninklijke Ahrend B.V.                                                                                                       | Liangjie Cao                                                            |
| (72) Marnix van Gurp                                                                                                      | (72) Jesse Kamps                                                                                                                   | Ai Wang                                                                 |
| Martin Jean José Vrösch                                                                                                   | Mahmoud Ghaderi                                                                                                                    | Wuyi Zhou                                                               |
| Jozef Maria Hubertus Lemmens                                                                                              | (74) mr. ir. J. van Breda c.s.                                                                                                     | Lei Feng                                                                |
| Sjoerd Jan Bos                                                                                                            | (51) E04H 17/00                                                                                                                    | Li Yang                                                                 |
| (74) mr.ir. F.N. Ferro                                                                                                    | E02D 19/18                                                                                                                         | (74) ir. M.B. Plaggenborg                                               |
| (51) C09K 8/508                                                                                                           | A01M 29/30                                                                                                                         | (31) 2024104758341                                                      |
| C08G 12/32                                                                                                                | (11) 2034996                                                                                                                       | (32) 19.04.2024                                                         |
| C08G 12/40                                                                                                                | (47) 12.12.2024                                                                                                                    | (33) China                                                              |
| C09K 8/035                                                                                                                | (22) 05.06.2023                                                                                                                    | (51) G01N 27/24                                                         |
| (11) 2037714                                                                                                              | (54) Inbrenginrichting voor het Inbrengen van een Barrièrescherm in de Bodem, en overeenkomstige Inbrengwerkwijze                  | G01N 29/06                                                              |
| (47) 17.12.2024                                                                                                           | (73) Martens en Van Oord Groep B.V.                                                                                                | G01M 1/00                                                               |
| (22) 17.05.2024                                                                                                           |                                                                                                                                    | G01M 3/08                                                               |
| (54) A non-sulfonated melamine formaldehyde resin filtration control agent for drilling fluids and its preparation method |                                                                                                                                    | G01N 27/22                                                              |
| (73) Yangtze University                                                                                                   |                                                                                                                                    | G01N 29/22                                                              |
| (72) Fuchang You                                                                                                          |                                                                                                                                    |                                                                         |

|                                                                                                       |                                                                                                                         |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| G01N 29/265                                                                                           | H01M 10/058                                                                                                             |
| (11) 2035007                                                                                          | H01M 50/466                                                                                                             |
| (47) 12.12.2024                                                                                       | (11) 2035013                                                                                                            |
| (22) 06.06.2023                                                                                       | (47) 12.12.2024                                                                                                         |
| (54) METHOD FOR MEASURING INTERNAL DEFECTS IN STRUCTURES IN A LIQUID ENVIRONMENT AND SYSTEM THERE FOR | (22) 06.06.2023                                                                                                         |
| (73) Acquaint B.V.                                                                                    | (54) A CERAMIC SEPARATOR FOR ENERGY STORAGE DEVICE AND METHOD OF MANUFACTURE THE SAME                                   |
| (72) Ruixuan Qi                                                                                       | (73) Real Scientists Limited                                                                                            |
| Ming Cao                                                                                              | (72) Alena Shumskaya                                                                                                    |
| Doekle Reinder Yntema                                                                                 | Siarhei Kostevitch                                                                                                      |
| (74) dr. ir. G.J.C. Verdijck c.s.                                                                     | Alexander Kornev                                                                                                        |
| (51) G06F 30/13                                                                                       | (74) ir. A. van der Maarl                                                                                               |
| G06Q 50/08                                                                                            | (51) H02G 3/04                                                                                                          |
| (11) 2035011                                                                                          | H02G 3/22                                                                                                               |
| (47) 12.12.2024                                                                                       | (11) 2034993                                                                                                            |
| (22) 06.06.2023                                                                                       | (47) 12.12.2024                                                                                                         |
| (54) METHOD FOR GENERATING A BUILDING INFORMATION MODEL FOR A PREFAB SEGMENT                          | (22) 05.06.2023                                                                                                         |
| (73) Bouwgroep Dijkstra Draisma B.V.                                                                  | (54) Cable guide, assembly of at least two stand construction frames and a cable guide, method for constructing a stand |
| (72) Job Koehoorn                                                                                     | (73) Henry van Boekel B.V.                                                                                              |
| (74) dr. ir. G.J.C. Verdijck c.s.                                                                     | (72) Hermanus Adriana Petrus Maria van Boekel                                                                           |
| (51) G06Q 10/20                                                                                       | (74) ir. A. Blokland c.s.                                                                                               |
| B61L 27/53                                                                                            | (51) H02K 11/25                                                                                                         |
| G06Q 50/06                                                                                            | H02K 49/10                                                                                                              |
| G06Q 50/40                                                                                            | H02K 49/04                                                                                                              |
| (11) 2034990                                                                                          | (11) 2034985                                                                                                            |
| (47) 12.12.2024                                                                                       | (47) 11.12.2024                                                                                                         |
| (22) 05.06.2023                                                                                       | (22) 02.06.2023                                                                                                         |
| (54) A method for sectioning a conduit network for monitoring and maintenance                         | (54) MAGNETIC COUPLING ASSEMBLY                                                                                         |
| (73) FNV IP B.V.                                                                                      | (73) Qupling Group B.V.                                                                                                 |
| (72) Karim El Laham                                                                                   | (72) Uitvinder ziet af van tenaamstelling.                                                                              |
| Neda Sepasian                                                                                         | (74) W.J. Slikker                                                                                                       |
| (74) R.J. Burnaby Lautier                                                                             | (51) H02K 49/04                                                                                                         |
| (51) G09B 23/28                                                                                       | (11) 2034983                                                                                                            |
| (11) 2031412                                                                                          | (47) 11.12.2024                                                                                                         |
| (47) 17.12.2024                                                                                       | (22) 02.06.2023                                                                                                         |
| (22) 27.03.2022                                                                                       | (54) MAGNETIC COUPLING ASSEMBLY                                                                                         |
| (54) CARDIOPULMONARY RESUSCITATION TRAINING AND ASSESSMENT-INTEGRATED APPARATUS                       | (73) Qupling Group B.V.                                                                                                 |
| (73) SICHUAN UNIVERSITY                                                                               | (72) Uitvinder ziet af van tenaamstelling.                                                                              |
| (72) Bingwei Tian                                                                                     | (74) W.J. Slikker                                                                                                       |
| (74) dr. T. Wittop Koning PhD                                                                         | (51) H02K 49/04                                                                                                         |
| (31) 202210139260.1                                                                                   | (11) 2034984                                                                                                            |
| (32) 15.02.2022                                                                                       | (47) 11.12.2024                                                                                                         |
| (33) China                                                                                            | (22) 02.06.2023                                                                                                         |
| (51) H01M 4/134                                                                                       | (54) MAGNETIC COUPLING ASSEMBLY                                                                                         |
| H01M 4/1395                                                                                           | (73) Qupling Group B.V.                                                                                                 |
| (11) 2034979                                                                                          | (72) Uitvinder ziet af van tenaamstelling.                                                                              |
| (47) 11.12.2024                                                                                       | (74) W.J. Slikker                                                                                                       |
| (22) 02.06.2023                                                                                       |                                                                                                                         |
| (54) Durable and efficient anode material design for metal-air batteries                              |                                                                                                                         |
| (73) Technische Universiteit Delft                                                                    |                                                                                                                         |
| (72) Yaiza Gonzalez-Garcia                                                                            |                                                                                                                         |
| Jilt Sietsma                                                                                          |                                                                                                                         |
| Aytac Yilmaz                                                                                          |                                                                                                                         |
| (74) dr. A. Ellens c.s.                                                                               |                                                                                                                         |
| (51) H01M 50/434                                                                                      |                                                                                                                         |
| H01M 10/28                                                                                            |                                                                                                                         |
| H01M 50/403                                                                                           |                                                                                                                         |
| C04B 33/04                                                                                            |                                                                                                                         |

**NP3**

**Nederlandse octrooien na gedeeltelijke afstand ex artikel 63 van de Rijsoctrooiwet 1995.  
Netherlands patents after partial limitation ex Article 63 of the NL Patent Law 1995.**

**EP1**

**Vertaalde conclusies van Europese octrooiaanvragen.**

**Translations of the claims of European patent applications.**



# EP2

## Voor Nederland verleende Europese octrooien. European patents granted for the Netherlands.

|                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) A01B 45/00<br>E01H 1/05<br>(11) EP4275464<br>(21) EP23171094.8<br>(47) 18.12.2024<br>(22) 02.05.2023<br>(54) MACHINE FOR DECOMPACTING<br>SYNTHETIC GRASS LAWNS<br>(73) Eurosystems S.p.A.<br>(72) BOVI, Fabio<br>(31) 202200009806<br>(32) 12.05.2022<br>(33) Italy                                                                                       | A01C 23/02<br>(11) EP4266865<br>(21) EP21830776.7<br>(47) 18.12.2024<br>(87) IB2021061296<br>07.07.2022<br>(22) 03.12.2021<br>(54) DEVICE FOR DISPENSING FLUID<br>PRODUCTS<br>(73) Startec S.r.l.<br>(72) SUT, Livio<br>(31) 202000032536<br>(32) 28.12.2020<br>(33) Italy                                                                                                                                 | (31) 202111177023<br>202110275556<br>(32) 09.10.2021<br>15.03.2021<br>(33) China<br>China                                                                                                                                                                                                                                                                                 |
| (51) A01B 63/112<br>(11) EP4133924<br>(21) EP22168327.9<br>(47) 18.12.2024<br>(22) 14.04.2022<br>(54) METHOD FOR CONTROLLING<br>A REAR POWER LIFTER OF AN<br>AGRICULTURAL MACHINE<br>(73) CLAAS Tractor SAS<br>(72) Birkmann, Christian<br>Pieper, Jona<br>Schaub, Christian<br>(31) 102021120813<br>(32) 10.08.2021<br>(33) Germany                           | (51) A01C 23/04<br>A01M 7/00<br>(11) EP4162785<br>(21) EP21201190.2<br>(47) 18.12.2024<br>(22) 06.10.2021<br>(54) METHOD FOR FILLING A TANK<br>SYSTEM OF AN AGRICULTURAL<br>SPRAYER WITH A LIQUID SPRAYING<br>MATERIAL AND AGRICULTURAL<br>SPRAYER<br>(73) Kverneland Group Nieuw-Vennep BV<br>(72) Van Turenhout, Jeroen<br>Korsuize, Vincent                                                             | (51) A01D 34/82<br>A01D 34/64<br>A01D 69/02<br>(11) EP3884758<br>(21) EP20202928.6<br>(47) 18.12.2024<br>(22) 21.10.2020<br>(54) WORK VEHICLE<br>(73) Kubota Corporation<br>(72) HISAKUNI, Tomohiko<br>YAMADA, Masahiro<br>ITO, Hirokazu<br>(31) 2020052469<br>(32) 24.03.2020<br>(33) Japan                                                                              |
| (51) A01B 73/04<br>A01B 73/06<br>A01D 57/20<br>A01D 84/00<br>(11) EP3763180<br>(21) EP20185126.8<br>(47) 18.12.2024<br>(22) 10.07.2020<br>(54) HARVESTING DEVICE FOR<br>TRANSFERRING THE SAME<br>BETWEEN A WORKING POSITION<br>AND A TRANSPORT POSITION<br>(73) CLAAS Saugau GmbH<br>(72) Boll, Ulrich<br>(31) 102019118738<br>(32) 10.07.2019<br>(33) Germany | (51) A01D 34/37<br>A01D 34/58<br>A01D 34/78<br>H01H 3/32<br>A01D 34/10<br>A01D 34/47<br>A01D 34/68<br>A01D 34/90<br>(11) EP3945770<br>(21) EP20713635.9<br>(47) 18.12.2024<br>(87) EP2020058094<br>01.10.2020<br>(22) 24.03.2020<br>(54) MACHINE TOOL SWITCHGEAR<br>(73) Robert Bosch GmbH<br>(72) KONCSIK, Tamas<br>DAVEY, Glenn<br>LING, Matthew<br>(31) 102019204271<br>(32) 27.03.2019<br>(33) Germany | (31) 1020052469<br>(32) 24.03.2020<br>(33) Japan<br>(51) A01D 41/12<br>(11) EP4209123<br>(21) EP22200164.6<br>(47) 18.12.2024<br>(22) 07.10.2022<br>(54) THRESHING CONCAVE FOR A<br>COMBINE HARVESTER<br>(73) Deere & Company<br>(72) Zollondz, Jonas<br>Lettau, Michael<br>Jung, Daniel<br>Broschart, Marco<br>(31) 102021128494<br>(32) 02.11.2021<br>(33) Germany      |
| (51) A01C 17/00<br>A01C 21/00<br>(11) EP3984342<br>(21) EP21193807.1<br>(47) 18.12.2024<br>(22) 30.08.2021<br>(54) METHOD AND DEVICE FOR APPLYING<br>MATERIAL TO AN AGRICULTURAL<br>CROP AREA<br>(73) Amazonen-Werke H. Dreyer SE & Co.<br>KG<br>(72) Große Brinkhaus, Andre<br>(31) 102020126932<br>(32) 14.10.2020<br>(33) Germany                           | (51) A01D 34/416<br>A01D 34/90<br>(11) EP4059338<br>(21) EP22159314.8<br>(47) 18.12.2024<br>(22) 01.03.2022<br>(54) GRASS TRIMMER<br>(73) Nanjing Chervon Industry Co., Ltd.<br>(72) YIN, Yiqiang<br>XU, Bowei<br>GUO, Jianpeng                                                                                                                                                                            | (51) A01D 41/127<br>(11) EP3590320<br>(21) EP19183212.0<br>(47) 18.12.2024<br>(22) 28.06.2019<br>(54) SYSTEM FOR DETERMINING<br>THE RESIDUE YIELD OF PLANT<br>MATERIALS HARVESTED BY AN<br>AGRICULTURAL HARVESTER<br>(73) CNH Industrial Belgium N.V.<br>(72) Prosser, Greg<br>Borsdorf, John J.<br>(31) 201816026158<br>(32) 03.07.2018<br>(33) United States of America |
| (51) A01C 23/00                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                            | (51) A01D 41/127<br>(11) EP4014712<br>(21) EP21199799.4<br>(47) 18.12.2024<br>(22) 29.09.2021<br>(54) METHOD FOR COLLECTING A CROP<br>LABORATORY SAMPLE IN A COMBINE<br>HARVESTER<br>(73) CLAAS Selbstfahrende Erntemaschinen<br>GmbH                                                                                                                                     |

|                                          |                                  |                                   |
|------------------------------------------|----------------------------------|-----------------------------------|
| (72) Middelberg, René                    | 202210987025                     | (33) Germany                      |
| Marbach, Ralf                            | (32) 01.09.2022                  | (51) A01G 23/10                   |
| Nalbach, Marc                            | 01.09.2022                       | (11) EP3349565                    |
| Witte, Johann                            | 01.09.2022                       | (21) EP16845781.0                 |
| Fischer, Frédéric                        | 17.08.2022                       | (47) 18.12.2024                   |
| (31) 102020134033                        | (33) China                       | (87) FI2016050640                 |
| (32) 17.12.2020                          | China                            | 23.03.2017                        |
| (33) Germany                             | China                            | (22) 15.09.2016                   |
| (51) A01D 41/127                         | China                            | (54) METHOD AND APPARATUS FOR     |
| A01B 79/00                               | (51) A01D 75/18                  | COLLECTING SAP                    |
| (11) EP3578032                           | A01D 41/127                      | (73) Nordic Koivu Oy              |
| (21) EP19168031.3                        | B60K 35/00                       | (72) KORHONEN, Arto               |
| (47) 18.12.2024                          | B60K 35/22                       | MAARANEN, Susanna                 |
| (22) 09.04.2019                          | B60K 35/28                       | (31) 20155667                     |
| (54) METHOD FOR CONTROLLING AN           | B60K 35/29                       | (32) 17.09.2015                   |
| AGRICULTURAL HARVESTING                  | (11) EP3960571                   | (33) Finland                      |
| PROGRAMME                                | (21) EP21181154.2                | (51) A01G 31/04                   |
| (73) CLAAS Selbstfahrende Erntemaschinen | (47) 18.12.2024                  | (11) EP4197317                    |
| GmbH                                     | (22) 23.06.2021                  | (21) EP22215490.8                 |
| (72) Baumgarten, Joachim                 | (54) AGRICULTURAL MACHINE        | (47) 18.12.2024                   |
| Bormann, Bastian                         | (73) CLAAS Tractor S.A.S.        | (22) 20.03.2019                   |
| Reinecke, Max                            | (72) Correia, Michael            | (54) MULTI CAVITIY VERTICAL GROW  |
| Redenius, Jannik                         | (31) 102020122201                | TOWER CONVEYANCE SYSTEM           |
| Kriebel, Bastian                         | (32) 25.08.2020                  | (73) MJNN LLC                     |
| Smolnik, Ivan                            | (33) Germany                     | (72) MURCKO., Timothy Michael     |
| Skiba, Andreas                           | (51) A01D 76/00                  | KLEIN., Brice Leon                |
| (31) 102018113327                        | A01D 78/00                       | FLYNN., Michael Peter             |
| (32) 05.06.2018                          | (11) EP3912455                   | COFFIN., Gage Goodspeed           |
| (33) Germany                             | (21) EP21174160.8                | STOREY., Nathaniel R.             |
| (51) A01D 41/127                         | (47) 18.12.2024                  | LE ROUX., Alexandre               |
| A01D 41/12                               | (22) 17.05.2021                  | (31) 201862752974 P               |
| G01F 23/00                               | (54) MERGER CONTROL DEVICE AND   | 201862761366 P                    |
| (11) EP4144203                           | MERGER                           | (32) 30.10.2018                   |
| (21) EP22194198.2                        | (73) CLAAS Saulgau GmbH          | 21.03.2018                        |
| (47) 18.12.2024                          | (72) Schmid, Christian           | (33) United States of America     |
| (22) 06.09.2022                          | (31) 102020113429                | United States of America          |
| (54) TARGET FOR GRAIN TANK LEVEL         | (32) 18.05.2020                  | (51) A01K 7/02                    |
| SENSOR INTEGRATED INTO THE               | (33) Germany                     | E03B 9/20                         |
| GRAIN TANK                               | (51) A01G 9/14                   | H02J 7/00                         |
| (73) CNH Industrial Belgium NV           | A01G 9/24                        | H02J 50/00                        |
| (72) MINNICH, Michael                    | A01G 31/02                       | H02J 50/10                        |
| BECKER, Justin                           | A01G 31/06                       | (11) EP3626068                    |
| BANKS, Clayton E.                        | (11) EP3570659                   | (21) EP19198196.8                 |
| YODER, Denver R.                         | (21) EP18742042.7                | (47) 18.12.2024                   |
| DILTS, Mark D.                           | (47) 18.12.2024                  | (22) 19.09.2019                   |
| (31) 202117467952                        | (87) SG2018050033                | (54) LIQUID DISPENSER FOR ANIMALS |
| (32) 07.09.2021                          | 26.07.2018                       | (73) LG Electronics Inc.          |
| (33) United States of America            | (22) 19.01.2018                  | (72) KIM, Myongsun                |
| (51) A01D 69/02                          | (54) FARMING MANAGEMENT SYSTEM   | CHUN, Jaehung                     |
| B60K 7/00                                | (73) Greenphyto Pte. Ltd.        | YOO, Hyunsun                      |
| A01D 34/00                               | (72) CHONG, Suk Shien            | EUN, Yousook                      |
| A01D 34/66                               | (31) 10201700512T                | KIM, Sungkyung                    |
| (11) EP4327645                           | (32) 20.01.2017                  | KIM, Joogyu                       |
| (21) EP23187142.7                        | (33) Singapore                   | (31) 20190059785                  |
| (47) 18.12.2024                          | (51) A01G 13/02                  | 20180131037                       |
| (22) 24.07.2023                          | E04C 3/08                        | 201862733393 P                    |
| (54) SELF-PROPELLED DEVICE               | (11) EP3815516                   | (32) 22.05.2019                   |
| (73) Nanjing Chervon Industry Co., Ltd.  | (21) EP20203304.9                | 30.10.2018                        |
| (72) CHEN, Yicong                        | (47) 18.12.2024                  | 19.09.2018                        |
| HU, Chenglong                            | (22) 22.10.2020                  | (33) Korea (Republic)             |
| MENG, Chao                               | (54) SUPPORT STRUCTURE FOR PLANT | Korea (Republic)                  |
| GENG, Yazhou                             | CULTURES                         | United States of America          |
| FU, Huixing                              | (73) BayWa Aktiengesellschaft    | (51) A01K 67/0275                 |
| XU, Haishen                              | (72) BERRETH, Klaus              | A61K 9/00                         |
| YIN, Qiqi                                | HOLZWARTH, Rudolf                | C12N 9/22                         |
| (31) 202211067847                        | (31) 102019129222                | C12N 15/113                       |
| 202211066923                             | (32) 29.10.2019                  | (11) EP3768303                    |
| 202211066921                             |                                  | (21) EP19772564.1                 |

|                                                                                      |                                                      |                                                                |
|--------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|
| (47) 18.12.2024                                                                      | (11) EP3634127                                       | (11) EP3772953                                                 |
| (87) US2019023934                                                                    | (21) EP18812781.5                                    | (21) EP19728899.6                                              |
| 26.09.2019                                                                           | (47) 18.12.2024                                      | (47) 18.12.2024                                                |
| (22) 25.03.2019                                                                      | (87) US2018036508                                    | (87) EP2019062962                                              |
| (54) CRISPR/CAS9-MEDIATED EXON-SKIPPING APPROACH FOR USH2A-ASSOCIATED USHER SYNDROME | 13.12.2018                                           | 12.12.2019                                                     |
| (73) Massachusetts Eye and Ear Infirmary Editas Medicine, Inc.                       | (22) 07.06.2018                                      | (22) 20.05.2019                                                |
| (72) MARGULIES, Carrie Marie                                                         | (54) APPARATUS FOR TISSUE TRANSPORT AND PRESERVATION | (54) PRESERVATION COMPOSITIONS                                 |
| PIERCE, Eric A.                                                                      | (73) Paragonix Technologies, Inc.                    | (73) Unilever IP Holdings B.V.                                 |
| MAEDER, Morgan L.                                                                    | (72) EDELMAN, William                                | (72) MITRA, Rupak                                              |
| PENDSE, Nachiket D.                                                                  | ANDERSON, Lisa, Maria                                | CAMPBELL-LEE, Stuart                                           |
| LIU, Qin                                                                             | JUDSON, Jared, Alden                                 | STOTT, Ian, Peter                                              |
| GLOSKOWSKI, Sebastian W.                                                             | (31) 201862650610 P                                  | POINTON, Thomas, Richard                                       |
| (31) 201962794402 P                                                                  | 201762584330 P                                       | (31) 18175856                                                  |
| 201862647578 P                                                                       | 201762516581 P                                       | (32) 04.06.2018                                                |
| (32) 18.01.2019                                                                      | (32) 30.03.2018                                      | (33) European Patent Office (EPO)                              |
| 23.03.2018                                                                           | 10.11.2017                                           | (51) A23B 4/03                                                 |
| (33) United States of America                                                        | 07.06.2017                                           | A23B 4/044                                                     |
| United States of America                                                             | (33) United States of America                        | A23B 4/052                                                     |
|                                                                                      | United States of America                             | A23L 13/40                                                     |
|                                                                                      | United States of America                             | A23L 13/70                                                     |
| (51) A01K 85/01                                                                      | (51) A01N 37/46                                      | (11) EP3731642                                                 |
| A01K 85/00                                                                           | A01N 63/50                                           | (21) EP18718563.2                                              |
| (11) EP4147571                                                                       | A61K 38/10                                           | (47) 18.12.2024                                                |
| (21) EP22190593.8                                                                    | C07K 7/08                                            | (87) US2018025214                                              |
| (47) 18.12.2024                                                                      | C07K 14/435                                          | 04.07.2019                                                     |
| (22) 16.08.2022                                                                      | A01P 5/00                                            | (22) 29.03.2018                                                |
| (54) LURE FOR FISHING                                                                | (11) EP3609331                                       | (54) METHOD OF MAKING COLD SMOKED MEAT PRODUCT                 |
| (73) Globeride, Inc.                                                                 | (21) EP18768312.3                                    | (73) Fish Pro Grow, LLC                                        |
| (72) YAGI, Hiroshi                                                                   | (47) 18.12.2024                                      | (72) GOODMAN, Ronald N.                                        |
| (31) 2022054003                                                                      | (87) IB2018051783                                    | (31) 201762611256 P                                            |
| 2021137315                                                                           | 20.09.2018                                           | (32) 28.12.2017                                                |
| (32) 29.03.2022                                                                      | (22) 17.03.2018                                      | (33) United States of America                                  |
| 25.08.2021                                                                           | (54) A SYNERGISTIC COMPOSITION OF A NEMATOCIDE       | (51) A23B 4/16                                                 |
| (33) Japan                                                                           | (73) Telluris Biotech India Private Limited          | A23B 4/005                                                     |
| Japan                                                                                | (72) POLACK, Glenda W                                | A23L 3/3418                                                    |
| (51) A01M 7/00                                                                       | POLINENI, Venu                                       | A23L 17/40                                                     |
| (11) EP4046485                                                                       | URREA, Alejandro Calderón                            | A23L 17/50                                                     |
| (21) EP22156522.9                                                                    | (31) 201741009365                                    | (11) EP4082349                                                 |
| (47) 18.12.2024                                                                      | (32) 17.03.2017                                      | (21) EP22171100.5                                              |
| (22) 14.02.2022                                                                      | (33) India                                           | (47) 18.12.2024                                                |
| (54) ASSEMBLY FOR SPRAY BOOM COMPRISING AN ANTI-WHIPPERING DEVICE                    | (51) A01N 59/16                                      | (22) 02.05.2022                                                |
| (73) Exel Industries                                                                 | C02F 1/50                                            | (54) METHOD FOR PRESERVING SHELLFISH AND/OR CRUSTACEANS.       |
| (72) BERTOUT, Jean-Philippe                                                          | C09D 5/14                                            | (73) Meromar Holding B.V.                                      |
| (31) 2101558                                                                         | (11) EP3935947                                       | (72) SEINEN, Arend André                                       |
| (32) 18.02.2021                                                                      | (21) EP21184337.0                                    | (31) 2028106                                                   |
| (33) France                                                                          | (47) 18.12.2024                                      | (32) 30.04.2021                                                |
| (51) A01M 17/00                                                                      | (22) 07.07.2021                                      | (33) Netherlands                                               |
| B05B 17/00                                                                           | (54) ANTI-MICROBIAL WATER SYSTEM COMPONENT           | (51) A23C 9/123                                                |
| F25D 3/12                                                                            | (73) Hamilton Sundstrand Corporation                 | A23C 9/127                                                     |
| A01M 1/20                                                                            | (72) METSELAAR, Carol L.                             | A23C 13/16                                                     |
| (11) EP3777532                                                                       | PEYTON, Barbara M.                                   | A23C 17/02                                                     |
| (21) EP18913741.7                                                                    | STEELE, John W.                                      | A23C 19/032                                                    |
| (47) 18.12.2024                                                                      | (31) 202016922418                                    | (11) EP3675642                                                 |
| (87) IB2018057762                                                                    | (32) 07.07.2020                                      | (21) EP18759640.8                                              |
| 10.10.2019                                                                           | (33) United States of America                        | (47) 18.12.2024                                                |
| (22) 05.10.2018                                                                      | (51) A01P 1/00                                       | (87) EP2018073382                                              |
| (54) CO2 SATURATION DEVICE FOR THE APPLICATION OF SNOW                               | A01N 37/06                                           | 07.03.2019                                                     |
| (73) Fabrica de Maquinaria Industrial Nelson Alejandro Herrera Contreras Eirl.       | A01N 49/00                                           | (22) 30.08.2018                                                |
| (72) HERRERA CONTRERAS, Nelson                                                       | A01N 31/04                                           | (54) PROCESS FOR PRODUCING A MESOPHILIC FERMENTED MILK PRODUCT |
| (31) 20180862                                                                        | A01N 31/06                                           | (73) Chr. Hansen A/S                                           |
| (32) 04.04.2018                                                                      | A01N 27/00                                           | (72) JANZEN, Thomas                                            |
| (33) Chile                                                                           | A61K 8/34                                            | GULDAGER, Helle Skov                                           |
| (51) A01N 1/02                                                                       | A61L 2/18                                            | PIROIS-BLIN, Sabrina                                           |
|                                                                                      | A61K 8/362                                           | JIMENEZ, Luciana                                               |
|                                                                                      | A61Q 19/00                                           |                                                                |

|                                     |                                       |                                   |
|-------------------------------------|---------------------------------------|-----------------------------------|
| BLOC, Virginie                      | (11) EP3714699                        | (33) European Patent Office (EPO) |
| BIRKELUND, Mimi                     | (21) EP20167118.7                     | (51) A23L 27/24                   |
| ODINOT, Jean-Marie                  | (47) 18.12.2024                       | A23K 50/40                        |
| (31) 17188549                       | (22) 09.06.2014                       | A21D 2/36                         |
| (32) 30.08.2017                     | (54) STEVIA EXTRACT CONTAINING        | A21D 2/24                         |
| (33) European Patent Office (EPO)   | SELECTED STEVIOL GLYCOSIDES AS        | A23L 5/00                         |
| (51) A23C 9/142                     | FLAVOR, SALTY AND SWEETNESS           | A23L 27/00                        |
| A23C 9/15                           | PROFILE MODIFIER                      | A23L 27/20                        |
| A23C 9/12                           | (73) PureCircle USA Inc.              | A23L 27/21                        |
| B01D 61/00                          | (72) PURKAYASTHA, Siddhartha          | A23L 27/22                        |
| (11) EP3787412                      | PETIT, Marcia                         | A23L 27/23                        |
| (21) EP19723540.1                   | (31) 201461942331 P                   | A23L 31/15                        |
| (47) 18.12.2024                     | 201361832451 P                        | A23L 3/46                         |
| (87) US2019026539                   | (32) 20.02.2014                       | A23L 23/10                        |
| 07.11.2019                          | 07.06.2013                            | A23L 27/26                        |
| (22) 09.04.2019                     | (33) United States of America         | A23L 13/40                        |
| (54) PRODUCTION AND SEPARATION      | United States of America              | A23P 10/40                        |
| OF MILK FRACTIONS WITH              | (51) A23J 3/16                        | A23P 10/47                        |
| DIAFILTRATION                       | A23L 15/00                            | A23K 40/10                        |
| (73) Fairlife, LLC                  | (11) EP3629753                        | A23K 20/111                       |
| (72) MCCLOSKEY, Michael J.          | (21) EP18809004.7                     | A23K 20/142                       |
| DOELMAN, Timothy P.                 | (47) 18.12.2024                       | (11) EP3410872                    |
| UR REHMAN, Shakeel                  | (87) AU2018050531                     | (21) EP17705037.4                 |
| MARON, Hans                         | 06.12.2018                            | (47) 18.12.2024                   |
| (31) 201862665670 P                 | (22) 31.05.2018                       | (87) EP2017052096                 |
| (32) 02.05.2018                     | (54) EGG-FREE SIMULATED EGG FOOD      | 10.08.2017                        |
| (33) United States of America       | PRODUCTS                              | (22) 01.02.2017                   |
| (51) A23C 9/144                     | (73) The Veggleto Company Pty Limited | (54) PROCESS FOR INCREASING THE   |
| A23C 21/00                          | (72) LEWIS, Deborah Ann               | DISSOLUTION RATE OF AMIDE         |
| A23C 9/152                          | LEWIS, David Adrian                   | COMPOUNDS                         |
| (11) EP3721715                      | (31) 2017902096                       | (73) Firmenich SA                 |
| (21) EP20167264.9                   | (32) 01.06.2017                       | (72) MUNT, Howard                 |
| (47) 18.12.2024                     | (33) Australia                        | BEAUSSOUBRE, Pascal               |
| (22) 31.03.2020                     | (51) A23K 20/10                       | FIEBER, Wolfgang                  |
| (54) METHOD FOR DEMINERALISATION OF | A23L 27/10                            | (31) 201662290461 P               |
| A DAIRY PROTEIN COMPOSITION         | (11) EP3656223                        | (32) 03.02.2016                   |
| (73) Eurodia Industrie              | (21) EP19201629.3                     | (33) United States of America     |
| (72) LARGETEAU, Denis               | (47) 18.12.2024                       | (51) A23L 27/30                   |
| LUTIN, Florence                     | (22) 07.10.2019                       | C08B 37/14                        |
| GONIN, Anne                         | (54) FOOD ADDITIVE FOR ANIMAL FEEDS   | C12P 19/02                        |
| (31) 2002936                        | COMPRISING FOOD ACIDS AND             | C12P 19/04                        |
| 1903955                             | ESSENTIAL OILS                        | C12P 19/14                        |
| (32) 25.03.2020                     | (73) A.W.P. S.r.l.                    | C08H 8/00                         |
| 12.04.2019                          | (72) CRISTOFORI, Paolo                | (11) EP3790409                    |
| (33) France                         | (31) 201800010530                     | (21) EP19799609.3                 |
| France                              | (32) 23.11.2018                       | (47) 18.12.2024                   |
| (51) A23G 1/00                      | (33) Italy                            | (87) US2019031760                 |
| A23G 1/32                           | (51) A23K 20/189                      | 14.11.2019                        |
| (11) EP3914087                      | C12N 9/40                             | (22) 10.05.2019                   |
| (21) EP20700914.3                   | (11) EP3462904                        | (54) COMPOSITIONS COMPRISING      |
| (47) 18.12.2024                     | (21) EP17727540.1                     | GLUCOSE AND HEMICELLULOSE AND     |
| (87) EP2020051305                   | (47) 18.12.2024                       | THEIR USE                         |
| 30.07.2020                          | (87) EP2017062652                     | (73) Comet Biorefining Inc.       |
| (22) 20.01.2020                     | 30.11.2017                            | (72) D'AGOSTINO, Dennis           |
| (54) VEGAN CHOCOLATE                | (22) 24.05.2017                       | TROYER JR., Richard Lloyd         |
| (73) Katjes Fassin GmbH + Co.       | (54) GASTRIC STABLE POLYPEPTIDES      | RICHARD, Andrew                   |
| Kommanditgesellschaft               | HAVING ALPHA-GALACTOSIDASE            | (31) 201862669684 P               |
| (72) BOEKHAUS, Detlev               | ACTIVITY AND POLYNUCLEOTIDES          | (32) 10.05.2018                   |
| BACHMÜLLER, Tobias                  | ENCODING SAME                         | (33) United States of America     |
| (31) 19153064                       | (73) Novozymes A/S                    | (51) A23L 33/16                   |
| (32) 22.01.2019                     | (72) SALOMON, Jesper                  | A23L 33/18                        |
| (33) European Patent Office (EPO)   | SPODSBERG, Nikolaj                    | A23L 33/19                        |
| (51) A23G 3/20                      | GJERMENSEN, Morten                    | A61P 17/02                        |
| A23G 3/34                           | KROGH, Kristian, Bertel, Roemer, M.   | A23K 50/40                        |
| A61K 47/36                          | DELLA PIA, Eduardo Antonio            | A23K 20/147                       |
| A23L 27/00                          | CARSTENSEN, Lone                      | A23K 20/20                        |
| A23L 27/30                          | (31) 16170961                         | A61P 19/02                        |
| A23L 33/105                         | (32) 24.05.2016                       | (11) EP3750411                    |

|                                     |                                     |                                         |
|-------------------------------------|-------------------------------------|-----------------------------------------|
| (21) EP20020275.2                   | (54) VAPORIZER CARTRIDGE AND        | (73) Huizhou Happy Vaping Technology    |
| (47) 18.12.2024                     | INHALER COMPRISING SUCH A           | Limited                                 |
| (22) 11.06.2020                     | VAPORIZER CARTRIDGE                 | (72) LIN, Guangrong                     |
| (54) NUTRITIONAL SUPPLEMENT FOR THE | (73) Körber Technologies GmbH       | ZHENG, Xianbin                          |
| ENHANCED HEALING OF INJURIES        | (72) MÜLLER, Thomas                 | (31) 201910789406                       |
| (73) Vanlommel, Maria Kristel       | KLEINE WÄCHTER, Michael             | (32) 26.08.2019                         |
| (72) Vanlommel, Florent             | GIESE, Matthias                     | (33) China                              |
| (31) 201900049                      | SCHMIDT, Rene                       | (51) A24F 40/44                         |
| (32) 12.06.2019                     | ROMMING, Niklas                     | A24F 40/46                              |
| (33) Belgium                        | KESSLER, Marc                       | A24F 40/10                              |
| (51) A24B 15/167                    | BERGMANN, Max                       | (11) EP3753425                          |
| A24B 15/42                          | JAKLIN, Jan                         | (21) EP18905927.2                       |
| A24F 47/00                          | SCHUSTER, Christof                  | (47) 18.12.2024                         |
| (11) EP3349598                      | HANNEKEN, Christian                 | (87) CN2018076692                       |
| (21) EP16766967.0                   | CORNILS, Lasse                      | 22.08.2019                              |
| (47) 18.12.2024                     | WUTTKE, Tobias                      | (22) 13.02.2018                         |
| (87) EP2016072075                   | (31) 102019116725                   | (54) HEATING ASSEMBLY FOR AN            |
| 23.03.2017                          | (32) 20.06.2019                     | ELECTRONIC CIGARETTE                    |
| (22) 16.09.2016                     | (33) Germany                        | (73) Shenzhen Smoore Technology Limited |
| (54) LIQUID FORMULATION OF AN       | (51) A24F 40/40                     | (72) JIANG, Zhenlong                    |
| ELECTRONIC VAPOR DEVICE             | (11) EP3937686                      | YI, Changyong                           |
| (73) Philip Morris Products S.A.    | (21) EP20714861.0                   | LI, Xiaoping                            |
| (72) KOBAL, Gerd                    | (47) 18.12.2024                     | (51) A24F 40/50                         |
| SMITH, Barry S.                     | (87) EP2020056243                   | (11) EP3989756                          |
| LI, San                             | 17.09.2020                          | (21) EP21838966.6                       |
| (31) 201514858638                   | (22) 09.03.2020                     | (47) 18.12.2024                         |
| (32) 18.09.2015                     | (54) AEROSOL PROVISION DEVICE       | (87) KR2021012101                       |
| (33) United States of America       | (73) Nicoventures Trading Limited   | 10.03.2022                              |
| (51) A24D 1/22                      | (72) THORSEN, Mitchel               | (22) 07.09.2021                         |
| A24F 13/02                          | SAYED, Ashley John                  | (54) AEROSOL GENERATING DEVICE AND      |
| A24F 42/10                          | WOODMAN, Thomas Alexander John      | METHOD FOR CONTROLLING POWER            |
| (11) EP3998881                      | WARREN, Luke James                  | MODE THEREOF                            |
| (21) EP20746709.3                   | (31) 201962816314 P                 | (73) KT&G Corporation                   |
| (47) 18.12.2024                     | (32) 11.03.2019                     | (72) LEE, Jaemin                        |
| (87) IB2020056769                   | (33) United States of America       | (31) 20210081850                        |
| 28.01.2021                          | (51) A24F 40/42                     | 20200113742                             |
| (22) 17.07.2020                     | A24F 40/10                          | (32) 23.06.2021                         |
| (54) HOLDER FOR AEROSOL DELIVERY    | A24F 40/485                         | 07.09.2020                              |
| DEVICE WITH DETACHABLE              | A24D 3/17                           | (33) Korea (Republic)                   |
| CARTRIDGE                           | (11) EP3866622                      | Korea (Republic)                        |
| (73) R. J. Reynolds Tobacco Company | (21) EP20846045.1                   | (51) A24F 47/00                         |
| (72) SMITH III, Edmond Strother     | (47) 18.12.2024                     | A24F 40/40                              |
| ARAYA, Moises                       | (87) KR2020009928                   | A24F 40/85                              |
| CONNER, Billy T.                    | 04.02.2021                          | A24F 40/10                              |
| BASCAS, Frank                       | (22) 28.07.2020                     | (11) EP4094606                          |
| TAM, Hannah                         | (54) CARTRIDGE AND AEROSOL          | (21) EP22185797.2                       |
| JACKSON, Thaddeus                   | GENERATING DEVICE INCLUDING         | (47) 18.12.2024                         |
| BACHTEL, Randall                    | THE SAME                            | (22) 07.03.2019                         |
| COX, Keri Meggan                    | (73) KT&G Corporation               | (54) SUPPORT ASSEMBLY FOR AEROSOL       |
| FRANCIS, Zachary Kevin              | (72) LEE, Jong Sub                  | GENERATOR AND AEROSOL                   |
| LEIGH, Taylor                       | (31) 20190126289                    | GENERATING APPARATUS HAVING             |
| (31) 201916516573                   | 20190093372                         | SAME                                    |
| (32) 19.07.2019                     | (32) 11.10.2019                     | (73) KT&G Corporation                   |
| (33) United States of America       | 31.07.2019                          | (72) AN, Hwi Kyeong                     |
| (51) A24F 40/10                     | (33) Korea (Republic)               | (31) 20180041713                        |
| A24F 40/57                          | Korea (Republic)                    | (32) 10.04.2018                         |
| A24F 40/42                          | (51) A24F 40/42                     | (33) Korea (Republic)                   |
| A24F 40/44                          | A24F 40/46                          | (51) A41C 3/14                          |
| A61M 11/04                          | A24F 40/10                          | A61B 10/00                              |
| A61M 15/06                          | (11) EP3981272                      | A61F 5/44                               |
| A61M 16/00                          | (21) EP20855912.0                   | A61F 5/443                              |
| (11) EP3986173                      | (47) 18.12.2024                     | A61F 7/10                               |
| (21) EP20733746.0                   | (87) CN2020107286                   | A61F 13/00                              |
| (47) 18.12.2024                     | 04.03.2021                          | A61F 13/14                              |
| (87) EP2020066735                   | (22) 06.08.2020                     | A61F 2/52                               |
| 24.12.2020                          | (54) ELECTRONIC CIGARETTE VAPORIZER | A61F 6/04                               |
| (22) 17.06.2020                     | CAPABLE OF PREHEATING E-            | A61F 7/02                               |
|                                     | CIGARETTE LIQUID                    | A61F 13/02                              |

|                                  |                                         |                                    |
|----------------------------------|-----------------------------------------|------------------------------------|
| A61H 23/02                       | (47) 18.12.2024                         | (31) 202100013616                  |
| A61M 37/00                       | (87) EP2020080889                       | (32) 25.05.2021                    |
| A61N 1/32                        | 14.05.2021                              | (33) Italy                         |
| (11) EP3988059                   | (22) 04.11.2020                         | (51) A43D 1/02                     |
| (21) EP20826737.7                | (54) WEARABLE PROTECTION DEVICE         | A61B 5/107                         |
| (47) 18.12.2024                  | (73) Alpinestars Research S.p.A.        | A43B 13/38                         |
| (87) CN2020096478                | (72) MAZZAROLO, Giovanni                | A43B 17/14                         |
| 24.12.2020                       | NARDO, Lorenzo                          | A43B 7/18                          |
| (22) 17.06.2020                  | (31) 201900020416                       | (11) EP3801115                     |
| (54) FLUID-CARRYING APPLICATION  | (32) 05.11.2019                         | (21) EP19810145.3                  |
| (73) Yang, Kuo Huang             | (33) Italy                              | (47) 18.12.2024                    |
| (72) Yang, Kuo Huang             | (51) A41D 19/00                         | (87) US2019034197                  |
| (31) 201920932735 U              | B32B 3/16                               | 05.12.2019                         |
| (32) 20.06.2019                  | B32B 3/18                               | (22) 28.05.2019                    |
| (33) China                       | (11) EP4404786                          | (54) HIGH PERFORMANCE FOOTBED AND  |
| (51) A41D 1/06                   | (21) EP22802220.8                       | METHOD OF MANUFACTURING SAME       |
| A41D 1/08                        | (47) 18.12.2024                         | (73) Insite Performance, LLC       |
| A41D 31/02                       | (87) FR2022052011                       | (72) DIHARCE, Gregory              |
| A41B 9/00                        | 04.05.2023                              | HOMER, Von Maurice                 |
| A41B 17/00                       | (22) 24.10.2022                         | REINHARTZ, Heath Jarett            |
| A61F 13/49                       | (54) NEEDLE-STICK RESISTANT MATERIAL    | MUTSCHLER, Charles Aaron           |
| (11) EP3860379                   | AND GARMENT COMPRISING SAME             | (31) 201816158395                  |
| (21) EP19875458.2                | (73) Trius Safety                       | 201862677582 P                     |
| (47) 18.12.2024                  | (72) EL AZZOUZI, Mohammed               | (32) 12.10.2018                    |
| (87) US2019056265                | GRIEU, Stéphane                         | 29.05.2018                         |
| 30.04.2020                       | (31) 2111329                            | (33) United States of America      |
| (22) 15.10.2019                  | (32) 25.10.2021                         | United States of America           |
| (54) ATHLETIC GARMENT            | (33) France                             | (51) A44C 17/02                    |
| (73) Clearview Systems, LLC      | (51) A42B 3/32                          | A44C 17/04                         |
| (72) POLSTEIN, Jason             | A42B 3/12                               | (11) EP4144252                     |
| POLSTEIN, Matthew                | (11) EP4018865                          | (21) EP22386058.6                  |
| THOMPSON, Allen                  | (21) EP21216460.2                       | (47) 18.12.2024                    |
| COTTER, Colleen                  | (47) 18.12.2024                         | (22) 22.08.2022                    |
| (31) 201862749449 P              | (22) 21.12.2021                         | (54) METHOD OF PLACING AND FITTING |
| (32) 23.10.2018                  | (54) INFLATABLE HELMET                  | A GLASS REFLECTOR (MIRROR          |
| (33) United States of America    | (73) Ventete Limited                    | AND/OR STRASS) INSIDE A PIECE      |
| (51) A41D 1/14                   | (72) HERPERGER, Colin                   | OF JEWELRY WHEN BEING              |
| A41F 9/00                        | (31) 202020491                          | MANUFACTURED                       |
| (11) EP4201240                   | (32) 23.12.2020                         | (73) Sadre Arhami, Mahdi           |
| (21) EP22204559.3                | (33) United Kingdom                     | (72) Sadre Arhami, Mahdi           |
| (47) 18.12.2024                  | (51) A43B 5/04                          | (31) 20210100580                   |
| (22) 28.10.2022                  | (11) EP3687330                          | (32) 02.09.2021                    |
| (54) WRAP SKIRT                  | (21) EP18792471.7                       | (33) Greece                        |
| (73) Amer Sports Canada Inc.     | (47) 18.12.2024                         | (51) A44C 17/02                    |
| (72) JORDAAN, Anna Elizabeth     | (87) IB2018057410                       | A44C 25/00                         |
| (31) 202117556016                | 28.03.2019                              | (11) EP4277492                     |
| (32) 20.12.2021                  | (22) 25.09.2018                         | (21) EP21844743.1                  |
| (33) United States of America    | (54) SKI BOOT                           | (47) 18.12.2024                    |
| (51) A41D 13/018                 | (73) Calzaturificio S.C.A.R.P.A. S.p.A. | (87) EP2021087693                  |
| A41D 13/05                       | (72) PARISOTTO, Davide                  | 21.07.2022                         |
| B62J 27/00                       | (31) 201700107006                       | (22) 27.12.2021                    |
| (11) EP4268647                   | (32) 25.09.2017                         | (54) REMOVABLE JEWEL SUPPORT       |
| (21) EP23168982.9                | (33) Italy                              | DEVICE                             |
| (47) 18.12.2024                  | (51) A43B 13/12                         | (73) Marlú S.p.A.                  |
| (22) 20.04.2023                  | A43B 13/18                              | (72) FABBRI, Morena                |
| (54) PERSONAL PROTECTION DEVICE, | B29D 35/04                              | (31) 202100000440                  |
| PARTICULARLY FOR PROTECTING      | B29D 35/14                              | (32) 12.01.2021                    |
| THE BACKBONE WHILE PERFORMING    | B29D 35/00                              | (33) Italy                         |
| SPORTS ACTIVITIES                | (11) EP4094618                          | (51) A45B 25/14                    |
| (73) Lomboni, Maria Pia          | (21) EP22175021.9                       | A45B 25/08                         |
| (72) Lomboni, Maria Pia          | (47) 18.12.2024                         | A45B 25/02                         |
| (31) 202200008558                | (22) 24.05.2022                         | (11) EP3981284                     |
| (32) 29.04.2022                  | (54) OUTSOLE FOR FOOTWEAR AND           | (21) EP19932687.7                  |
| (33) Italy                       | METHOD FOR MANUFACTURING                | (47) 18.12.2024                    |
| (51) A41D 13/018                 | SUCH AN OUTSOLE                         | (87) CN2019097179                  |
| G01M 3/32                        | (73) Diadora S.p.A.                     | 17.12.2020                         |
| (11) EP4054367                   | (72) RISATTI, MICHELE                   | (22) 23.07.2019                    |
| (21) EP20797793.5                | ARDISSONO, Cristian                     | (54) HAND-PUSH SUNSHADE            |

|                                   |                                 |                                             |
|-----------------------------------|---------------------------------|---------------------------------------------|
| (73) Luo, Xiong                   | A46B 5/00                       | A47C 4/00                                   |
| (72) Luo, Xiong                   | A61C 15/00                      | E04B 2/74                                   |
| (31) 201910495558                 | A61C 15/02                      | A47B 3/00                                   |
| (32) 10.06.2019                   | B29C 45/14                      | A47B 3/12                                   |
| (33) China                        | B29C 45/16                      | A47B 85/00                                  |
| (51) A45C 3/00                    | B29C 45/26                      | A47C 4/28                                   |
| A47G 25/54                        | (11) EP3305241                  | A47C 5/14                                   |
| D06F 95/00                        | (21) EP16807539.8               | B32B 3/08                                   |
| (11) EP4291067                    | (47) 18.12.2024                 | B32B 21/14                                  |
| (21) EP22705802.1                 | (87) JP2016067149               | B32B 7/14                                   |
| (47) 18.12.2024                   | 15.12.2016                      | B32B 3/12                                   |
| (87) EP2022053692                 | (22) 08.06.2016                 | B32B 3/26                                   |
| 25.08.2022                        | (54) INTERDENTAL CLEANING TOOL  | B32B 5/18                                   |
| (22) 15.02.2022                   | (73) Sunstar Suisse SA          | B32B 5/02                                   |
| (54) TRANSFORMABLE GARMENT BAG    | (72) YAMANE, Makiko             | E04B 1/343                                  |
| (73) Ruoss, Valentin              | KATO, Keisuke                   | E04B 1/82                                   |
| Hans-Joachim Schneider GmbH       | SAKURAI, Shinya                 | E04H 1/12                                   |
| (72) RUOSS, Valentin              | (31) 2015116165                 | E04B 1/344                                  |
| (31) 102021103742                 | 2015116156                      | E04C 3/00                                   |
| (32) 17.02.2021                   | 2015116155                      | F21W 131/301                                |
| (33) Germany                      | 2015116137                      | (11) EP4013268                              |
| (51) A45C 11/20                   | (32) 08.06.2015                 | (21) EP20852823.2                           |
| (11) EP4297608                    | 08.06.2015                      | (47) 18.12.2024                             |
| (21) EP21709480.4                 | 08.06.2015                      | (87) CA2020051102                           |
| (47) 18.12.2024                   | 08.06.2015                      | 18.02.2021                                  |
| (87) IB2021051597                 | (33) Japan                      | (22) 12.08.2020                             |
| 01.09.2022                        | Japan                           | (54) FLEXIBLE FURNITURE WITH WOOD           |
| (22) 26.02.2021                   | Japan                           | PANELS AND RELATED METHODS                  |
| (54) LUNCHBOX                     | Japan                           | (73) Molo Design, Ltd.                      |
| (73) Faitron AG                   | (51) A46B 13/00                 | (72) MACALLEN, Todd P.                      |
| (72) GRAF, Fabian                 | A61C 17/22                      | FORSYTHE, Stephanie J.                      |
| (51) A45F 3/14                    | B26B 21/52                      | (31) 201962886034 P                         |
| A45F 5/02                         | A45D 29/05                      | (32) 13.08.2019                             |
| A63C 11/02                        | A45D 29/14                      | (33) United States of America               |
| (11) EP3838063                    | A61C 15/04                      | (51) A47C 27/05                             |
| (21) EP20215343.3                 | (11) EP3818904                  | A47C 27/14                                  |
| (47) 18.12.2024                   | (21) EP19207432.6               | A47C 31/10                                  |
| (22) 18.12.2020                   | (47) 18.12.2024                 | A47C 27/06                                  |
| (54) SKI RACK SYSTEM              | (22) 06.11.2019                 | A47C 23/30                                  |
| (73) Camp S.p.A.                  | (54) HANDLE FOR AN ELECTRICALLY | A47C 23/00                                  |
| (72) CODEGA, Antonio              | OPERATED PERSONAL CARE          | A47C 23/043                                 |
| MAURI, Filippo                    | IMPLEMENT                       | A47C 23/05                                  |
| GHISLANZONI, Lisa                 | (73) The Gillette Company LLC   | A47C 27/07                                  |
| (31) 201900024466                 | (72) BRUST, Martin              | (11) EP4046540                              |
| (32) 18.12.2019                   | MORGOTT, Markus                 | (21) EP20875766.6                           |
| (33) Italy                        | KNORR, Marcel                   | (47) 18.12.2024                             |
| (51) A46B 3/00                    | JUNGNICKEL, Uwe                 | (87) CN2020121407                           |
| B29C 45/14                        | REUSCHENBACH, Andreas           | 22.04.2021                                  |
| B29C 45/16                        | (51) A47B 96/06                 | (22) 16.10.2020                             |
| A46B 9/02                         | F16B 12/10                      | (54) SPRING CUSHION FOR FURNITURE           |
| A46D 3/00                         | A47B 57/20                      | (73) New-Tec Integration (Xiamen) Co., Ltd. |
| A46B 15/00                        | F16B 12/24                      | (72) LENG, Luhao                            |
| A46B 5/02                         | (11) EP4287908                  | (31) 202011105910                           |
| A46B 1/00                         | (21) EP22700385.2               | 201910990436                                |
| (11) EP4098147                    | (47) 18.12.2024                 | (32) 15.10.2020                             |
| (21) EP22185822.8                 | (87) EP2022050425               | 17.10.2019                                  |
| (47) 18.12.2024                   | 11.08.2022                      | (33) China                                  |
| (22) 14.05.2013                   | (22) 11.01.2022                 | China                                       |
| (54) INTERDENTAL BRUSH            | (54) DEVICE FOR SUPPORT AND     | (51) A47D 13/06                             |
| (73) Trisa Holding AG             | REMOVABLE FIXING OF SHELVES     | A63H 33/00                                  |
| (72) Zurfluh, Peter               | TO THE UPRIGHTS OF A FURNITURE  | E04H 15/00                                  |
| Schär, Michael                    | ITEM                            | (11) EP4164455                              |
| (31) 12004914                     | (73) Effegi Brevetti S.r.l.     | (21) EP21730193.6                           |
| (32) 02.07.2012                   | (72) GIOVANNETTI, Antonio       | (47) 18.12.2024                             |
| (33) European Patent Office (EPO) | (31) 202100002174               | (87) EP2021064729                           |
| (51) A46B 9/04                    | (32) 02.02.2021                 | 23.12.2021                                  |
| A46B 3/00                         | (33) Italy                      | (22) 02.06.2021                             |
|                                   | (51) A47B 96/20                 | (54) TENT FRAME                             |

|                                                                   |                                                                                                               |                                               |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| (73) Bürck, Moritz                                                | BELLO, Daniele                                                                                                | (72) ARNDT, Jonathan                          |
| (72) Bürck, Moritz                                                | BOLZONELLO, Stefano                                                                                           | HENNE, Brian A                                |
| (31) 102020207443                                                 | (31) 202100003395                                                                                             | (31) 202163153106 P                           |
| (32) 16.06.2020                                                   | (32) 15.02.2021                                                                                               | (32) 24.02.2021                               |
| (33) Germany                                                      | (33) Italy                                                                                                    | (33) United States of America                 |
| (51) A47F 3/00                                                    | (51) A47J 31/44                                                                                               | (51) A47L 5/22                                |
| A47F 3/04                                                         | A47J 31/46                                                                                                    | A47L 7/00                                     |
| (11) EP3865014                                                    | A47J 31/60                                                                                                    | A47L 11/20                                    |
| (21) EP20201729.9                                                 | (11) EP4272609                                                                                                | A47L 11/34                                    |
| (47) 18.12.2024                                                   | (21) EP23171839.6                                                                                             | (11) EP4319611                                |
| (22) 14.10.2020                                                   | (47) 18.12.2024                                                                                               | (21) EP22726847.1                             |
| (54) PRODUCT PRESENTER                                            | (22) 05.05.2023                                                                                               | (47) 18.12.2024                               |
| (73) AKE Ausseer Kälte- und Edelstahltechnik GmbH                 | (54) A MILK TEXTURING AND DISPENSING ASSEMBLY                                                                 | (87) US2022024011                             |
| (72) Pilz, Helmut                                                 | (73) Bolwell, Felicity                                                                                        | 13.10.2022                                    |
| (31) 102020103571                                                 | Streben Pty Ltd                                                                                               | (22) 08.04.2022                               |
| (32) 12.02.2020                                                   | (72) Conis, Jason Paul                                                                                        | (54) SURFACE CLEANER                          |
| (33) Germany                                                      | (31) 2022901196                                                                                               | (73) Techtronic Floor Care Technology Limited |
| (51) A47F 7/00                                                    | (32) 05.05.2022                                                                                               | (72) CRAIG, Joshua                            |
| (11) EP4312672                                                    | (33) Australia                                                                                                | GALLENO, Daniel                               |
| (21) EP22718780.4                                                 | (51) A47J 36/16                                                                                               | LHOSTE-CLOS, Mathieu                          |
| (47) 18.12.2024                                                   | A47J 37/06                                                                                                    | HANSEN, Jeremy                                |
| (87) IB2022052933                                                 | A47J 45/07                                                                                                    | FERRIGNO, Anthony                             |
| 06.10.2022                                                        | (11) EP3823504                                                                                                | DAVILA, Rafael                                |
| (22) 30.03.2022                                                   | (21) EP19737115.6                                                                                             | (31) 202163172347 P                           |
| (54) FIXING DEVICE AND DISPLAY FOR PRODUCTS WITH STICK            | (47) 18.12.2024                                                                                               | (32) 08.04.2021                               |
| (73) Perfetti Van Melle S.p.A.                                    | (87) EP2019068628                                                                                             | (33) United States of America                 |
| (72) WALZL, Martin                                                | 23.01.2020                                                                                                    | (51) A47L 7/00                                |
| IDASZAK, Lukasz                                                   | (22) 10.07.2019                                                                                               | A47L 9/04                                     |
| (31) 202100007991                                                 | (54) HOT AIR FRYER COOKING APPARATUS WITH COOKING ACCESSORIES FOR VARIOUS FOOD PREPARATIONS                   | A47L 11/40                                    |
| (32) 31.03.2021                                                   | (73) SEB S.A.                                                                                                 | (11) EP4154778                                |
| (33) Italy                                                        | (72) SEURAT, Frédéric                                                                                         | (21) EP22190067.3                             |
| (51) A47J 31/36                                                   | PRIETO, Guillaume                                                                                             | (47) 18.12.2024                               |
| A47J 31/40                                                        | CORNU, Jérémy                                                                                                 | (22) 11.08.2022                               |
| A47J 31/52                                                        | (31) 1856561                                                                                                  | (54) SURFACE CLEANING APPARATUS               |
| A47J 31/00                                                        | (32) 16.07.2018                                                                                               | (73) Bissell Inc.                             |
| (11) EP4312676                                                    | (33) France                                                                                                   | (72) Pruiett, Jason W.                        |
| (21) EP22713073.9                                                 | (51) A47J 36/16                                                                                               | Grab, Tyler                                   |
| (47) 18.12.2024                                                   | A47J 43/046                                                                                                   | Griffith, Aaron                               |
| (87) IB2022052752                                                 | A47J 43/07                                                                                                    | (31) 202163238864 P                           |
| 29.09.2022                                                        | A47J 37/06                                                                                                    | (32) 31.08.2021                               |
| (22) 25.03.2022                                                   | (11) EP4285797                                                                                                | (33) United States of America                 |
| (54) BEVERAGE PREPARATION MACHINE                                 | (21) EP23204331.5                                                                                             | (51) A47L 9/04                                |
| (73) EVOCA S.p.A.                                                 | (47) 18.12.2024                                                                                               | A47L 7/00                                     |
| (72) ARRIGONI, Andrea                                             | (22) 18.05.2021                                                                                               | B08B 13/00                                    |
| INFANTI, Diego                                                    | (54) FOOD COOKING APPLIANCE COMPRISING A FIRST REMOVABLE COOKING VESSEL AND A SECOND REMOVABLE COOKING VESSEL | A47L 11/14                                    |
| LIBERALI, Marco                                                   | (73) SEB S.A.                                                                                                 | A47L 11/18                                    |
| (31) 202100007541                                                 | (72) PETITALLOT, Johann                                                                                       | A47L 11/19                                    |
| 202100007517                                                      | SEURAT, Frédéric                                                                                              | A47L 11/20                                    |
| (32) 26.03.2021                                                   | MUGNIER, Cédric                                                                                               | (11) EP3970588                                |
| 26.03.2021                                                        | DUSSART, Marie                                                                                                | (21) EP20805480.9                             |
| (33) Italy                                                        | (31) 2005045                                                                                                  | (47) 18.12.2024                               |
| Italy                                                             | (32) 19.05.2020                                                                                               | (87) CN2020086961                             |
| (51) A47J 31/42                                                   | (33) France                                                                                                   | 19.11.2020                                    |
| A47J 42/08                                                        | (51) A47K 13/12                                                                                               | (22) 26.04.2020                               |
| A47J 42/44                                                        | A47K 13/26                                                                                                    | (54) A GROUND CLEANER                         |
| (11) EP4266959                                                    | (11) EP4049569                                                                                                | (73) Tineco Intelligent Technology Co., Ltd.  |
| (21) EP22704365.0                                                 | (21) EP22158320.6                                                                                             | (72) LIU, Yonghai                             |
| (47) 18.12.2024                                                   | (47) 18.12.2024                                                                                               | WEI, Yinglong                                 |
| (87) EP2022052814                                                 | (22) 23.02.2022                                                                                               | CHENG, Rongyang                               |
| 18.08.2022                                                        | (54) TOILET SEAT HINGE                                                                                        | XUE, Jincheng                                 |
| (22) 07.02.2022                                                   | (73) Bemis Manufacturing Company                                                                              | CHEN, Zhen                                    |
| (54) DEVICE FOR GRINDING COFFEE BEANS AND RELATIVE CONTROL METHOD |                                                                                                               | ZHOU, Chunfeng                                |
| (73) De'Longhi Appliances S.r.l.                                  |                                                                                                               | (31) 201911360265                             |
| (72) ROSSETTO, Giovanni                                           |                                                                                                               | 201911202732                                  |
|                                                                   |                                                                                                               | 201911202726                                  |
|                                                                   |                                                                                                               | 201911147958                                  |
|                                                                   |                                                                                                               | 201910943270                                  |
|                                                                   |                                                                                                               | 201910399630                                  |



|                                          |                                                                                                     |                                                                                                         |
|------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| (32) 25.12.2019                          | (54) HAND-HELD FLOOR CLEANING MACHINE WITH A SUCTION FOOT HOLDER                                    | (54) WASHING APPLIANCE WITH IMPROVED DETERMINATION OF INLET VALVE FAULT CONDITIONS                      |
| 29.11.2019                               |                                                                                                     |                                                                                                         |
| 29.11.2019                               |                                                                                                     |                                                                                                         |
| 21.11.2019                               | (73) Hako GmbH                                                                                      | (73) ELECTROLUX APPLIANCES                                                                              |
| 30.09.2019                               | (72) Protz, Carsten                                                                                 | AKTIEBOLAG                                                                                              |
| 14.05.2019                               | Ulrich, Bertram                                                                                     | (72) NENSEN, Arne                                                                                       |
| (33) China                               | (31) 102022111720                                                                                   | FINNE, Conny                                                                                            |
| China                                    | (32) 10.05.2022                                                                                     | BISUTTI, Alberto                                                                                        |
| China                                    | (33) Germany                                                                                        | BENINATO, Daniele                                                                                       |
| China                                    | (51) A47L 11/284                                                                                    | KOZMA, Viktor                                                                                           |
| China                                    | A47L 11/294                                                                                         | BROVEDANI, Sandro                                                                                       |
| China                                    | A47L 11/30                                                                                          | PERSSON, David                                                                                          |
| (51) A47L 9/16                           | (11) EP4278939                                                                                      | PROTA, Riccardo                                                                                         |
| (11) EP4066713                           | (21) EP22174326.3                                                                                   | (51) A61B 1/005                                                                                         |
| (21) EP20892786.3                        | (47) 18.12.2024                                                                                     | G02B 23/24                                                                                              |
| (47) 18.12.2024                          | (22) 19.05.2022                                                                                     | A61B 1/00                                                                                               |
| (87) KR2020007096                        | (54) CLEANING DEVICE AND METHOD FOR WET CLEANING OF A SURFACE, CONTROL DEVICE FOR A CLEANING DEVICE | A61M 25/00                                                                                              |
| 03.06.2021                               |                                                                                                     | B32B 1/08                                                                                               |
| (22) 01.06.2020                          |                                                                                                     | B32B 7/12                                                                                               |
| (54) VACUUM CLEANER                      |                                                                                                     | B32B 15/088                                                                                             |
| (73) LG Electronics Inc.                 | (73) Vorwerk & Co. Interholding GmbH                                                                | B32B 15/09                                                                                              |
| (72) SHIN, Jin Hyouk                     | (72) Greving, Jens                                                                                  | B32B 15/095                                                                                             |
| RYOU, Kyoung Ho                          | Meier, Steffen Marius                                                                               | B32B 15/18                                                                                              |
| SHIN, Hyo Chul                           | (51) A47L 11/30                                                                                     | B32B 27/12                                                                                              |
| CHANG, Dae Ho                            | A47L 11/40                                                                                          | B32B 27/34                                                                                              |
| RYU, Jung Wan                            | (11) EP3932280                                                                                      | B32B 27/36                                                                                              |
| (31) 20190157469                         | (21) EP21184229.9                                                                                   | B32B 27/40                                                                                              |
| (32) 29.11.2019                          | (47) 18.12.2024                                                                                     | (11) EP4268702                                                                                          |
| (33) Korea (Republic)                    | (22) 20.09.2019                                                                                     | (21) EP21910139.1                                                                                       |
| (51) A47L 9/28                           | (54) PORTABLE EXTRACTOR                                                                             | (47) 18.12.2024                                                                                         |
| A47L 9/16                                | (73) Techtronic Floor Care Technology Limited                                                       | (87) JP2021043514                                                                                       |
| (11) EP3773110                           | (72) BODE, Donovan                                                                                  | 30.06.2022                                                                                              |
| (21) EP19777832.7                        | RUKAVINA, Douglas, M                                                                                | (22) 29.11.2021                                                                                         |
| (47) 18.12.2024                          | DEL TORO, Israel                                                                                    | (54) FLEXIBLE TUBE FOR ENDOSCOPE, ENDOSCOPE-TYPE MEDICAL INSTRUMENT, AND MANUFACTURING METHODS THEREFOR |
| (87) KR2019003654                        | IRFAN, Mohammed                                                                                     |                                                                                                         |
| 03.10.2019                               | QUINTERO, Juan Aviles                                                                               | (73) FUJIFILM Corporation                                                                               |
| (22) 28.03.2019                          | (31) 201862734760 P                                                                                 | (72) HORITA Kazuma                                                                                      |
| (54) CLEANER                             | (32) 21.09.2018                                                                                     | NAKAI Yoshihiro                                                                                         |
| (73) LG Electronics Inc.                 | (33) United States of America                                                                       | (31) 2020215764                                                                                         |
| (72) HAM, Seunglok                       | (51) A47L 15/00                                                                                     | (32) 24.12.2020                                                                                         |
| LEE, Seungjin                            | A47L 15/42                                                                                          | (33) Japan                                                                                              |
| LEE, Sangik                              | (11) EP4452037                                                                                      | (51) A61B 1/24                                                                                          |
| (31) 20180036563                         | (21) EP21845000.5                                                                                   | A61C 17/00                                                                                              |
| (32) 29.03.2018                          | (47) 18.12.2024                                                                                     | A61C 17/06                                                                                              |
| (33) Korea (Republic)                    | (87) EP2021087401                                                                                   | A61C 17/10                                                                                              |
| (51) A47L 9/32                           | 29.06.2023                                                                                          | (11) EP3965637                                                                                          |
| (11) EP4110152                           | (22) 22.12.2021                                                                                     | (21) EP20804801.7                                                                                       |
| (21) EP21709751.8                        | (54) WASHING APPLIANCE WITH RECIRCULATION PUMP                                                      | (47) 18.12.2024                                                                                         |
| (47) 18.12.2024                          | (73) ELECTROLUX APPLIANCES                                                                          | (87) US2020032228                                                                                       |
| (87) GB2021050443                        | AKTIEBOLAG                                                                                          | 19.11.2020                                                                                              |
| 02.09.2021                               | (72) KOZMA, Viktor                                                                                  | (22) 08.05.2020                                                                                         |
| (22) 23.02.2021                          | PERSSON, David                                                                                      | (54) DENTAL MOUTHPIECE                                                                                  |
| (54) CONCEALED HANDLE ON CLEANING DEVICE | BENINATO, Daniele                                                                                   | (73) Solmetex, LLC                                                                                      |
| (73) Techtronic Cordless GP              | NENSEN, Arne                                                                                        | (72) NGUYEN, Thien                                                                                      |
| (72) HALE, Tobias                        | BROVEDANI, Sandro                                                                                   | NGUYEN, Ethan                                                                                           |
| (31) 202002720                           | PROTA, Riccardo                                                                                     | PHAM, Tam, Thanh                                                                                        |
| (32) 26.02.2020                          | BISUTTI, Alberto                                                                                    | NGUYEN, Lauren                                                                                          |
| (33) United Kingdom                      | FINNE, Conny                                                                                        |                                                                                                         |
| (51) A47L 11/16                          | (51) A47L 15/00                                                                                     | (31) 201962846353 P                                                                                     |
| A47L 11/162                              | A47L 15/42                                                                                          | (32) 10.05.2019                                                                                         |
| A47L 11/20                               | (11) EP4452036                                                                                      | (33) United States of America                                                                           |
| A47L 11/30                               | (21) EP21844320.8                                                                                   | (51) A61B 3/10                                                                                          |
| A47L 11/40                               | (47) 18.12.2024                                                                                     | (11) EP3682793                                                                                          |
| (11) EP4275568                           | (87) EP2021087406                                                                                   | (21) EP19219988.3                                                                                       |
| (21) EP23172059.0                        | 29.06.2023                                                                                          | (47) 18.12.2024                                                                                         |
| (47) 18.12.2024                          | (22) 22.12.2021                                                                                     | (22) 30.12.2019                                                                                         |
| (22) 08.05.2023                          |                                                                                                     |                                                                                                         |

|                                                                                                        |                                                                                           |                                                                |
|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| (54) OPHTHALMOLOGIC APPARATUS AND METHOD OF CONTROLLING THE SAME                                       | (33) Japan                                                                                | (54) SYSTEM AND METHOD FOR ASSISTING THE CONDUCT OF ACTIVITIES |
| (73) Topcon Corporation                                                                                | (51) A61B 5/00                                                                            | (73) Politecnico di Milano                                     |
| (72) MINO, Toshihiro                                                                                   | A61B 1/04                                                                                 | (72) BIANCHINI, Massimo                                        |
| LIU, Jonathan                                                                                          | A61B 5/05                                                                                 | SUSCA, Davide                                                  |
| (31) 201916377263                                                                                      | A61B 5/053                                                                                | MAFFEI, Stefano                                                |
| 201962793044 P                                                                                         | A61B 5/07                                                                                 | (31) 202100013985                                              |
| (32) 08.04.2019                                                                                        | (11) EP3691518                                                                            | (32) 28.05.2021                                                |
| 16.01.2019                                                                                             | (21) EP18792435.2                                                                         | (33) Italy                                                     |
| (33) United States of America                                                                          | (47) 18.12.2024                                                                           |                                                                |
| United States of America                                                                               | (87) FR2018052418                                                                         |                                                                |
|                                                                                                        | 11.04.2019                                                                                |                                                                |
| (51) A61B 3/113                                                                                        | (22) 02.10.2018                                                                           | (51) A61B 5/00                                                 |
| A61B 5/11                                                                                              | (54) BIOTELEMETRY DEVICE THAT CAN BE INGESTED AND IMPLANTED IN VIVO                       | A61B 5/145                                                     |
| A61B 5/00                                                                                              | (73) Bodycap                                                                              | A61B 5/1486                                                    |
| (11) EP3182880                                                                                         | Centre National de la Recherche Scientifique - CNRS                                       | (11) EP4241685                                                 |
| (21) EP15833830.1                                                                                      | Université de Rennes                                                                      | (21) EP23169503.2                                              |
| (47) 18.12.2024                                                                                        | (72) NIKOLAYEV, Denys                                                                     | (47) 18.12.2024                                                |
| (87) US2015046117                                                                                      | ZHADOBOV, Maxim                                                                           | (22) 20.12.2018                                                |
| 25.02.2016                                                                                             | SAULEAU, Ronan                                                                            | (54) MEDICAL SYSTEM AND METHOD OF MANUFACTURING THEREOF        |
| (22) 20.08.2015                                                                                        | (31) 1759198                                                                              | (73) F. Hoffmann-La Roche AG                                   |
| (54) SYSTEMS AND METHODS FOR USING EYE MOVEMENTS TO DETERMINE TRAUMATIC BRAIN INJURY                   | (32) 02.10.2017                                                                           | (72) KONYA, Ahmet                                              |
| (73) Dignity Health                                                                                    | (33) France                                                                               | (31) 17209756                                                  |
| (72) MARTINEZ-CONDE, Susana                                                                            | (51) A61B 5/00                                                                            | (32) 21.12.2017                                                |
| MACKNIK, Stephen L.                                                                                    | A61B 5/021                                                                                | (33) European Patent Office (EPO)                              |
| (31) 201462040166 P                                                                                    | (11) EP4298993                                                                            |                                                                |
| (32) 21.08.2014                                                                                        | (21) EP23180874.2                                                                         | (51) A61B 5/00                                                 |
| (33) United States of America                                                                          | (47) 18.12.2024                                                                           | A61B 5/145                                                     |
|                                                                                                        | (22) 22.06.2023                                                                           | A61B 5/1486                                                    |
| (51) A61B 3/14                                                                                         | (54) DISPLAY DEVICE TO MEASURE BLOOD PRESSURE                                             | (11) EP4241686                                                 |
| A61B 3/032                                                                                             | (73) Samsung Display Co., Ltd.                                                            | (21) EP23169504.0                                              |
| (11) EP4366601                                                                                         | (72) KIM, Chul                                                                            | (47) 18.12.2024                                                |
| (21) EP22809062.7                                                                                      | (31) 20220079719                                                                          | (22) 20.12.2018                                                |
| (47) 18.12.2024                                                                                        | (32) 29.06.2022                                                                           | (54) MEDICAL SYSTEM AND METHOD OF MANUFACTURING THEREOF        |
| (87) EP2022079624                                                                                      | (33) Korea (Republic)                                                                     | (73) F. Hoffmann-La Roche AG                                   |
| 04.05.2023                                                                                             |                                                                                           | (72) KONYA, Ahmet                                              |
| (22) 24.10.2022                                                                                        |                                                                                           | (31) 17209756                                                  |
| (54) METHOD AND DEVICE FOR MEASURING THE VISION OF A PERSON                                            | (51) A61B 5/00                                                                            | (32) 21.12.2017                                                |
| (73) Carl Zeiss Vision International GmbH                                                              | A61B 5/021                                                                                | (33) European Patent Office (EPO)                              |
| (72) LEUBE, Alexander                                                                                  | A61B 5/026                                                                                |                                                                |
| NEHRBASS, Eric                                                                                         | A61B 5/0295                                                                               | (51) A61B 5/00                                                 |
| STAUDENMAIER, Simon                                                                                    | A61B 5/022                                                                                | A61B 5/145                                                     |
| (31) 21204486                                                                                          | (11) EP3858229                                                                            | A61B 5/1486                                                    |
| (32) 25.10.2021                                                                                        | (21) EP20186833.8                                                                         | (11) EP4238495                                                 |
| (33) European Patent Office (EPO)                                                                      | (47) 18.12.2024                                                                           | (21) EP23169506.5                                              |
|                                                                                                        | (22) 21.07.2020                                                                           | (47) 18.12.2024                                                |
| (51) A61B 3/14                                                                                         | (54) SIGNAL PROCESSING APPARATUS, AND APPARATUS AND METHOD FOR ESTIMATING BIO-INFORMATION | (22) 20.12.2018                                                |
| G06T 7/00                                                                                              | (73) Samsung Electronics Co., Ltd.                                                        | (54) MEDICAL SYSTEM AND METHOD OF MANUFACTURING THEREOF        |
| A61B 3/12                                                                                              | (72) JANG, Dae Geun                                                                       | (73) F. Hoffmann-La Roche AG                                   |
| (11) EP3741288                                                                                         | CHOI, Chang Mok                                                                           | (72) KONYA, Ahmet                                              |
| (21) EP19741888.2                                                                                      | (31) 20200010772                                                                          | (31) 17209756                                                  |
| (47) 18.12.2024                                                                                        | (32) 30.01.2020                                                                           | (32) 21.12.2017                                                |
| (87) JP2019001470                                                                                      | (33) Korea (Republic)                                                                     | (33) European Patent Office (EPO)                              |
| 25.07.2019                                                                                             |                                                                                           |                                                                |
| (22) 18.01.2019                                                                                        | (51) A61B 5/00                                                                            | (51) A61B 5/00                                                 |
| (54) DIAGNOSIS SUPPORT DEVICE, LEARNING DEVICE, DIAGNOSIS SUPPORT METHOD, LEARNING METHOD, AND PROGRAM | A61B 5/0533                                                                               | A61B 5/145                                                     |
| (73) NIKON CORPORATION                                                                                 | G16H 20/70                                                                                | A61B 5/1486                                                    |
| (72) MASAYOSHI Kanato                                                                                  | G16H 40/63                                                                                | (11) EP4241684                                                 |
| KATADA Yusaku                                                                                          | G16H 40/67                                                                                | (21) EP23169501.6                                              |
| KURIHARA Toshihide                                                                                     | (11) EP4346561                                                                            | (47) 18.12.2024                                                |
| TSUBOTA Kazuo                                                                                          | (21) EP22736357.9                                                                         | (22) 20.12.2018                                                |
| (31) 2018007585                                                                                        | (47) 18.12.2024                                                                           | (54) MEDICAL SYSTEM AND METHOD OF MANUFACTURING THEREOF        |
| (32) 19.01.2018                                                                                        | (87) IB2022055010                                                                         | (73) F. Hoffmann-La Roche AG                                   |
|                                                                                                        | 01.12.2022                                                                                | (72) Konya, Ahmet                                              |
|                                                                                                        | (22) 27.05.2022                                                                           | (31) 17209756                                                  |
|                                                                                                        |                                                                                           | (32) 21.12.2017                                                |
|                                                                                                        |                                                                                           | (33) European Patent Office (EPO)                              |
|                                                                                                        |                                                                                           |                                                                |
|                                                                                                        |                                                                                           | (51) A61B 5/00                                                 |

|                                           |                                      |                                            |
|-------------------------------------------|--------------------------------------|--------------------------------------------|
| A61B 5/145                                | LAI, Tom Yu Chia                     | (31) 202006020                             |
| G04D 1/02                                 | (31) 201862688997 P                  | (32) 24.04.2020                            |
| B25B 9/02                                 | (32) 22.06.2018                      | (33) United Kingdom                        |
| H05K 13/04                                | (33) United States of America        | (51) A61B 5/0507                           |
| (11) EP4210557                            | (51) A61B 5/00                       | G01R 27/26                                 |
| (21) EP21770022.8                         | G01R 33/28                           | G01R 27/08                                 |
| (47) 18.12.2024                           | A61B 5/055                           | (11) EP4262547                             |
| (87) EP2021074338                         | (11) EP4122387                       | (21) EP21844400.8                          |
| 10.03.2022                                | (21) EP21187024.1                    | (47) 18.12.2024                            |
| (22) 03.09.2021                           | (47) 18.12.2024                      | (87) IB2021062085                          |
| (54) METHODS AND APPARATUS                | (22) 21.07.2021                      | 30.06.2022                                 |
| ENABLING COUPLING OF AN                   | (54) MAGNETIC RESONANCE              | (22) 21.12.2021                            |
| ELECTRONICS UNIT TO A BASE                | DEVICE COMPRISING A PATIENT          | (54) APPARATUS AND METHOD FOR              |
| UNIT OF A CONTINUOUS ANALYTE              | REPRESENTATION UNIT                  | ACQUIRING TOMOGRAPHIC IMAGES               |
| MONITORING DEVICE                         | (73) Siemens Healthineers AG         | USING MICROWAVES                           |
| (73) Ascensia Diabetes Care Holdings AG   | (72) Bollenbeck, Jan                 | (73) Istituto Nazionale di Fisica Nucleare |
| (72) EREKOVANSKI, Nicholas                | (51) A61B 5/024                      | (72) CONTI, Nadim                          |
| PRAIS, Eugene                             | A61B 5/00                            | (31) 202000031724                          |
| AVIROVIKJ, Dragan                         | A61B 5/02                            | (32) 21.12.2020                            |
| (31) 202063075258 P                       | (11) EP3192439                       | (33) Italy                                 |
| (32) 07.09.2020                           | (21) EP15840904.5                    | (51) A61B 5/0536                           |
| (33) United States of America             | (47) 18.12.2024                      | A61B 5/00                                  |
| (51) A61B 5/00                            | (87) JP2015004570                    | A61M 16/00                                 |
| A61B 8/00                                 | 17.03.2016                           | (11) EP3949854                             |
| G01S 7/52                                 | (22) 08.09.2015                      | (21) EP21020327.9                          |
| G01S 15/89                                | (54) BIOINFORMATION MEASURING        | (47) 18.12.2024                            |
| (11) EP3820354                            | DEVICE                               | (22) 17.09.2019                            |
| (21) EP19740346.2                         | (73) Kyocera Corporation             | (54) LUNG VENTILATION DETECTING            |
| (47) 18.12.2024                           | (72) MORIOKA, Norikazu               | DEVICE                                     |
| (87) EP2019068740                         | HIRANO, Asao                         | (73) Löwenstein Medical Technology S.A.    |
| 16.01.2020                                | HIDAKA, Mizuho                       | (72) Kremer, Peter                         |
| (22) 11.07.2019                           | (31) 2014182378                      | (31) 102018007602                          |
| (54) METHOD FOR ACOUSTO-                  | (32) 08.09.2014                      | (32) 26.09.2018                            |
| OPTIC IMAGING BY FOURIER                  | (33) Japan                           | (33) Germany                               |
| RECONSTRUCTION USING A FLAT               | (51) A61B 5/024                      | (51) A61B 5/0537                           |
| WAVE AS A CARRIER WAVE OF THE             | A61B 5/16                            | A61B 5/145                                 |
| ULTRASONIC WAVE                           | A61B 5/026                           | G01N 27/327                                |
| (73) INSTITUT NATIONAL DE LA SANTE        | A61B 5/349                           | (11) EP4137046                             |
| ET DE LA RECHERCHE MEDICALE -             | (11) EP3562383                       | (21) EP21191836.2                          |
| INSERM                                    | (21) EP17828902.1                    | (47) 18.12.2024                            |
| Univ Paris XIII Paris-Nord Villetaneuse   | (47) 18.12.2024                      | (22) 18.08.2021                            |
| Centre National de la Recherche           | (87) EP2017083976                    | (54) ANALYTE SENSOR AND A METHOD           |
| Scientifique (CNRS)                       | 05.07.2018                           | FOR ITS PRODUCING                          |
| Ecole Supérieure de Physique et de        | (22) 21.12.2017                      | (73) Roche Diabetes Care GmbH              |
| Chimie Industrielles de la Ville de Paris | (54) DEVICE, SYSTEM AND METHOD FOR   | (72) Sliozberg, Kirill                     |
| (72) TUALLE, Jean-Michel                  | GENERATING BIOFEEDBACK               | (51) A61B 5/06                             |
| GENNISSON, Jean-Luc                       | (73) Mengden, Thomas                 | A61B 5/055                                 |
| BOCOUM, Maimouna                          | AIT Austrian Institute of Technology | A61B 6/03                                  |
| RAMAZ, François                           | GmbH                                 | A61B 1/267                                 |
| (31) 1856378                              | (72) WASSERTHEURER, Siegfried        | A61B 5/08                                  |
| (32) 11.07.2018                           | MENGDEN, Thomas                      | A61B 34/20                                 |
| (33) France                               | (31) 102016015631                    | (11) EP3773192                             |
| (51) A61B 5/00                            | (32) 29.12.2016                      | (21) EP19718298.3                          |
| A61B 17/00                                | (33) Germany                         | (47) 18.12.2024                            |
| A61B 90/00                                | (51) A61B 5/03                       | (87) EP2019059266                          |
| A61B 5/022                                | A61B 5/00                            | 17.10.2019                                 |
| A61B 17/135                               | (11) EP4138650                       | (22) 11.04.2019                            |
| (11) EP3809984                            | (21) EP21724354.2                    | (54) POSITION-DETERMINING DEVICE           |
| (21) EP19822298.6                         | (47) 18.12.2024                      | FOR DETERMINING THE POSITION               |
| (47) 18.12.2024                           | (87) GB2021050995                    | OF AN OBJECT WITHIN A TUBULAR              |
| (87) IB2019055233                         | 28.10.2021                           | STRUCTURE                                  |
| 26.12.2019                                | (22) 23.04.2021                      | (73) Fraunhofer-Gesellschaft zur Förderung |
| (22) 21.06.2019                           | (54) DEVICE AND METHOD FOR           | der angewandten Forschung e.V.             |
| (54) TOURNIQUET WITH USER-                | MEASURING A PRESSURE                 | (72) HAHN, Horst                           |
| SELECTABLE SAFETY PROTOCOLS               | DIFFERENTIAL                         | STREHLOW, Jan                              |
| (73) Western Clinical Engineering Ltd.    | (73) Clinical Technology Limited     | PÄTZ, Torben                               |
| (72) MCEWEN, James Allen                  | (72) HOYLE, Brian Stewart            | (31) 102018108643                          |
| JAMESON, Michael                          | DAVIES, Gwilym Alban                 | (32) 11.04.2018                            |

|                                          |                                    |                                   |
|------------------------------------------|------------------------------------|-----------------------------------|
| (33) Germany                             | (11) EP4271268                     | (21) EP21731467.3                 |
| (51) A61B 5/06                           | (21) EP21798176.0                  | (47) 18.12.2024                   |
| A61B 10/02                               | (47) 18.12.2024                    | (87) EP2021065327                 |
| A61B 10/04                               | (87) US2021050672                  | 16.12.2021                        |
| A61B 10/06                               | 07.07.2022                         | (22) 08.06.2021                   |
| A61B 17/34                               | (22) 16.09.2021                    | (54) AN AUDIO SYSTEM FOR AUDITORY |
| A61B 34/00                               | (54) SYSTEMS, DEVICES, AND METHODS | STIMULATION FOR TREATMENT OF      |
| A61B 5/053                               | FOR ANALYTE MONITORING             | NEUROLOGICAL, PSYCHOLOGICAL       |
| A61B 34/30                               | (73) Abbott Diabetes Care Inc.     | OR PSYCHIATRIC DISORDERS          |
| A61B 90/00                               | (72) MITCHELL, Steven T.           | (73) Aarhus Universitet           |
| (11) EP3182922                           | SIMMONS, Matthew                   | T&W Engineering A/S               |
| (21) EP15836579.1                        | RAO, Vivek S.                      | (72) CHRISTENSEN, Christian Bech  |
| (47) 18.12.2024                          | COLE, Jean-Pierre                  | RANK, Mike Lind                   |
| (87) US2015046084                        | PACE, Louis G.                     | KIDMOSE, Preben                   |
| 03.03.2016                               | ROBINSON, Peter G.                 | HEMMESEN, Martin Christian        |
| (22) 20.08.2015                          | VOIT, Peter                        | (31) PA202000670                  |
| (54) SYSTEMS FOR DYNAMIC                 | (31) 202063132651 P                | (32) 09.06.2020                   |
| TRAJECTORY CONTROL                       | (32) 31.12.2020                    | (33) Denmark                      |
| (73) Intuitive Surgical Operations, Inc. | (33) United States of America      | (51) A61B 6/00                    |
| (72) CARLSON, Christopher R.             | (51) A61B 5/155                    | A61B 5/00                         |
| BARBAGLI, Federico                       | A61B 5/15                          | A61B 5/055                        |
| SCHLESINGER, Randall L.                  | (11) EP3632321                     | A61B 34/10                        |
| (31) 201462041038 P                      | (21) EP18810851.8                  | A61B 34/20                        |
| (32) 23.08.2014                          | (47) 18.12.2024                    | G16H 30/40                        |
| (33) United States of America            | (87) KR2018006313                  | G16H 50/20                        |
| (51) A61B 5/08                           | 06.12.2018                         | G06T 7/11                         |
| A61B 5/097                               | (22) 01.06.2018                    | G06T 5/00                         |
| A61B 5/00                                | (54) SENSOR APPLICATOR ASSEMBLY    | G06V 40/14                        |
| G01N 33/497                              | FOR CONTINUOUS GLUCOSE             | G06V 10/25                        |
| (11) EP3936044                           | MONITORING SYSTEM                  | (11) EP4104765                    |
| (21) EP21182729.0                        | (73) I-sens, Inc.                  | (21) EP21754189.5                 |
| (47) 18.12.2024                          | (72) CHAE, Kyung Chul              | (47) 18.12.2024                   |
| (22) 30.06.2021                          | CHOI, Hyun Ho                      | (87) KR2021001535                 |
| (54) SAMPLE COLLECTOR FOR                | RYU, Goang Yel                     | 19.08.2021                        |
| RECEIVING A BREATH GAS SAMPLE            | KANG, Young Jea                    | (22) 05.02.2021                   |
| AND GAS SAMPLE TESTING DEVICE            | WANG, Ji Hoon                      | (54) METHOD AND DEVICE FOR        |
| (73) Dräger Safety AG & Co. KGaA         | (31) 20170068964                   | EXTRACTING MAJOR VESSEL           |
| (72) Schröter, Sebastian                 | (32) 02.06.2017                    | REGION ON BASIS OF VESSEL IMAGE   |
| Rekow, Jens                              | (33) Korea (Republic)              | (73) Medipixel, Inc.              |
| (31) 102020117784                        | (51) A61B 5/16                     | (72) KWEON, Jihoon                |
| (32) 06.07.2020                          | A61B 5/00                          | KIM, Young-Hak                    |
| (33) Germany                             | A61B 5/01                          | (31) 20200015856                  |
| (51) A61B 5/12                           | A61B 5/026                         | (32) 10.02.2020                   |
| A61B 5/378                               | (11) EP3424425                     | (33) Korea (Republic)             |
| G16H 50/20                               | (21) EP17760040.0                  | (51) A61B 6/00                    |
| A61B 3/10                                | (47) 18.12.2024                    | G01R 33/48                        |
| G16H 40/63                               | (87) JP2017007991                  | A61B 6/03                         |
| A61B 5/38                                | 08.09.2017                         | A61B 6/46                         |
| (11) EP4395641                           | (22) 28.02.2017                    | A61B 6/50                         |
| (21) EP22764475.4                        | (54) DETERMINATION RESULT OUTPUT   | G06T 7/00                         |
| (47) 18.12.2024                          | DEVICE                             | G01R 33/563                       |
| (87) NL2022050495                        | (73) Daikin Industries, Ltd.       | (11) EP4257048                    |
| 09.03.2023                               | Institute of Science Tokyo         | (21) EP22167439.3                 |
| (22) 31.08.2022                          | (72) TOMATSU, Taro                 | (47) 18.12.2024                   |
| (54) DETERMINING A PERSON'S              | ARAI, Junichiro                    | (22) 08.04.2022                   |
| SENSORY CAPABILITY BASED ON              | KOTANI, Yasunori                   | (54) MULTIMODAL DETERMINATION OF  |
| STIMULUS RESPONSE AMPLITUDE              | OHGAMI, Yoshimi                    | AUGMENTED SEQUENCE OF CT          |
| WEIGHTS                                  | (31) 2016038483                    | PARAMETER CARDS                   |
| (73) Mindaffect B.V.                     | (32) 29.02.2016                    | (73) Siemens Healthineers AG      |
| (72) PORTOLES MARIN, Oscar               | (33) Japan                         | (72) Lichy, Matthias              |
| KODERMAN, Eva                            | (51) A61B 5/374                    | Hofmann, Bernd                    |
| FARQUHAR, Jason David Robert             | A61B 5/38                          | Schmidt, Bernhard                 |
| VAN KESTEREN, Mark Wilhelmus             | A61B 7/02                          | (51) A61B 6/42                    |
| Theodorus                                | A61B 7/04                          | G06N 3/0464                       |
| (31) 2029113                             | A61M 21/00                         | G06N 3/084                        |
| (32) 02.09.2021                          | A61B 5/00                          | G06N 3/09                         |
| (33) Netherlands                         | A61B 7/00                          | A61B 6/03                         |
| (51) A61B 5/145                          | (11) EP4161623                     | A61B 6/00                         |

|                                         |                                            |                                       |
|-----------------------------------------|--------------------------------------------|---------------------------------------|
| A61B 8/08                               | (54) METHODS FOR HIGH SPATIAL              | 201900005986                          |
| (11) EP4355218                          | AND TEMPORAL RESOLUTION                    | (32) 17.04.2019                       |
| (21) EP22731714.6                       | ULTRASOUND IMAGING OF                      | 17.04.2019                            |
| (47) 18.12.2024                         | MICROVESSELS                               | (33) Italy                            |
| (87) EP2022065616                       | (73) Mayo Foundation for Medical Education | Italy                                 |
| 22.12.2022                              | and Research                               | (51) A61B 8/12                        |
| (22) 09.06.2022                         | (72) HUANG, Chengwu                        | A61B 1/00                             |
| (54) CONTROLLING AN ALERT SIGNAL        | CHEN, Shigao                               | A61B 8/00                             |
| FOR SPECTRAL COMPUTED                   | (31) 202063039549 P                        | A61B 5/00                             |
| TOMOGRAPHY IMAGING                      | (32) 16.06.2020                            | (11) EP4241659                        |
| (73) Koninklijke Philips N.V.           | (33) United States of America              | (21) EP23182659.5                     |
| (72) GOSHEN, Liran                      | (51) A61B 8/06                             | (47) 18.12.2024                       |
| (31) 21180119                           | A61B 8/08                                  | (22) 28.06.2018                       |
| (32) 17.06.2021                         | G01S 15/89                                 | (54) IMAGE DIAGNOSTIC CATHETER        |
| (33) European Patent Office (EPO)       | (11) EP4103062                             | (73) TERUMO Kabushiki Kaisha          |
| (51) A61B 6/46                          | (21) EP21710705.1                          | (72) TOKIDA, Masanori                 |
| G06T 7/00                               | (47) 18.12.2024                            | (31) 2017127631                       |
| A61B 6/50                               | (87) US2021017631                          | (32) 29.06.2017                       |
| G06T 5/50                               | 19.08.2021                                 | (33) Japan                            |
| A61F 2/958                              | (22) 11.02.2021                            | (51) A61B 9/00                        |
| A61B 90/00                              | (54) HIGH-SENSITIVITY AND REAL-            | A61B 7/04                             |
| A61B 6/00                               | TIME ULTRASOUND BLOOD FLOW                 | H01H 35/14                            |
| G06T 7/12                               | IMAGING BASED ON ADAPTIVE                  | (11) EP4037570                        |
| G06T 7/73                               | AND LOCALIZED SPATIOTEMPORAL               | (21) EP20873211.5                     |
| (11) EP3815036                          | CLUTTER FILTERING                          | (47) 18.12.2024                       |
| (21) EP19731757.1                       | (73) Mayo Foundation for Medical Education | (87) FI2020050652                     |
| (47) 18.12.2024                         | and Research                               | 08.04.2021                            |
| (87) EP2019066619                       | (72) CHEN, Shigao                          | (22) 02.10.2020                       |
| 02.01.2020                              | HUANG, Chengwu                             | (54) A MEDICAL TESTING APPARATUS      |
| (22) 24.06.2019                         | (31) 202062975515 P                        | (73) Danska Oy                        |
| (54) STENT POSITIONING                  | (32) 12.02.2020                            | (72) DANSKA, Tomas                    |
| (73) Koninklijke Philips N.V.           | (33) United States of America              | (31) 20195846                         |
| (72) AUVRAY, Vincent, Maurice, André    | (51) A61B 8/08                             | (32) 04.10.2019                       |
| FLORENT, Raoul                          | A61B 8/00                                  | (33) Finland                          |
| (31) 18290070                           | (11) EP4007528                             | (51) A61B 10/00                       |
| (32) 28.06.2018                         | (21) EP20756933.6                          | A61B 5/11                             |
| (33) European Patent Office (EPO)       | (47) 18.12.2024                            | A61B 5/00                             |
| (51) A61B 6/58                          | (87) FR2020051396                          | (11) EP4111984                        |
| A61B 6/00                               | 04.02.2021                                 | (21) EP21767819.2                     |
| (11) EP4340727                          | (22) 29.07.2020                            | (47) 18.12.2024                       |
| (21) EP21778343.0                       | (54) CARDIAC DEVICE                        | (87) JP2021009229                     |
| (47) 18.12.2024                         | (73) Institut National de Recherche en     | 16.09.2021                            |
| (87) CN2021116208                       | Informatique et en Automatique (INRIA)     | (22) 09.03.2021                       |
| 05.01.2023                              | INSTITUT NATIONAL DE LA SANTE ET           | (54) INFORMATION PROCESSING           |
| (22) 02.09.2021                         | DE LA RECHERCHE MEDICALE                   | METHOD, COMPUTER PROGRAM,             |
| (54) CT BEAM HARDENING CORRECTION       | (72) PERNOT, Mathieu                       | INFORMATION PROCESSING DEVICE,        |
| METHOD, CT BEAM HARDENING               | MOIREAU, Philippe                          | AND INFORMATION PROCESSING            |
| CORRECTION DEVICE, AND                  | CHAPELLE, Dominique                        | SYSTEM                                |
| STORAGE MEDIUM                          | TANTER, Mickaël                            | (73) Terumo Kabushiki Kaisha          |
| (73) Siemens Shanghai Medical Equipment | (31) 1908859                               | (72) HONMA, Yasuyuki                  |
| Ltd.                                    | (32) 01.08.2019                            | MAEDA, Naoyuki                        |
| (72) ZHANG, Guo Qing                    | (33) France                                | (31) 2020041076                       |
| ZHOU, Wei                               | (51) A61B 8/08                             | (32) 10.03.2020                       |
| WANG, Yang                              | A61B 8/12                                  | (33) Japan                            |
| CHEN, Wen Hao                           | A61B 8/00                                  | (51) A61B 17/04                       |
| (31) 202110718133                       | (11) EP3955825                             | A61B 17/00                            |
| (32) 28.06.2021                         | (21) EP20725917.7                          | A61B 90/00                            |
| (33) China                              | (47) 18.12.2024                            | (11) EP4138680                        |
| (51) A61B 8/06                          | (87) IB2020053593                          | (21) EP21718402.7                     |
| A61B 8/08                               | 22.10.2020                                 | (47) 18.12.2024                       |
| G01S 7/52                               | (22) 16.04.2020                            | (87) US2021023392                     |
| (11) EP3998951                          | (54) ENDOCAVITY PROBE AND METHOD           | 28.10.2021                            |
| (21) EP21739217.4                       | FOR PROCESSING DIAGNOSTIC                  | (22) 22.03.2021                       |
| (47) 18.12.2024                         | IMAGES                                     | (54) CONTROLLED SUTURE TENSIONING     |
| (87) US2021037464                       | (73) ELESTA S.P.A.                         | (73) Edwards Lifesciences Corporation |
| 23.12.2021                              | (72) BRESCHI, Luca                         | (72) RAO, Jyoti B                     |
| (22) 15.06.2021                         | MASOTTI, Leonardo                          | CARPENTER, John Richard               |
|                                         | (31) 201900005988                          | JANISH, Bryan A.                      |

|                                   |                                                |                                   |
|-----------------------------------|------------------------------------------------|-----------------------------------|
| (31) 202063014083 P               | (54) MEDICAL IMPLANT ATTACHMENT                | PRUITT, Alexander                 |
| (32) 22.04.2020                   | MECHANISM                                      | (31) 201962899622 P               |
| (33) United States of America     | (73) Boston Scientific Scimed Inc.             | (32) 12.09.2019                   |
| (51) A61B 17/064                  | (72) KROEGER, John D.                          | (33) United States of America     |
| A61B 17/068                       | COOPER, Kelsey Rae                             | (51) A61B 17/22                   |
| A61B 17/00                        | MORRIS, David B.                               | (11) EP4034005                    |
| (11) EP4032481                    | ROTH, Reggie                                   | (21) EP20786114.7                 |
| (21) EP22155597.2                 | DINGES, Eric                                   | (47) 18.12.2024                   |
| (47) 18.12.2024                   | TASSONI, Nicholas L.                           | (87) US2020050899                 |
| (22) 30.11.2015                   | TESCHENDORF, John L.                           | 01.04.2021                        |
| (54) APPARATUS FOR LOADING AND    | JANCARIC, Thomas P.                            | (22) 15.09.2020                   |
| IMPLANTING A SHAPE MEMORY         | (31) 201862634498 P                            | (54) LESION CROSSING SHOCK WAVE   |
| IMPLANT                           | (32) 23.02.2018                                | CATHETER                          |
| (73) DePuy Synthes Products, Inc. | (33) United States of America                  | (73) Shockwave Medical, Inc.      |
| (72) TABER, Joseph H.             | (51) A61B 17/15                                | (72) PHAN, Huy                    |
| CHENEY, Daniel F.                 | A61B 17/17                                     | LONG, Chi                         |
| PERKINS, Luke A.                  | A61B 17/80                                     | JENKINS, Todd                     |
| RITZ, Joseph P.                   | (11) EP3672502                                 | NGUYEN, Hoa                       |
| (31) 201514950321                 | (21) EP18753216.3                              | (31) 201962904847 P               |
| 201462086381 P                    | (47) 18.12.2024                                | (32) 24.09.2019                   |
| (32) 24.11.2015                   | (87) EP2018072461                              | (33) United States of America     |
| 02.12.2014                        | 28.02.2019                                     | (51) A61B 17/22                   |
| (33) United States of America     | (22) 20.08.2018                                | (11) EP4129214                    |
| United States of America          | (54) SURGICAL GUIDE DEVICE FOR                 | (21) EP22196987.6                 |
| (51) A61B 17/072                  | ASSISTING AN OPEN WEDGE                        | (47) 18.12.2024                   |
| A61B 17/00                        | OSTEOTOMY                                      | (22) 02.11.2018                   |
| (11) EP4161405                    | (73) Newclip International                     | (54) LOW PROFILE ELECTRODES FOR A |
| (21) EP22714578.6                 | (72) BERTON, Philippe                          | SHOCK WAVE CATHETER               |
| (47) 18.12.2024                   | BAUDRY, Frank                                  | (73) Shockwave Medical, Inc.      |
| (87) IB2022052818                 | LARCHE, Grégoire                               | (72) VO, Khanh                    |
| 06.10.2022                        | PODGORSKI, Jean-Pierre                         | NGUYEN, Hoa D.                    |
| (22) 28.03.2022                   | (31) 1757798                                   | (31) 201715817073                 |
| (54) COMPRESSIBLE ADJUNCTS WITH   | (32) 22.08.2017                                | (32) 17.11.2017                   |
| DRUG RELEASE FEATURES             | (33) France                                    | (33) United States of America     |
| (73) Cilag GmbH International     | (51) A61B 17/15                                | (51) A61B 17/29                   |
| (72) SHELTON, IV, Frederick E.    | A61B 17/17                                     | A61B 18/14                        |
| STRANG, Heather                   | A61B 17/80                                     | (11) EP3845162                    |
| VENDELY, Michael J.               | (11) EP3845153                                 | (21) EP20217636.8                 |
| HARRIS, Jason L.                  | (21) EP20181567.7                              | (47) 18.12.2024                   |
| WONG, Jordan B.                   | (47) 18.12.2024                                | (22) 29.12.2020                   |
| (31) 202117216982                 | (22) 23.06.2020                                | (54) ELECTROSURGICAL END          |
| (32) 30.03.2021                   | (54) SURGICAL GUIDE FOR OSTEOTOMY              | EFFECTORS WITH THERMALLY          |
| (33) United States of America     | OPERATIONS                                     | INSULATIVE AND THERMALLY          |
| (51) A61B 17/072                  | (73) Saúde Atlântica - Gestão Hospitalar, S.A. | CONDUCTIVE PORTIONS               |
| A61B 17/064                       | (72) SANCHEZ ALVAREZ, Jose Miguel              | (73) Ethicon LLC                  |
| A61B 17/00                        | SANCHEZ ARIZMENDIARRIETA, Xabier               | (72) MORGAN, Nicholas M.          |
| A61B 17/29                        | FIZ SANCHEZ, Juan Nicholas                     | ECKERT, Chad E.                   |
| A61B 90/00                        | (31) 201930635                                 | WORTHINGTON, Sarah A.             |
| (11) EP4049594                    | (32) 09.07.2019                                | ARONHALT, Taylor W.               |
| (21) EP22167948.3                 | (33) Spain                                     | FIEBIG, Kevin M.                  |
| (47) 18.12.2024                   | (51) A61B 17/16                                | MORGAN, Joshua P.                 |
| (22) 21.12.2017                   | A61B 17/17                                     | MUMAW, Daniel J.                  |
| (54) FIRING MEMBER PIN            | A61B 18/18                                     | MESSERLY, Jeffrey D.              |
| CONFIGURATIONS                    | (11) EP4027912                                 | ZEINER, Mark S.                   |
| (73) Ethicon LLC                  | (21) EP20862138.3                              | SHELTON IV, Frederick E.          |
| (72) HARRIS, Jason L.             | (47) 18.12.2024                                | (31) 202016885888                 |
| SHELTON, IV, Frederick E.         | (87) US2020050249                              | 201962955299 P                    |
| BAKOS, Gregory J.                 | 18.03.2021                                     | (32) 28.05.2020                   |
| (31) 201615385906                 | (22) 10.09.2020                                | 30.12.2019                        |
| (32) 21.12.2016                   | (54) SYSTEMS FOR TISSUE MODULATION             | (33) United States of America     |
| (33) United States of America     | (73) Relevant Medsystems, Inc.                 | United States of America          |
| (51) A61B 17/12                   | (72) WILLINK, Michael                          | (51) A61B 17/32                   |
| (11) EP3755239                    | DONOVAN, Brian W.                              | (11) EP3834753                    |
| (21) EP19712326.8                 | BAKER, Ray M.                                  | (21) EP21151184.5                 |
| (47) 18.12.2024                   | MARKS, Michael R.                              | (47) 18.12.2024                   |
| (87) US2019018724                 | DINELLO, Alexandre M.                          | (22) 03.09.2014                   |
| 29.08.2019                        | EDIDIN, Avram Allan                            |                                   |
| (22) 20.02.2019                   | PATEL, Samit                                   |                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) TRANSDUCER FEATURES<br>FOR ULTRASONIC SURGICAL<br>INSTRUMENT                                                                                                                                                                                                                                                                                                                                          | A61B 17/00<br>(11) EP3991669<br>(21) EP20833409.4<br>(47) 18.12.2024<br>(87) CN2020095440<br>30.12.2020<br>(22) 10.06.2020<br>(54) ADSORPTION HEAD AND<br>ADSORPTION DEVICE<br>(73) Deke Medtech (Hangzhou) Inc.<br>(72) WU, Zhiming<br>SHAO, Nan<br>ZI, Zhenjun<br>XU, Mingyuan<br>HU, Jingjing<br>(31) 201910555241<br>(32) 25.06.2019<br>(33) China                                                                                                                   | (73) Aesculap AG<br>(72) Schwiesau, Jens<br>Krüger, Sven<br>(31) 102020108276<br>(32) 25.03.2020<br>(33) Germany                                                                                                                                                                                                                                                                                            |
| (73) Ethicon LLC<br>(72) GEE, Jacob S<br>STULEN, Foster B<br>DANNAHER, William D<br>KIMBALL, Cory G<br>LAMPING, Michael R.<br>DIETZ, Timothy G<br>MONSON, Gavin M<br>NIELD, Scott A<br>RHEE, Sora<br>SCHULTE, John B<br>BALEK, Stephen J.<br>(31) 201314032842<br>(32) 20.09.2013<br>(33) United States of America                                                                                         | (51) A61B 17/3209<br>A61B 17/00<br>A61B 17/064<br>(11) EP3257455<br>(21) EP16174952.8<br>(47) 18.12.2024<br>(22) 17.06.2016<br>(54) A FISTULA TREATMENT SYSTEM<br>(73) National University of Ireland, Galway<br>(72) ZILVERSMIT, Moshe<br>BAMBURY, Eoin                                                                                                                                                                                                                 | (51) A61B 17/88<br>A61F 2/30<br>B21D 7/00<br>B21D 7/12<br>A61F 2/28<br>A61B 17/80<br>(11) EP3888578<br>(21) EP20000232.7<br>(47) 18.12.2024<br>(22) 29.06.2020<br>(54) PLATE BENDER FOR MANDIBULAR<br>IMPLANTS<br>(73) Techfit Digital Surgery Inc.<br>(72) Restrepo Franco, Santiago<br>Toro Restrepo, Mauricio<br>Polanía Restrepo, Simón<br>(31) 20003890<br>(32) 30.03.2020<br>(33) Colombia            |
| (51) A61B 17/3209<br>A61B 17/3211<br>A61B 17/3213<br>A61B 17/00<br>(11) EP3818952<br>(21) EP20206298.0<br>(47) 18.12.2024<br>(22) 06.11.2020<br>(54) INCISION TOOLS<br>(73) K2M, Inc.<br>(72) SARENDRANATH, Alvin<br>STAD, Shawn D.<br>BUCHERT, Oliver<br>POELSTRA, Kornelis<br>BELL, Christopher P.<br>SHARIFI-MEHR, Amir Ali<br>(31) 201962931939 P<br>(32) 07.11.2019<br>(33) United States of America  | (51) A61B 17/34<br>A61M 1/04<br>A61B 90/40<br>A61M 39/02<br>A61B 17/00<br>(11) EP4059457<br>(21) EP22172503.9<br>(47) 18.12.2024<br>(22) 21.09.2018<br>(54) PERCUTANEOUS ACCESS PATHWAY<br>SYSTEM<br>(73) Critical Innovations, LLC<br>(72) DONALDSON, Ross<br>BUCHANAN, Oliver<br>ARMSTRONG, Jon<br>CAMBRIDGE, John<br>FISHER, Tim<br>(31) 201816113707<br>201762562183 P<br>(32) 27.08.2018<br>22.09.2017<br>(33) United States of America<br>United States of America | (51) A61B 18/02<br>A61B 18/18<br>A61B 18/00<br>(11) EP3847984<br>(21) EP21156920.7<br>(47) 18.12.2024<br>(22) 01.06.2018<br>(54) ELECTROSURGICAL INSTRUMENT<br>FOR FREEZING AND ABLATING<br>BIOLOGICAL TISSUE<br>(73) Creo Medical Limited<br>(72) BURN, Patrick<br>SHAH, Pallav<br>WHITE, Malcolm<br>CLEGG, Peter<br>HANCOCK, Christopher Paul<br>(31) 201708725<br>(32) 01.06.2017<br>(33) United Kingdom |
| (51) A61B 17/34<br>(11) EP4125643<br>(21) EP21722865.9<br>(47) 18.12.2024<br>(87) EP2021061428<br>04.11.2021<br>(22) 30.04.2021<br>(54) UNIVERSAL SIZE MULTI-WALLED<br>ELASTOMER CANNULA DEPTH<br>LIMITER<br>(73) Ethicon LLC<br>Cilag GmbH International<br>(72) VIJAYACHANDRAN, Sajayesh<br>(31) 202011018668<br>202117213409<br>(32) 01.05.2020<br>26.03.2021<br>(33) India<br>United States of America | (51) A61B 17/70<br>(11) EP3677204<br>(21) EP19205199.3<br>(47) 18.12.2024<br>(22) 13.05.2013<br>(54) SURGICAL CONNECTORS AND<br>INSTRUMENTATION<br>(73) OrthoPediatrics Corp.<br>(72) PENDLETON, John E.<br>LEWIS, Ryan A.<br>DANIELS, David W.<br>KAPITAN, John<br>SOUZA, John J.<br>(31) 201361798414 P<br>201261646030 P<br>(32) 15.03.2013<br>11.05.2012<br>(33) United States of America<br>United States of America                                                | (51) A61B 18/02<br>A61B 90/00<br>(11) EP3781059<br>(21) EP19837278.1<br>(47) 18.12.2024<br>(87) US2019042329<br>23.01.2020<br>(22) 18.07.2019<br>(54) CRYOGENIC SURGICAL SYSTEMS<br>(73) AtriCure, Inc.<br>(72) STEFANOV, Stefan<br>FAGO, Frank, M.<br>MCHALE, Jonathon<br>(31) 201862701384 P<br>(32) 20.07.2018<br>(33) United States of America                                                          |
| (51) A61B 17/34                                                                                                                                                                                                                                                                                                                                                                                            | (51) A61B 17/70<br>(11) EP3884891<br>(21) EP21163893.7<br>(47) 18.12.2024<br>(22) 22.03.2021<br>(54) SURGICAL CONNECTING DEVICE<br>AND SURGICAL CONNECTION<br>SYSTEM                                                                                                                                                                                                                                                                                                     | (51) A61B 18/12<br>A61B 18/00<br>A61B 18/14<br>(11) EP3846709<br>(21) EP19772930.4<br>(47) 18.12.2024<br>(87) US2019049768<br>12.03.2020                                                                                                                                                                                                                                                                    |

|                                            |                                  |                                    |
|--------------------------------------------|----------------------------------|------------------------------------|
| (22) 05.09.2019                            | (87) JP2020033087                | (51) A61B 34/10                    |
| (54) ELECTROSURGICAL GENERATOR             | 10.03.2022                       | A61B 34/30                         |
| VERIFICATION SYSTEM                        | (22) 01.09.2020                  | A61B 34/00                         |
| (73) Applied Medical Resources Corporation | (54) SURGICAL TOOL               | A61B 1/00                          |
| (72) GORIN, Igor                           | (73) RIVERFIELD Inc.             | A61B 1/018                         |
| ADL, Sean                                  | (72) SHINDO, Koki                | A61B 17/29                         |
| SOTO, Andrew                               | (51) A61B 34/00                  | A61B 90/00                         |
| (31) 201862727176 P                        | G06F 3/0488                      | (11) EP3939749                     |
| (32) 05.09.2018                            | G06F 3/0354                      | (21) EP20773771.9                  |
| (33) United States of America              | G06F 3/044                       | (47) 18.12.2024                    |
| (51) A61B 18/12                            | G06F 3/0484                      | (87) JP2020005839                  |
| A61B 18/14                                 | G06F 3/0482                      | 24.09.2020                         |
| (11) EP3752083                             | G06F 3/0481                      | (22) 14.02.2020                    |
| (21) EP19706032.0                          | G06F 3/03                        | (54) SYSTEM FOR DISPLAYING A FORCE |
| (47) 18.12.2024                            | G06F 3/14                        | AND FORCE SENSATION DISPLAY        |
| (87) IB2019050928                          | G06F 3/01                        | METHOD                             |
| 22.08.2019                                 | A61B 34/10                       | (73) RIVERFIELD Inc.               |
| (22) 06.02.2019                            | G06F 3/04817                     | (72) FURUSAWA, Yuki                |
| (54) MULTI-CHANNEL RF ABLATION             | G06F 3/04815                     | HARAGUCHI, Daisuke                 |
| (73) Biosense Webster (Israel) Ltd.        | G06F 3/04883                     | TANAKA, Yasushi                    |
| (72) ROTMAN, Eyal                          | G06F 3/04845                     | (31) 2019048548                    |
| FRIED, Shlomo                              | (11) EP3380031                   | (32) 15.03.2019                    |
| LEVIN, Michael                             | (21) EP16868102.1                | (33) Japan                         |
| ASHKINEZER, Boris                          | (47) 18.12.2024                  | (51) A61B 34/20                    |
| (31) 201815898052                          | (87) IB2016056228                | A61B 8/00                          |
| (32) 15.02.2018                            | 01.06.2017                       | A61B 8/12                          |
| (33) United States of America              | (22) 17.10.2016                  | A61B 90/00                         |
| (51) A61B 18/12                            | (54) METHOD AND SYSTEM FOR       | (11) EP3478209                     |
| A61B 18/14                                 | INTERACTING WITH MEDICAL         | (21) EP17742375.3                  |
| (11) EP3846717                             | INFORMATION                      | (47) 18.12.2024                    |
| (21) EP19773593.9                          | (73) NZ Technologies Inc.        | (87) EP2017065780                  |
| (47) 18.12.2024                            | (72) ZIRAKNEJAD, Nima            | 04.01.2018                         |
| (87) US2019049807                          | PORWAL, Anshul                   | (22) 27.06.2017                    |
| 12.03.2020                                 | SAXENA, Pranav                   | (54) INTERTIAL DEVICE TRACKING     |
| (22) 05.09.2019                            | (31) 201562260428 P              | SYSTEM AND METHOD OF               |
| (54) ELECTROSURGICAL GENERATOR             | (32) 27.11.2015                  | OPERATION THEREOF                  |
| CONTROL SYSTEM                             | (33) United States of America    | (73) Koninklijke Philips N.V.      |
| (73) Applied Medical Resources Corporation | (51) A61B 34/10                  | (72) MERAL, Faik, Can              |
| (72) GORIN, Igor                           | A61B 8/00                        | KRUECKER, Jochen                   |
| PANG, Joanna                               | A61B 90/00                       | (31) 201662356622 P                |
| NGUYEN, Michael                            | G16H 30/40                       | (32) 30.06.2016                    |
| (31) 201862727195 P                        | A61B 34/30                       | (33) United States of America      |
| (32) 05.09.2018                            | A61B 5/107                       | (51) A61B 34/30                    |
| (33) United States of America              | G06T 7/33                        | A61B 17/34                         |
| (51) A61B 18/14                            | G06T 7/73                        | A61B 46/10                         |
| A61B 34/00                                 | G16H 20/40                       | A61B 34/35                         |
| B29C 45/00                                 | G16H 30/20                       | (11) EP3261574                     |
| (11) EP4087508                             | G16H 50/20                       | (21) EP16756012.7                  |
| (21) EP21835412.4                          | G16H 50/50                       | (47) 18.12.2024                    |
| (47) 18.12.2024                            | A61B 6/03                        | (87) US2016014219                  |
| (87) IB2021062030                          | (11) EP4181812                   | 01.09.2016                         |
| 30.06.2022                                 | (21) EP21762141.6                | (22) 21.01.2016                    |
| (22) 20.12.2021                            | (47) 18.12.2024                  | (54) ROBOTICALLY CONTROLLING       |
| (54) SEAL FOR SURGICAL INSTRUMENT          | (87) IL2021050850                | REMOTE CENTER OF MOTION WITH       |
| (73) Cilag GmbH International              | 20.01.2022                       | SOFTWARE AND GUIDE TUBE            |
| (72) MAXWELL, Michael B.                   | (22) 12.07.2021                  | (73) Covidien LP                   |
| KURTH, David W.                            | (54) SYSTEM AND METHOD FOR IMAGE | (72) PEINE, William                |
| KLOPPENBORG, Nicholas M.                   | GENERATION AND REGISTRATION      | (31) 201562121283 P                |
| BURCHNALL, Mark R.                         | BASED ON CALCULATED ROBOTIC      | (32) 26.02.2015                    |
| MUMAW, Daniel J.                           | ARM POSITIONS                    | (33) United States of America      |
| (31) 202017129013                          | (73) Mazor Robotics Ltd.         | (51) A61B 50/33                    |
| (32) 21.12.2020                            | (72) ZEHAVID, Eli                | A61B 46/10                         |
| (33) United States of America              | SHMAYAHU, Yizhaq                 | A61B 50/13                         |
| (51) A61B 34/00                            | USHPIZIN, Yonatan                | (11) EP3727182                     |
| A61B 34/30                                 | WEISS, Noam                      | (21) EP18833945.1                  |
| (11) EP4193955                             | (31) 202063052763 P              | (47) 18.12.2024                    |
| (21) EP20952371.1                          | (32) 16.07.2020                  | (87) FR2018053310                  |
| (47) 18.12.2024                            | (33) United States of America    | 27.06.2019                         |



|                                                                                   |                                                                                          |                                                                              |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| (22) 14.12.2018                                                                   | (51) A61C 7/08                                                                           | (22) 17.04.2014                                                              |
| (54) ITEM OF EQUIPMENT FOR RECEIVING SURGICAL MATERIALS AND/OR LIQUID PRODUCTS    | A61C 7/00                                                                                | (54) METHOD OF USE OF AN ELECTRICAL TOOTHBRUSH OPERATED WITH A MOBILE DEVICE |
| (73) Lemer Pax                                                                    | B33Y 50/00                                                                               | (73) Trisa Holding AG                                                        |
| (72) LEMER, Pierre-Marie                                                          | G01N 33/44                                                                               | (72) Meier, Hanspeter                                                        |
| (31) 1762776                                                                      | G06N 5/046                                                                               | Pfenniger, Philipp                                                           |
| (32) 21.12.2017                                                                   | G16H 50/50                                                                               | (31) 13405124                                                                |
| (33) France                                                                       | G16H 20/40                                                                               | (32) 30.10.2013                                                              |
| (51) A61C 3/00                                                                    | G06N 20/00                                                                               | (33) European Patent Office (EPO)                                            |
| A61C 13/00                                                                        | (11) EP4234247                                                                           | (51) A61C 19/00                                                              |
| A61B 17/3211                                                                      | (21) EP23174378.2                                                                        | A61L 2/04                                                                    |
| (11) EP3906886                                                                    | (47) 18.12.2024                                                                          | A61L 2/07                                                                    |
| (21) EP21180244.2                                                                 | (22) 27.09.2019                                                                          | A61L 2/28                                                                    |
| (47) 18.12.2024                                                                   | (54) COMPUTER IMPLEMENTED METHOD AND COMPUTER READABLE MEDIUM FOR AN ORTHODONTIC ALIGNER | G16H 40/40                                                                   |
| (22) 08.04.2019                                                                   | (73) Align Technology, Inc.                                                              | (11) EP3459493                                                               |
| (54) DENTAL INSTRUMENT WITH A FLEXIBLE TIP END AND METHOD OF MANUFACTURE          | (72) SHIRAZI AGHJARI, Reza                                                               | (21) EP17799120.5                                                            |
| (73) Hu-Friedy Mfg. Co., LLC                                                      | CAI, Luyao                                                                               | (47) 18.12.2024                                                              |
| (72) Nemeth, Jennifer                                                             | LI, Chunhua                                                                              | (87) JP2017016104                                                            |
| Kerstein, Alexander M.                                                            | MEDVINSKAYA, Viktoria                                                                    | 23.11.2017                                                                   |
| Seeralan, Ravi P.                                                                 | KUKK, Arno                                                                               | (22) 21.04.2017                                                              |
| (31) 201862686493 P                                                               | CHERKAS, Andrey                                                                          | (54) DENTAL TREATMENT INSTRUMENT TEMPERATURE INFORMATION MANAGEMENT DEVICE   |
| (32) 18.06.2018                                                                   | SU, Kangning                                                                             | (73) The Yoshida Dental Mfg. Co., Ltd.                                       |
| (33) United States of America                                                     | JANG, Andrew                                                                             | (72) GOTANI, Yoshiki                                                         |
| (51) A61C 3/025                                                                   | SATO, Jun                                                                                | KUDO, Keiichi                                                                |
| A61C 17/02                                                                        | AKOPOVA, Anna                                                                            | SATO, Takafumi                                                               |
| A61C 1/10                                                                         | WANG, Yuxiang                                                                            | YAGINUMA, Tetsuya                                                            |
| B24C 7/00                                                                         | TANUGULA, Rohit                                                                          | (31) 2016099884                                                              |
| B24C 5/02                                                                         | (31) 201916584794                                                                        | (32) 18.05.2016                                                              |
| B24C 5/04                                                                         | 201916584791                                                                             | (33) Japan                                                                   |
| (11) EP4203841                                                                    | 201916584788                                                                             | (51) A61C 19/045                                                             |
| (21) EP21766149.5                                                                 | 201916584786                                                                             | A61B 5/11                                                                    |
| (47) 18.12.2024                                                                   | 201862737458 P                                                                           | A61F 5/56                                                                    |
| (87) EP2021073113                                                                 | (32) 26.09.2019                                                                          | (11) EP4197489                                                               |
| 03.03.2022                                                                        | 26.09.2019                                                                               | (21) EP21783326.8                                                            |
| (22) 20.08.2021                                                                   | 26.09.2019                                                                               | (47) 18.12.2024                                                              |
| (54) HANDPIECE, SYSTEM AND METHOD FOR CONNECTING A HANDPIECE WITH A SUPPLY SYSTEM | 27.09.2018                                                                               | (87) ES2021070608                                                            |
| (73) Ferton Holding S.A.                                                          | (33) United States of America                                                            | 17.02.2022                                                                   |
| (72) BEANI, Florent                                                               | United States of America                                                                 | (22) 11.08.2021                                                              |
| FOURNIER, Maxime                                                                  | United States of America                                                                 | (54) MANDIBULAR ADVANCEMENT MEASUREMENT AND POSITIONING DEVICE               |
| DONNET, Marcel                                                                    | United States of America                                                                 | (73) 3D Unicon Innova, S.L.                                                  |
| SAUVAGEOT-MAXIT, Karine                                                           | United States of America                                                                 | (72) DIAZ GONZÁLEZ, José, Luis                                               |
| (31) 20192703                                                                     | (51) A61C 8/00                                                                           | SÁNCHEZ ALBERTOS, Daniel                                                     |
| (32) 25.08.2020                                                                   | A61L 27/06                                                                               | FERNÁNDEZ FAJARDO, Daniel                                                    |
| (33) European Patent Office (EPO)                                                 | (11) EP4284295                                                                           | FERNÁNDEZ VIDAL, Juan, José                                                  |
| (51) A61C 7/00                                                                    | (21) EP22704949.1                                                                        | (31) 202030870                                                               |
| A61C 9/00                                                                         | (47) 18.12.2024                                                                          | (32) 14.08.2020                                                              |
| G06T 7/00                                                                         | (87) IB2022050664                                                                        | (33) Spain                                                                   |
| (11) EP3796865                                                                    | 04.08.2022                                                                               | (51) A61F 2/01                                                               |
| (21) EP19725305.7                                                                 | (22) 26.01.2022                                                                          | A61F 2/24                                                                    |
| (47) 18.12.2024                                                                   | (54) PROCESS FOR TREATING THE SURFACE OF AN IMPLANT MADE OF TITANIUM                     | (11) EP3923861                                                               |
| (87) EP2019062380                                                                 | (73) Biomec S.r.l.                                                                       | (21) EP20755499.9                                                            |
| 28.11.2019                                                                        | (72) BARILANI, Oscar                                                                     | (47) 18.12.2024                                                              |
| (22) 14.05.2019                                                                   | GATTI, Giorgio                                                                           | (87) US2020018128                                                            |
| (54) DEVICE FOR ANALYSING A DENTAL SITUATION                                      | DELLA BELLA, Olivio                                                                      | 20.08.2020                                                                   |
| (73) Dental Monitoring                                                            | MOTTA, Francesca                                                                         | (22) 13.02.2020                                                              |
| (72) PELLISSARD, Thomas                                                           | D'ANGELO, Domenico                                                                       | (54) CATHETER WITH INTEGRATED EMBOLIC PROTECTION DEVICE                      |
| DEBRAUX, Laurent                                                                  | MUSSANO, Federico Davide                                                                 | (73) Emboline, Inc.                                                          |
| SALAH, Philippe                                                                   | (31) 202100001574                                                                        | (72) DREXEL, Masao                                                           |
| GHYSELINCK, Guillaume                                                             | (32) 27.01.2021                                                                          | RUSSELL, Scott M.                                                            |
| (31) 18305627                                                                     | (33) Italy                                                                               | BELSON, Amir                                                                 |
| (32) 22.05.2018                                                                   | (51) A61C 17/22                                                                          | KLESHINSKI, Stephen J.                                                       |
| (33) European Patent Office (EPO)                                                 | (11) EP3865089                                                                           | (31) 201962844941 P                                                          |
|                                                                                   | (21) EP21163659.2                                                                        |                                                                              |
|                                                                                   | (47) 18.12.2024                                                                          |                                                                              |

|                                                                                 |                                                                   |                                                                                                                       |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 201962804909 P                                                                  | (54) MEDICAL IMPLANT FOR TREATING ANEURYSMS                       | (72) RABITO, Glen T.                                                                                                  |
| (32) 08.05.2019                                                                 | (73) Acandis GmbH                                                 | ARMER, Dustin P.                                                                                                      |
| 13.02.2019                                                                      | (72) SCHÜSSLER, Andreas                                           | STEWART, Kevin                                                                                                        |
| (33) United States of America                                                   | BÜCHERT, Michael                                                  | HUANG, Mark                                                                                                           |
| United States of America                                                        | (31) 102020128124                                                 | OKABE, Hiroshi                                                                                                        |
| (51) A61F 2/01                                                                  | (32) 26.10.2020                                                   | MA, Minh                                                                                                              |
| A61F 2/24                                                                       | (33) Germany                                                      | CORSO, Philip P. Jr.                                                                                                  |
| A61B 17/22                                                                      | (51) A61F 2/12                                                    | MARR, Devin                                                                                                           |
| A61F 2/06                                                                       | A47L 5/16                                                         | CURTIS, Alison S.                                                                                                     |
| (11) EP3687443                                                                  | F21V 21/092                                                       | OLSON, Christopher                                                                                                    |
| (21) EP18796107.3                                                               | (11) EP3810035                                                    | (31) 367293 P                                                                                                         |
| (47) 18.12.2024                                                                 | (21) EP18923110.3                                                 | 201061426407 P                                                                                                        |
| (87) IB2018057501                                                               | (47) 18.12.2024                                                   | (32) 23.07.2010                                                                                                       |
| 04.04.2019                                                                      | (87) US2018047724                                                 | 22.12.2010                                                                                                            |
| (22) 27.09.2018                                                                 | 26.12.2019                                                        | (33) United States of America                                                                                         |
| (54) AORTIC PROTECTION                                                          | (22) 23.08.2018                                                   | United States of America                                                                                              |
| (73) Brandeis, Zeev                                                             | (54) BREAST IMPLANT REMOVAL DEVICE                                | (51) A61F 2/24                                                                                                        |
| (72) Brandeis, Zeev                                                             | (73) Kim Medical Design, LLC                                      | (11) EP3073964                                                                                                        |
| (31) 201762564314 P                                                             | (72) MAUDSLEY, Kevin, J.                                          | (21) EP14815992.4                                                                                                     |
| (32) 28.09.2017                                                                 | KIRN, David, S.                                                   | (47) 18.12.2024                                                                                                       |
| (33) United States of America                                                   | (31) 201862695418 P                                               | (87) US2014066524                                                                                                     |
| (51) A61F 2/04                                                                  | 201862687288 P                                                    | 04.06.2015                                                                                                            |
| (11) EP3986330                                                                  | (32) 09.07.2018                                                   | (22) 20.11.2014                                                                                                       |
| (21) EP20800425.9                                                               | 20.06.2018                                                        | (54) CUFF STITCHING REINFORCEMENT                                                                                     |
| (47) 18.12.2024                                                                 | (33) United States of America                                     | (73) St. Jude Medical, Cardiology Division, Inc.                                                                      |
| (87) US2020055022                                                               | United States of America                                          | (72) MCCARTHY, Andrea L.                                                                                              |
| 22.04.2021                                                                      | (51) A61F 2/16                                                    | SMITH, Kent J.                                                                                                        |
| (22) 09.10.2020                                                                 | (11) EP4370063                                                    | BRAIDO, Peter N.                                                                                                      |
| (54) SYSTEM AND DEVICE FOR ANCHORING A STENT                                    | (21) EP22751292.8                                                 | (31) 201361909496 P                                                                                                   |
| (73) Boston Scientific Scimed, Inc.                                             | (47) 18.12.2024                                                   | (32) 27.11.2013                                                                                                       |
| (72) FOLAN, Martyn G.                                                           | (87) EP2022069368                                                 | (33) United States of America                                                                                         |
| KEATING, Thomas M.                                                              | 19.01.2023                                                        | (51) A61F 2/24                                                                                                        |
| BURKE, Martin                                                                   | (22) 12.07.2022                                                   | (11) EP3592294                                                                                                        |
| TUCK, Daniel                                                                    | (54) INJECTOR WITH A PISTON TIP HAVING A PLURALITY OF ARMS        | (21) EP18713464.8                                                                                                     |
| (31) 201962915051 P                                                             | (73) Carl Zeiss Meditec AG                                        | (47) 18.12.2024                                                                                                       |
| (32) 15.10.2019                                                                 | (72) MOEIN, Hadi                                                  | (87) US2018021004                                                                                                     |
| (33) United States of America                                                   | (31) 102021117965                                                 | 13.09.2018                                                                                                            |
| (51) A61F 2/04                                                                  | (32) 12.07.2021                                                   | (22) 06.03.2018                                                                                                       |
| A61F 2/82                                                                       | (33) Germany                                                      | (54) REPLACEMENT HEART VALVE                                                                                          |
| A61B 17/12                                                                      | (51) A61F 2/16                                                    | SYSTEM HAVING DOCKING STATION WITH SACRIFICIAL VALVE                                                                  |
| A61F 2/95                                                                       | G02C 7/02                                                         | (73) Boston Scientific Scimed, Inc.                                                                                   |
| A61F 2/91                                                                       | (11) EP3291766                                                    | (72) O'GORMAN, Fionnuala                                                                                              |
| (11) EP3563801                                                                  | (21) EP16713204.2                                                 | O'CONNOR, Tim                                                                                                         |
| (21) EP17887300.6                                                               | (47) 18.12.2024                                                   | MCNAMARA, Adrian                                                                                                      |
| (47) 18.12.2024                                                                 | (87) US2016022063                                                 | QUIRKE, Kenneth                                                                                                       |
| (87) CN2017117181                                                               | 20.10.2016                                                        | O'SULLIVAN, Richard                                                                                                   |
| 05.07.2018                                                                      | (22) 11.03.2016                                                   | GUNNING, Paul                                                                                                         |
| (22) 19.12.2017                                                                 | (54) HIGH DEFINITION AND EXTENDED DEPTH OF FIELD INTRAOCULAR LENS | (31) 201762467599 P                                                                                                   |
| (54) LUNG VOLUME REDUCTION ELASTIC IMPLANT AND LUNG VOLUME REDUCTION INSTRUMENT | (73) Z Optics, Inc.                                               | (32) 06.03.2017                                                                                                       |
| (73) Shenzhen Lifetech Respiration Scientific Co., Ltd.                         | (72) SARVER, Edwin, J.                                            | (33) United States of America                                                                                         |
| (72) LI, Siyi                                                                   | SIMMS, James, J.                                                  | (51) A61F 2/24                                                                                                        |
| LI, Anning                                                                      | (31) 201514686233                                                 | (11) EP3679892                                                                                                        |
| (31) 201611263514                                                               | (32) 14.04.2015                                                   | (21) EP18851593.6                                                                                                     |
| (32) 30.12.2016                                                                 | (33) United States of America                                     | (47) 18.12.2024                                                                                                       |
| (33) China                                                                      | (51) A61F 2/24                                                    | (87) CN2018103945                                                                                                     |
| (51) A61F 2/07                                                                  | (11) EP2595569                                                    | 07.03.2019                                                                                                            |
| A61F 2/856                                                                      | (21) EP11810493.4                                                 | (22) 04.09.2018                                                                                                       |
| (11) EP4231961                                                                  | (47) 18.12.2024                                                   | (54) STENT APPARATUS HAVING SELF- PLEATED SKIRT, PROCESSING METHOD THEREFOR, SKIRT PLEATING METHOD, AND CARDIAC VALVE |
| (21) EP21802600.3                                                               | (87) US2011045072                                                 | (73) Venus MedTech (HangZhou) Inc.                                                                                    |
| (47) 18.12.2024                                                                 | 26.01.2012                                                        | (72) QI, Jesse Jun                                                                                                    |
| (87) EP2021079204                                                               | (22) 22.07.2011                                                   | (31) 201711031064                                                                                                     |
| 05.05.2022                                                                      | (54) RETAINING MECHANISMS FOR PROSTHETIC VALVES                   | 201710786392                                                                                                          |
| (22) 21.10.2021                                                                 | (73) Edwards Lifesciences Corporation                             |                                                                                                                       |

|                                                |                                               |                                       |
|------------------------------------------------|-----------------------------------------------|---------------------------------------|
| (32) 28.10.2017                                | KRANS, Mark                                   | 06.05.2021                            |
| 04.09.2017                                     | BRAIDO, Peter N.                              | (22) 14.10.2020                       |
| (33) China                                     | PARA, Andrea N.                               | (54) BLOW MOLDED BALLOON SHOULDER     |
| China                                          | (31) 201562137411 P                           | ASSEMBLY FOR A TRANSCATHETER          |
| (51) A61F 2/24                                 | (32) 24.03.2015                               | DELIVERY DEVICE                       |
| (11) EP4161446                                 | (33) United States of America                 | (73) Edwards Lifesciences Corporation |
| (21) EP21751938.8                              | (51) A61F 2/24                                | (72) ZHU, Yidong M.                   |
| (47) 18.12.2024                                | (11) EP3399948                                | (31) 201962928951 P                   |
| (87) US2021041926                              | (21) EP17704331.2                             | (32) 31.10.2019                       |
| 20.01.2022                                     | (47) 18.12.2024                               | (33) United States of America         |
| (22) 16.07.2021                                | (87) US2017012447                             | (51) A61F 2/24                        |
| (54) EXPANSION AND LOCKING                     | 13.07.2017                                    | A61M 39/22                            |
| ASSEMBLIES WITH INTERTWINED                    | (22) 06.01.2017                               | A61F 2/02                             |
| WIRES                                          | (54) PROSTHETIC HEART VALVE COOLING           | (11) EP2879618                        |
| (73) Edwards Lifesciences Corporation          | (73) Medtronic Vascular, Inc.                 | (21) EP13825214.3                     |
| (72) NIR, Noam                                 | (72) OLNEY, Karl                              | (47) 18.12.2024                       |
| (31) 202063052688 P                            | WANG, Wei                                     | (87) US2013052549                     |
| (32) 16.07.2020                                | WONG, Benjamin                                | 06.02.2014                            |
| (33) United States of America                  | DUDNEY, Joshua                                | (22) 29.07.2013                       |
| (51) A61F 2/24                                 | TIEN, Tracey                                  | (54) HOLDERS FOR PROSTHETIC HEART     |
| (11) EP1845900                                 | MCKINLEY, Laura                               | VALVES                                |
| (21) EP06719286.4                              | (31) 201614990657                             | (73) Edwards Lifesciences Corporation |
| (47) 18.12.2024                                | (32) 07.01.2016                               | (72) CAMPBELL, Louis, A.              |
| (87) US2006002363                              | (33) United States of America                 | PHUNG, Andrew                         |
| 03.08.2006                                     | (51) A61F 2/24                                | (31) 201313948923                     |
| (22) 23.01.2006                                | A61B 17/068                                   | 201361779890 P                        |
| (54) HEART VALVE INSERTER                      | (11) EP4021350                                | 201261677940 P                        |
| (73) Valve Special Purpose Co., LLC            | (21) EP20781631.5                             | (32) 23.07.2013                       |
| (72) BOKROS, Jack, C                           | (47) 18.12.2024                               | 13.03.2013                            |
| STUPKA, Jonathan, C                            | (87) IL2020050925                             | 31.07.2012                            |
| WAITS, C., Thomas                              | 04.03.2021                                    | (33) United States of America         |
| (31) 650778 P                                  | (22) 25.08.2020                               | United States of America              |
| (32) 27.01.2005                                | (54) ANCHOR CHANNEL TIP                       | United States of America              |
| (33) United States of America                  | (73) Edwards Lifesciences Innovation (Israel) | (51) A61F 2/44                        |
| (51) A61F 2/24                                 | Ltd.                                          | A61F 2/46                             |
| (11) EP2926772                                 | (72) SHEPS, Tal                               | (11) EP3964180                        |
| (21) EP14183091.9                              | BRAUON, Haim                                  | (21) EP21199785.3                     |
| (47) 18.12.2024                                | IFLAH, Ehud                                   | (47) 18.12.2024                       |
| (22) 21.04.2004                                | PEER, Amit                                    | (22) 11.10.2017                       |
| (54) Artificial valve prosthesis with improved | (31) 201962894517 P                           | (54) EXPANDABLE SPINAL IMPLANT        |
| flow dynamics                                  | (32) 30.08.2019                               | SYSTEM WITH A BIASED TIP              |
| (73) Cook Medical Technologies LLC             | (33) United States of America                 | (73) Warsaw Orthopedic, Inc.          |
| (72) FLAGLE, Jacob A.                          | (51) A61F 2/24                                | (72) BRANCH, Charles                  |
| HOFFA, Andrew K.                               | A61F 2/02                                     | BERVEN, Sigurd                        |
| SCHAEFFER, Darin G.                            | A61F 2/95                                     | MILLER, Keith E.                      |
| GARRISON, Michael L.                           | (11) EP3845203                                | KUYLER, Adriaan J.                    |
| CASE, Brian C.                                 | (21) EP19853341.6                             | DVORAK, Marcel                        |
| (31) 530781 P                                  | (47) 18.12.2024                               | FISHER, Charles                       |
| 465141 P                                       | (87) CN2019103838                             | MELKENT, Anthony J.                   |
| (32) 18.12.2003                                | 05.03.2020                                    | DJURASOVIC, Mladen                    |
| 24.04.2003                                     | (22) 30.08.2019                               | DEWEY, Jonathan M.                    |
| (33) United States of America                  | (54) DELIVERY DEVICE                          | (31) 201615340770                     |
| United States of America                       | (73) Shanghai Microport Cardioflow Medtech    | (32) 01.11.2016                       |
| (51) A61F 2/24                                 | Co., Ltd.                                     | (33) United States of America         |
| (11) EP3273910                                 | (72) GUI, Baozhu                              | (51) A61F 2/54                        |
| (21) EP16712690.3                              | WU, Xuwen                                     | A61F 2/68                             |
| (47) 18.12.2024                                | CHEN, Guoming                                 | A61H 1/02                             |
| (87) US2016023518                              | MEI, Jie                                      | B25J 18/04                            |
| 29.09.2016                                     | LI, Yu                                        | (11) EP4218685                        |
| (22) 22.03.2016                                | (31) 201811014867                             | (21) EP22211811.9                     |
| (54) MITRAL HEART VALVE                        | (32) 31.08.2018                               | (47) 18.12.2024                       |
| REPLACEMENT                                    | (33) China                                    | (22) 18.05.2016                       |
| (73) St. Jude Medical, Cardiology Division,    | (51) A61F 2/24                                | (54) ARM SUPPORTING EXOSKELETON       |
| Inc.                                           | A61F 2/958                                    | (73) The Regents of the University of |
| (72) GLIMSDALE, Mathias C.                     | (11) EP4051177                                | California                            |
| BENSON, Thomas M.                              | (21) EP20804032.9                             | (72) VAN ENGELHOVEN, Logan            |
| DALE, Theodore P.                              | (47) 18.12.2024                               | KAZEROONI, Homayoon                   |
| FAHIM, Mina S.                                 | (87) US2020055520                             | (31) 201562162871 P                   |

|                                        |                                       |                                     |
|----------------------------------------|---------------------------------------|-------------------------------------|
| (32) 18.05.2015                        | (31) 19190021                         | (72) PASSMAN, Joseph, Arthur        |
| (33) United States of America          | (32) 05.08.2019                       | (31) 201916584262                   |
| (51) A61F 2/66                         | (33) European Patent Office (EPO)     | 201862740690 P                      |
| A61F 2/50                              | (51) A61F 2/93                        | (32) 26.09.2019                     |
| A61F 2/70                              | (11) EP3801405                        | 03.10.2018                          |
| A61F 2/74                              | (21) EP19739740.9                     | (33) United States of America       |
| A61F 2/76                              | (47) 18.12.2024                       | United States of America            |
| (11) EP3427702                         | (87) US2019035993                     | (51) A61F 5/00                      |
| (21) EP18189642.4                      | 19.12.2019                            | A61B 1/04                           |
| (47) 18.12.2024                        | (22) 07.06.2019                       | A61B 1/06                           |
| (22) 24.02.2014                        | (54) IN VIVO ADJUSTMENT MECHANISM     | A61B 1/273                          |
| (54) PROSTHETIC FOOT WITH ENHANCED     | AND ASSOCIATED SYSTEMS AND            | A61B 1/313                          |
| STABILITY AND ELASTIC ENERGY           | METHODS                               | A61B 1/32                           |
| RETURN                                 | (73) W.L. Gore & Associates, Inc.     | A61B 17/00                          |
| (73) Össur HF                          | (72) BRINKMANN, John M.               | A61B 17/30                          |
| (72) CLAUSEN, Arinbjorn                | GOODMAN, Paul D.                      | A61F 2/04                           |
| ANDRESSON, Bjarni                      | (31) 201862683295 P                   | A61N 1/36                           |
| LECOMTE, Christophe                    | (32) 11.06.2018                       | A61B 17/04                          |
| JONSSON, Vilhjalmur Freyr              | (33) United States of America         | A61B 17/068                         |
| (31) 201361770212 P                    | (51) A61F 2/95                        | A61B 17/34                          |
| 201361769405 P                         | (11) EP3856092                        | (11) EP4091585                      |
| (32) 27.02.2013                        | (21) EP19804893.6                     | (21) EP22167671.1                   |
| 26.02.2013                             | (47) 18.12.2024                       | (47) 18.12.2024                     |
| (33) United States of America          | (87) US2019052921                     | (22) 29.01.2009                     |
| United States of America               | 02.04.2020                            | (54) AN APPARATUS FOR TREATING GERD |
| (51) A61F 2/78                         | (22) 25.09.2019                       | (73) Implantica Patent Ltd.         |
| A61F 2/76                              | (54) CONSTRAINING SYSTEMS             | (72) Forsell, Peter                 |
| A61F 2/24                              | (73) W.L. Gore & Associates, Inc.     | (31) 0802138                        |
| A61M 39/22                             | (72) TENNANT, John S.                 | 6719 P                              |
| (11) EP3395298                         | YAMAMOTO, Marc Y.                     | (32) 10.10.2008                     |
| (21) EP18170789.4                      | RAMIREZ, Gil R.                       | 29.01.2008                          |
| (47) 18.12.2024                        | STASTKA, Jerry J.                     | (33) Sweden                         |
| (22) 22.06.2012                        | (31) 201862741937 P                   | United States of America            |
| (54) TRANSAPICAL MITRAL VALVE REPAIR   | 201862737040 P                        | (51) A61F 5/453                     |
| DEVICE                                 | (32) 05.10.2018                       | A61F 5/455                          |
| (73) University of Maryland, Baltimore | 26.09.2018                            | A61F 5/44                           |
| (72) GAMMIE, James                     | (33) United States of America         | A61F 5/451                          |
| PATEL, Rahul                           | United States of America              | (11) EP4274520                      |
| GHOEISHI, Mehrdad                      | (51) A61F 2/95                        | (21) EP22700188.0                   |
| (31) 201161550772 P                    | A61F 2/24                             | (47) 18.12.2024                     |
| 201161501404 P                         | (11) EP3810042                        | (87) GB2022050026                   |
| (32) 24.10.2011                        | (21) EP19735229.7                     | 14.07.2022                          |
| 27.06.2011                             | (47) 18.12.2024                       | (22) 07.01.2022                     |
| (33) United States of America          | (87) EP2019066380                     | (54) A LIQUID CAPTURE DEVICE        |
| United States of America               | 26.12.2019                            | (73) Binding Sciences Limited       |
| (51) A61F 2/82                         | (22) 20.06.2019                       | (72) LEATHER, Sarah                 |
| A61F 2/86                              | (54) SYSTEM AND METHOD FOR LOADING    | BINDING, Keith                      |
| A61F 2/90                              | A SELF-EXPANDABLE PROSTHESIS          | (31) 202116440                      |
| A61F 2/91                              | ON A DELIVERY DEVICE                  | 202100266                           |
| A61F 2/915                             | (73) BIOTRONIK AG                     | (32) 15.11.2021                     |
| A61F 2/962                             | (72) HEPKE, Markus                    | 08.01.2021                          |
| A61M 25/00                             | MAYER, Maximilian                     | (33) United Kingdom                 |
| A61M 25/01                             | ERBE, Christian                       | United Kingdom                      |
| (11) EP4009918                         | (31) 18179248                         | (51) A61F 5/56                      |
| (21) EP20746637.6                      | (32) 22.06.2018                       | (11) EP3151792                      |
| (47) 18.12.2024                        | (33) European Patent Office (EPO)     | (21) EP15802874.6                   |
| (87) EP2020071119                      | (51) A61F 2/966                       | (47) 18.12.2024                     |
| 11.02.2021                             | A61M 25/00                            | (87) US2015034197                   |
| (22) 27.07.2020                        | A61M 25/06                            | 10.12.2015                          |
| (54) IMPLANT HAVING A THREE-           | A61F 2/24                             | (22) 04.06.2015                     |
| DIMENSIONAL STRUCTURE                  | (11) EP3860531                        | (54) SYSTEM AND METHOD FOR SENSOR   |
| (73) Biotronik AG                      | (21) EP19787538.8                     | DRIVEN INTELLIGENT ORAL             |
| (72) ROTHSTOCK, Stephan                | (47) 18.12.2024                       | APPLIANCE                           |
| HOF, Andreas                           | (87) US2019053763                     | (73) Giri, Subha                    |
| HEIN, André                            | 09.04.2020                            | (72) Giri, Subha                    |
| KOOP, Karsten                          | (22) 30.09.2019                       | (31) 201462007593 P                 |
| FLORES, Imanol                         | (54) EXPANDABLE INTRODUCER SHEATH     | (32) 04.06.2014                     |
| GOEBEL, Paul                           | (73) Edwards Lifesciences Corporation | (33) United States of America       |

|                                    |                                              |                                              |
|------------------------------------|----------------------------------------------|----------------------------------------------|
| (51) A61F 5/56                     | United States of America                     | (32) 16.09.2020                              |
| (11) EP4021358                     | United States of America                     | (33) United States of America                |
| (21) EP20858076.1                  | United States of America                     | (51) A61F 9/007                              |
| (47) 18.12.2024                    | United States of America                     | A61B 17/00                                   |
| (87) AU2020000089                  | United States of America                     | (11) EP3781093                               |
| 04.03.2021                         | United States of America                     | (21) EP19727082.0                            |
| (22) 26.08.2020                    | (51) A61F 9/00                               | (47) 18.12.2024                              |
| (54) MANDIBULAR ADVANCEMENT DEVICE | A61L 31/08                                   | (87) IB2019053188                            |
| WITH AUTOMATIC ADJUSTMENT          | A61F 9/007                                   | 24.10.2019                                   |
| MEANS                              | (11) EP3324902                               | (22) 17.04.2019                              |
| (73) Bioanalytics Holdings Limited | (21) EP16747681.1                            | (54) ERGONOMIC HANDPIECE                     |
| (72) MORGAN, Owen                  | (47) 18.12.2024                              | (73) Johnson & Johnson Surgical Vision, Inc. |
| SASSE, Anthony                     | (87) US2016043647                            | (72) CHRISTOPHER, Stephen M.                 |
| (31) 2019903108                    | 26.01.2017                                   | CHILDS, Jacob S.                             |
| (32) 26.08.2019                    | (22) 22.07.2016                              | (31) 201862660647 P                          |
| (33) Australia                     | (54) COATED PUNCTAL PLUG                     | (32) 20.04.2018                              |
| (51) A61F 7/02                     | (73) Incept, LLC                             | (33) United States of America                |
| A61F 9/00                          | (72) DRISCOLL, Arthur                        | (51) A61F 9/007                              |
| (11) EP3442482                     | JARRETT, Peter                               | A61B 90/30                                   |
| (21) EP17798433.3                  | DESAI, Ankita Darshan                        | (11) EP3630026                               |
| (47) 18.12.2024                    | MCGRATH, Michael, J.                         | (21) EP18731170.9                            |
| (87) CA2017050464                  | BASSETT, Michael                             | (47) 18.12.2024                              |
| 23.11.2017                         | SAWHNEY, Amarpreet, S.                       | (87) IB2018053229                            |
| (22) 13.04.2017                    | (31) 201562195580 P                          | 29.11.2018                                   |
| (54) EYE THERMAL COMPRESS          | (32) 22.07.2015                              | (22) 09.05.2018                              |
| (73) Umay Care Holdings Inc.       | (33) United States of America                | (54) ILLUMINATED INFUSION CANNULA            |
| (72) HABIB, Ali                    | (51) A61F 9/007                              | (73) ALCON INC.                              |
| (31) 201662321976 P                | (11) EP4274528                               | (72) MIRSEPASSI, Alireza                     |
| (32) 13.04.2016                    | (21) EP22700063.5                            | FARLEY, Mark Harrison                        |
| (33) United States of America      | (47) 18.12.2024                              | PAPAC, Michael J.                            |
| (51) A61F 9/00                     | (87) EP2022050275                            | (31) 201762510362 P                          |
| A61B 3/10                          | 14.07.2022                                   | (32) 24.05.2017                              |
| A61N 5/06                          | (22) 07.01.2022                              | (33) United States of America                |
| A61M 35/00                         | (54) VITRECTOMY DEVICE                       | (51) A61F 9/008                              |
| A61B 3/107                         | (73) Visionair BV                            | (11) EP4288007                               |
| A61F 9/008                         | Universiteit Hasselt                         | (21) EP22709604.7                            |
| (11) EP3556330                     | (72) WILLEKENS, Koen                         | (47) 18.12.2024                              |
| (21) EP19162368.5                  | (31) 21150592                                | (87) EP2022052669                            |
| (47) 18.12.2024                    | (32) 07.01.2021                              | 11.08.2022                                   |
| (22) 18.03.2011                    | (33) European Patent Office (EPO)            | (22) 04.02.2022                              |
| (54) SYSTEMS FOR APPLYING AND      | (51) A61F 9/007                              | (54) LASER THERAPY DEVICE FOR                |
| MONITORING EYE THERAPY             | (11) EP3697355                               | THERAPY OF A LIVING TISSUE                   |
| (73) Avedro, Inc.                  | (21) EP18797141.1                            | (73) Medizinisches Laserzentrum Lübeck       |
| (72) MARSHALL, John                | (47) 18.12.2024                              | GmbH                                         |
| SCHARF, Ronald                     | (87) IB2018058016                            | (72) BRINKMANN, Ralf                         |
| BLINN, Stephen                     | 25.04.2019                                   | SEIFERT, Eric                                |
| FRIEDMAN, Marc                     | (22) 16.10.2018                              | ABBAS, Hossameldin                           |
| KAMAEV, Pavel                      | (54) SURGICAL WORKSTATION                    | (31) 102021201080                            |
| PERTAUB, Radha                     | FOR SIMPLIFIED LOADING OF                    | (32) 05.02.2021                              |
| MULLER, David                      | INTRAOCULAR LENSES                           | (33) Germany                                 |
| (31) 42337510 P                    | (73) Johnson & Johnson Surgical Vision, Inc. | (51) A61F 9/008                              |
| 40910310 P                         | (72) KEH, Sandra                             | A61B 3/00                                    |
| 38896310 P                         | (31) 201762574112 P                          | G02F 1/00                                    |
| 37702410 P                         | (32) 18.10.2017                              | (11) EP3846751                               |
| 32813810 P                         | (33) United States of America                | (21) EP19857121.8                            |
| 32652710 P                         | (51) A61F 9/007                              | (47) 18.12.2024                              |
| 31911110 P                         | (11) EP4213777                               | (87) IB2019057247                            |
| 31584010 P                         | (21) EP21782600.7                            | 12.03.2020                                   |
| (32) 15.12.2010                    | (47) 18.12.2024                              | (22) 28.08.2019                              |
| 01.11.2010                         | (87) IB2021058307                            | (54) NARROW ANGLE ILLUMINATION RING          |
| 01.10.2010                         | 24.03.2022                                   | FOR OPHTHALMIC SURGICAL LASER                |
| 25.08.2010                         | (22) 13.09.2021                              | SYSTEM                                       |
| 26.04.2010                         | (54) ROBOTIC CATARACT SURGERY                | (73) AMO Development, LLC                    |
| 21.04.2010                         | USING FOCUSED ULTRASOUND                     | (72) FELLENN, Frank D.                       |
| 30.03.2010                         | (73) Johnson & Johnson Surgical Vision, Inc. | WANG, Tianheng                               |
| 19.03.2010                         | (72) LAMHOT, Yoav                            | DEWEY, David A.                              |
| (33) United States of America      | GLINER, Vadim                                | (31) 201862726939 P                          |
| United States of America           | (31) 202017022577                            | (32) 04.09.2018                              |

|                                       |                                        |                                           |
|---------------------------------------|----------------------------------------|-------------------------------------------|
| (33) United States of America         | (72) CASTIGLIONE, David M.             | A61F 13/42                                |
| (51) A61F 9/009                       | (31) 201862681988 P                    | (11) EP3851084                            |
| (11) EP3534855                        | (32) 07.06.2018                        | (21) EP21158365.3                         |
| (21) EP16794747.2                     | (33) United States of America          | (47) 18.12.2024                           |
| (47) 18.12.2024                       | (51) A61F 13/05                        | (22) 27.12.2017                           |
| (87) IB2016056628                     | (11) EP3784182                         | (54) ABSORBENT CORE AND ARTICLES          |
| 11.05.2018                            | (21) EP19721463.8                      | COMPRISING SAID CORE                      |
| (22) 03.11.2016                       | (47) 18.12.2024                        | (73) Ontex Group NV                       |
| (54) SYSTEM AND METHOD FOR            | (87) US2019027463                      | Ontex BV                                  |
| INDIRECTLY DETERMINING WEIGHT         | 31.10.2019                             | (72) BREU, Manfred                        |
| ON EYE DURING LASER OPHTHALMIC        | (22) 15.04.2019                        | MAILINGER, Christel                       |
| SURGERY                               | (54) DRESSING PROVIDING APERTURES      | Heege, Thomas                             |
| (73) Alcon Inc.                       | WITH MULTIPLE ORIFICE SIZES FOR        | WEBER, Ainas                              |
| (72) STARIGK, Martin                  | NEGATIVE-PRESSURE THERAPY              | (31) 201700132                            |
| WITTNEBEL, Michael                    | (73) Solventum Intellectual Properties | PCT/EP2017/084195                         |
| (51) A61F 9/009                       | Company                                | 16206993                                  |
| (11) EP4110249                        | (72) KHARKAR, Prathamesh, Madhav       | (32) 27.09.2017                           |
| (21) EP21708194.2                     | ROBINSON, Timothy, Mark                | 21.12.2017                                |
| (47) 18.12.2024                       | SCHMIDT, Marisa                        | 27.12.2016                                |
| (87) EP2021054575                     | LOCKE, Christopher, Brian              | (33) Belgium                              |
| 02.09.2021                            | RICE, Justin                           | World Intellectual Property Office (WIPO) |
| (22) 24.02.2021                       | SMITH, Kenneth, R.                     | European Patent Office (EPO)              |
| (54) SYSTEM, CONTACT DEVICE, AND      | INGRAM, Shannon, C.                    | (51) A61F 13/535                          |
| METHOD FOR PRODUCING A                | CARROLL, Christopher, Allen            | (11) EP3773397                            |
| CONTACT DEVICE                        | PRATT, Benjamin, Andrew                | (21) EP19719143.0                         |
| (73) Carl Zeiss Meditec AG            | ALLEN, Diwi, L.                        | (47) 18.12.2024                           |
| (72) PREUSS, Dirk                     | (31) 201815960310                      | (87) US2019026935                         |
| WIRTH, Andreas                        | (32) 23.04.2018                        | 17.10.2019                                |
| (31) 102020105335                     | (33) United States of America          | (22) 11.04.2019                           |
| (32) 28.02.2020                       | (51) A61F 13/472                       | (54) DISPOSABLE ABSORBENT ARTICLES        |
| (33) Germany                          | A61F 13/474                            | (73) The Procter & Gamble Company         |
| (51) A61F 9/01                        | A61F 13/15                             | (72) HARDIE, Stephen Lebeuf               |
| G01N 21/64                            | A61F 13/47                             | WILLIAMS, Joshua Andrew                   |
| A61B 3/14                             | (11) EP3628292                         | (31) 201862655959 P                       |
| A61B 5/00                             | (21) EP18196825.6                      | (32) 11.04.2018                           |
| A61F 9/008                            | (47) 18.12.2024                        | (33) United States of America             |
| A61F 9/007                            | (22) 26.09.2018                        | (51) A61F 13/56                           |
| A61N 5/06                             | (54) ADAPTABLE ABSORBENT ARTICLE       | A61F 13/45                                |
| A61K 31/525                           | (73) The Procter & Gamble Company      | (11) EP3585343                            |
| (11) EP3297589                        | (72) Meisl, Sabine                     | (21) EP17898103.1                         |
| (21) EP16800582.5                     | Chernenkaya, Alisa                     | (47) 18.12.2024                           |
| (47) 18.12.2024                       | Denti, Federica                        | (87) CN2017074991                         |
| (87) US2016033718                     | (51) A61F 13/49                        | 30.08.2018                                |
| 01.12.2016                            | A61F 13/496                            | (22) 27.02.2017                           |
| (22) 23.05.2016                       | A61F 13/505                            | (54) WEARABLE ARTICLE HAVING              |
| (54) SYSTEMS FOR MONITORING CROSS-    | A61F 13/68                             | ELASTIC BELT                              |
| LINKING ACTIVITY FOR CORNEAL          | A41B 9/00                              | (73) The Procter & Gamble Company         |
| TREATMENTS                            | A41B 9/12                              | (72) MORIMOTO, Koichi                     |
| (73) Avedro Inc.                      | (11) EP4041171                         | LIU, Hui                                  |
| FRIEDMAN, Marc D.                     | (21) EP20807924.4                      | (51) A61G 1/02                            |
| (72) FRIEDMAN, Marc, D.               | (47) 18.12.2024                        | A61G 1/056                                |
| (31) 201562165741 P                   | (87) US2020054532                      | A61G 3/02                                 |
| (32) 22.05.2015                       | 15.04.2021                             | A61G 3/08                                 |
| (33) United States of America         | (22) 07.10.2020                        | (11) EP4162908                            |
| (51) A61F 9/02                        | (54) DURABLE UNDERWEAR ADAPTED         | (21) EP22197540.2                         |
| A62B 18/08                            | FOR USE WITH ABSORBENT                 | (47) 18.12.2024                           |
| A62B 18/04                            | COMPONENT                              | (22) 23.09.2022                           |
| A61F 9/04                             | (73) The Procter & Gamble Company      | (54) STRETCHER                            |
| (11) EP3801780                        | (72) SWINFORD, Janice, Faye            | (73) Stem S.r.l.                          |
| (21) EP19814763.9                     | SEITZ, Bret, Darren                    | (72) MENNA, Ezio                          |
| (47) 18.12.2024                       | LANGDON, Frederick, Michael            | CORRADI, Michele                          |
| (87) IB2019054542                     | (31) 201962911435 P                    | (31) 202100025568                         |
| 12.12.2019                            | (32) 07.10.2019                        | (32) 07.10.2021                           |
| (22) 31.05.2019                       | (33) United States of America          | (33) Italy                                |
| (54) RESPIRATOR CONFIGURED TO         | (51) A61F 13/532                       | (51) A61G 3/08                            |
| ACCEPT VISION-PROTECTING              | A61F 13/533                            | (11) EP4013364                            |
| MODULE                                | A61F 13/15                             | (21) EP20761946.1                         |
| (73) 3M Innovative Properties Company | A61F 13/475                            | (47) 18.12.2024                           |

|                                                                               |                                                                                                                                  |                                                                                                                                         |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| (87) US2020045839<br>18.02.2021                                               | (87) IT2019000019<br>26.09.2019                                                                                                  | United States of America                                                                                                                |
| (22) 12.08.2020                                                               | (22) 26.02.2019                                                                                                                  | (51) A61J 1/20                                                                                                                          |
| (54) MOBILITY DEVICE SECUREMENT<br>SYSTEM                                     | (54) DEVICE FOR BLOCKING A SHOE FOR<br>A SYSTEM FOR REHABILITATING THE<br>WALK, EXOSKELETON AND SYSTEM<br>COMPRISING SUCH DEVICE | A61J 1/14                                                                                                                               |
| (73) Valeda Company, LLC                                                      | (73) Nimble Robotics S.r.l.                                                                                                      | A61B 10/00                                                                                                                              |
| (72) CARDONA, Edgardo                                                         | (72) BISETTI, Enrico                                                                                                             | A61B 50/30                                                                                                                              |
| (31) 201962885481 P                                                           | BELFORTE, Carlo                                                                                                                  | A61B 50/33                                                                                                                              |
| 201962885428 P                                                                | SIROLLI, Silvia Alessandra                                                                                                       | A61B 5/15                                                                                                                               |
| (32) 12.08.2019                                                               | BELFORTE, Guido                                                                                                                  | A61B 5/154                                                                                                                              |
| 12.08.2019                                                                    | (31) 201800003887                                                                                                                | A61B 50/00                                                                                                                              |
| (33) United States of America                                                 | (32) 23.03.2018                                                                                                                  | (11) EP4218708                                                                                                                          |
| United States of America                                                      | (33) Italy                                                                                                                       | (21) EP23152984.3                                                                                                                       |
| (51) A61G 7/10                                                                | (51) A61H 9/00                                                                                                                   | (47) 18.12.2024                                                                                                                         |
| (11) EP4238544                                                                | (11) EP4106709                                                                                                                   | (22) 03.03.2015                                                                                                                         |
| (21) EP23153124.5                                                             | (21) EP21707792.4                                                                                                                | (54) APPARATUS FOR DISINFECTION OF A<br>SPECIMEN CONTAINER                                                                              |
| (47) 18.12.2024                                                               | (47) 18.12.2024                                                                                                                  | (73) Magnolia Medical Technologies, Inc.                                                                                                |
| (22) 24.01.2023                                                               | (87) IB2021051328                                                                                                                | (72) PATTON, Richard G.                                                                                                                 |
| (54) A STANDING FRAME AND A KNEE<br>SUPPORT FOR A STANDING FRAME              | 26.08.2021                                                                                                                       | BULLINGTON, Gregory J.                                                                                                                  |
| (73) Liw Care Technology Spolka z<br>Ograniczona Odpowiedzialnoscia           | (22) 17.02.2021                                                                                                                  | GAU, Shan E.                                                                                                                            |
| (72) BORTNOWSKI, Maciej                                                       | (54) STRUCTURE FOR THERAPEUTIC<br>APPLICATIONS                                                                                   | (31) 201461947076 P                                                                                                                     |
| (31) 44052922                                                                 | (73) JK-Holding GmbH                                                                                                             | (32) 03.03.2014                                                                                                                         |
| (32) 03.03.2022                                                               | (72) GERSTENMEIER, Jürgen                                                                                                        | (33) United States of America                                                                                                           |
| (33) Poland                                                                   | (31) 1762020                                                                                                                     | (51) A61J 1/22                                                                                                                          |
| (51) A61G 13/08                                                               | (32) 18.02.2020                                                                                                                  | A61J 1/20                                                                                                                               |
| A61G 13/04                                                                    | (33) Switzerland                                                                                                                 | B65B 55/12                                                                                                                              |
| A61G 13/12                                                                    | (51) A61H 23/02                                                                                                                  | B67C 3/20                                                                                                                               |
| (11) EP3664760                                                                | (11) EP3932381                                                                                                                   | B65B 3/00                                                                                                                               |
| (21) EP18843859.2                                                             | (21) EP20191863.8                                                                                                                | B65B 3/26                                                                                                                               |
| (47) 18.12.2024                                                               | (47) 18.12.2024                                                                                                                  | (11) EP3694465                                                                                                                          |
| (87) US2018045480                                                             | (22) 20.08.2020                                                                                                                  | (21) EP18867189.5                                                                                                                       |
| 14.02.2019                                                                    | (54) ITEM OF CLOTHING FOR MASSAGING<br>AND STIMULATING LYMPHATIC FLOW                                                            | (47) 18.12.2024                                                                                                                         |
| (22) 07.08.2018                                                               | (73) Edelweiss Basics GmbH & Co. KG                                                                                              | (87) CA2018051214                                                                                                                       |
| (54) SURGICAL FRAME INCLUDING MAIN<br>BEAM FOR FACILITATING PATIENT<br>ACCESS | (72) Weber-Unger, Georg                                                                                                          | 18.04.2019                                                                                                                              |
| (73) Warsaw Orthopedic, Inc.                                                  | (31) 202020103850 U                                                                                                              | (22) 26.09.2018                                                                                                                         |
| (72) HYNES, Richard A.                                                        | (32) 02.07.2020                                                                                                                  | (54) METHOD FOR MONITORING AND<br>CONTROLLING THE FILLING<br>OF A CONTAINER WITH A<br>PHARMACEUTICAL FLUID IN AN<br>ASEPTIC ENVIRONMENT |
| LIM, Roy K                                                                    | (33) Germany                                                                                                                     | (73) VANRX Pharmasystems Inc.                                                                                                           |
| MCGAHAN, Thomas V.                                                            | (51) A61J 1/05                                                                                                                   | (72) GUERRERO, Carlos Alberto Diaz                                                                                                      |
| MORRISON, Matthew M.                                                          | A61M 5/142                                                                                                                       | (31) 201715729655                                                                                                                       |
| (31) 201715672005                                                             | A61M 5/145                                                                                                                       | (32) 10.10.2017                                                                                                                         |
| (32) 08.08.2017                                                               | (11) EP3823580                                                                                                                   | (33) United States of America                                                                                                           |
| (33) United States of America                                                 | (21) EP19746416.7                                                                                                                | (51) A61J 3/07                                                                                                                          |
| (51) A61H 1/00                                                                | (47) 18.12.2024                                                                                                                  | B30B 1/14                                                                                                                               |
| A61H 1/02                                                                     | (87) US2019042233                                                                                                                | B30B 1/28                                                                                                                               |
| (11) EP4117597                                                                | 23.01.2020                                                                                                                       | (11) EP3790805                                                                                                                          |
| (21) EP20839100.3                                                             | (22) 17.07.2019                                                                                                                  | (21) EP19871327.3                                                                                                                       |
| (47) 18.12.2024                                                               | (54) SEMI-RIGID AND FLEXIBLE<br>ELEMENTS FOR WEARABLE DRUG<br>DELIVERY DEVICE RESERVOIR                                          | (47) 18.12.2024                                                                                                                         |
| (87) EP2020087804                                                             | (73) Insulet Corporation                                                                                                         | (87) IB2019058333                                                                                                                       |
| 01.07.2021                                                                    | (72) METZMAKER, Thomas                                                                                                           | 16.04.2020                                                                                                                              |
| (22) 23.12.2020                                                               | NAZZARO, David                                                                                                                   | (22) 01.10.2019                                                                                                                         |
| (54) LEG ACTUATION APPARATUS AND<br>GAIT REHABILITATION APPARATUS             | CARDINALI, Steven                                                                                                                | (54) A TAMPING ASSEMBLY                                                                                                                 |
| (73) Hocoma AG                                                                | MCLAUGHLIN, Ian                                                                                                                  | (73) SCITECH CENTRE                                                                                                                     |
| (72) VENEMAN, Jan Frederik                                                    | MAC, Jackie                                                                                                                      | ACG PAM PHARMA TECHNOLOGIES<br>PVT. LTD.                                                                                                |
| MOSER, Adrian                                                                 | BARNES, Jeff                                                                                                                     | (72) PRAJAPATI, Manish                                                                                                                  |
| (31) 19219389                                                                 | (31) 201862772551 P                                                                                                              | SINGH, Karan                                                                                                                            |
| (32) 23.12.2019                                                               | 201862736172 P                                                                                                                   | DESHMUKH, Prakash                                                                                                                       |
| (33) European Patent Office (EPO)                                             | 201862699023 P                                                                                                                   | (31) 201821038692                                                                                                                       |
| (51) A61H 3/00                                                                | (32) 28.11.2018                                                                                                                  | (32) 11.10.2018                                                                                                                         |
| A43C 19/00                                                                    | 25.09.2018                                                                                                                       | (33) India                                                                                                                              |
| A61H 1/02                                                                     | 17.07.2018                                                                                                                       | (51) A61K 6/61                                                                                                                          |
| (11) EP3768218                                                                | (33) United States of America                                                                                                    | A61K 6/62                                                                                                                               |
| (21) EP19721860.5                                                             | United States of America                                                                                                         | A61K 6/73                                                                                                                               |
| (47) 18.12.2024                                                               |                                                                                                                                  | A61K 6/76                                                                                                                               |
|                                                                               |                                                                                                                                  | A61K 6/77                                                                                                                               |

|                                                            |                                                                                                                                          |                                                                                               |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| A61K 6/887                                                 | (21) EP16720867.7                                                                                                                        | (54) PEPTIDES AND COMPOSITIONS FOR USE IN COSMETICS                                           |
| (11) EP3666247                                             | (47) 18.12.2024                                                                                                                          | (73) Lipottrue, S.L.                                                                          |
| (21) EP18843972.3                                          | (87) EP2016060299                                                                                                                        | (72) PASTOR, Silvia                                                                           |
| (47) 18.12.2024                                            | 10.11.2016                                                                                                                               | CARULLA, Patricia                                                                             |
| (87) JP2018029561                                          | (22) 09.05.2016                                                                                                                          | GRAU-CAMPISTANY, Ariadna                                                                      |
| 14.02.2019                                                 | (54) PROCESS FOR TREATING KERATIN MATERIALS USING AMIDE, ACID OR ESTER C-GLYCOSIDE DERIVATIVES, AND COSMETIC COMPOSITION CONTAINING SAME | ESCUADERO, Juan Carlos                                                                        |
| (22) 07.08.2018                                            | (73) L'OREAL                                                                                                                             | (31) 19382011                                                                                 |
| (54) DIVIDED CURABLE COMPOSITION                           | (72) FRANTZ, Marie-céline                                                                                                                | (32) 08.01.2019                                                                               |
| (73) Mitsui Chemicals, Inc.                                | MAO, Lisheng                                                                                                                             | (33) European Patent Office (EPO)                                                             |
| (72) KOSUGI, Yoko                                          | XU, Jinzhu                                                                                                                               | (51) A61K 8/65                                                                                |
| MITAMURA, Takenori                                         | GUEGUINIAT, Amélie                                                                                                                       | A61K 8/73                                                                                     |
| (31) 2017152436                                            | DALKO, Maria                                                                                                                             | A61Q 19/00                                                                                    |
| (32) 07.08.2017                                            | (31) 1554157                                                                                                                             | A61Q 19/08                                                                                    |
| (33) Japan                                                 | (32) 07.05.2015                                                                                                                          | A61L 27/52                                                                                    |
| (51) A61K 8/02                                             | (33) France                                                                                                                              | (11) EP3351237                                                                                |
| A61Q 9/02                                                  | (51) A61K 8/49                                                                                                                           | (21) EP18159139.7                                                                             |
| A61K 8/31                                                  | A61Q 11/00                                                                                                                               | (47) 18.12.2024                                                                               |
| A61K 8/34                                                  | A61K 8/22                                                                                                                                | (22) 02.11.2012                                                                               |
| A61K 8/81                                                  | A61N 5/06                                                                                                                                | (54) HYALURONIC ACID-COLLAGEN MATRICES FOR DERMAL FILLING AND VOLUMIZING APPLICATIONS         |
| A61K 8/86                                                  | A61K 6/00                                                                                                                                | (73) Allergan, Inc.                                                                           |
| A61K 8/891                                                 | A61K 8/73                                                                                                                                | (72) Manesis, Nicholas J.                                                                     |
| B26B 21/44                                                 | A61K 8/36                                                                                                                                | YU, Xiaojie                                                                                   |
| B26B 21/40                                                 | A61K 8/81                                                                                                                                | Pollock, Jacob F.                                                                             |
| (11) EP3478245                                             | A61K 8/19                                                                                                                                | (31) 201213605565                                                                             |
| (21) EP17733714.4                                          | (11) EP3202391                                                                                                                           | 201213603213                                                                                  |
| (47) 18.12.2024                                            | (21) EP16200524.3                                                                                                                        | 201161555970 P                                                                                |
| (87) US2017038126                                          | (47) 18.12.2024                                                                                                                          | (32) 06.09.2012                                                                               |
| 04.01.2018                                                 | (22) 29.04.2011                                                                                                                          | 04.09.2012                                                                                    |
| (22) 19.06.2017                                            | (54) PHOTOACTIVATABLE OXYGEN-EVOLVING COMPOSITIONS AND METHODS FOR TEETH WHITENING                                                       | 04.11.2011                                                                                    |
| (54) SHAVING AID FOR RAZOR CARTRIDGES COMPRISING FILAMENTS | (73) FLE INTERNATIONAL S.R.L.                                                                                                            | (33) United States of America                                                                 |
| (73) The Gillette Company LLC                              | (72) Loupis, Nikolaos                                                                                                                    | United States of America                                                                      |
| (72) ROMO ESCALANTE, Eduardo                               | Pierrgallini, Remigio                                                                                                                    | United States of America                                                                      |
| PRATT, Michael, Sean                                       | (31) 771105                                                                                                                              | (51) A61K 8/67                                                                                |
| MAO, Min                                                   | (32) 30.04.2010                                                                                                                          | A61K 8/73                                                                                     |
| HUMPHREYS, Claire, Patricia                                | (33) United States of America                                                                                                            | A61Q 19/08                                                                                    |
| SPOONER-FLEMING, Joia, Kirin                               | (51) A61K 8/64                                                                                                                           | A61Q 19/00                                                                                    |
| GLASSMEYER, Stephen, Robert                                | A61Q 19/04                                                                                                                               | (11) EP3381437                                                                                |
| CALDERAS, Jonathan, Javier                                 | (11) EP3709963                                                                                                                           | (21) EP18165440.1                                                                             |
| STEPHENS, Alison, Fiona                                    | (21) EP18786370.9                                                                                                                        | (47) 18.12.2024                                                                               |
| (31) 201662357209 P                                        | (47) 18.12.2024                                                                                                                          | (22) 03.04.2018                                                                               |
| (32) 30.06.2016                                            | (87) EP2018078916                                                                                                                        | (54) TOPICAL COMPOSITIONS COMPRISING RETINOLIDS AND LOW IRRITATION POLYMERIC CLEANSING AGENTS |
| (33) United States of America                              | 23.05.2019                                                                                                                               | (73) Kenvue Brands LLC                                                                        |
| (51) A61K 8/04                                             | (22) 22.10.2018                                                                                                                          | (72) SOUTHALL, Michael D.                                                                     |
| A61K 8/06                                                  | (54) PEPTIDES FOR INCREASING MELANIN IN MELANOCYTES                                                                                      | FEVOLA, Michael James                                                                         |
| A61K 8/37                                                  | (73) Unilever IP Holdings B.V.                                                                                                           | CHANG, Michael                                                                                |
| A61K 8/73                                                  | (72) THIMMAIAH, Sreenivasa                                                                                                               | KAUR, Simarna                                                                                 |
| A61Q 19/00                                                 | CHANDRAMOWLI, Ganesh                                                                                                                     | FASSIH, Ali                                                                                   |
| (11) EP3906009                                             | STOTT, Ian, Peter                                                                                                                        | (31) 201715475565                                                                             |
| (21) EP20706181.3                                          | (31) 17201585                                                                                                                            | (32) 31.03.2017                                                                               |
| (47) 18.12.2024                                            | (32) 14.11.2017                                                                                                                          | (33) United States of America                                                                 |
| (87) EP2020054035                                          | (33) European Patent Office (EPO)                                                                                                        | (51) A61K 8/81                                                                                |
| 17.09.2020                                                 | (51) A61K 8/64                                                                                                                           | A61Q 5/04                                                                                     |
| (22) 17.02.2020                                            | A61Q 19/08                                                                                                                               | A61Q 5/06                                                                                     |
| (54) MOUSSE-LIKE COSMETIC PREPARATION                      | C07K 7/06                                                                                                                                | A61Q 5/00                                                                                     |
| (73) Beiersdorf AG                                         | (11) EP3908252                                                                                                                           | (11) EP3313365                                                                                |
| (72) CHANTY, Delphine                                      | (21) EP20700237.9                                                                                                                        | (21) EP15731581.3                                                                             |
| RASCHKE, Thomas                                            | (47) 18.12.2024                                                                                                                          | (47) 18.12.2024                                                                               |
| PESCHKE, Lisa                                              | (87) EP2020050070                                                                                                                        | (87) EP2015064287                                                                             |
| (31) 102019203184                                          | 16.07.2020                                                                                                                               | 29.12.2016                                                                                    |
| (32) 08.03.2019                                            | (22) 03.01.2020                                                                                                                          | (22) 24.06.2015                                                                               |
| (33) Germany                                               |                                                                                                                                          | (54) HAIR CONDITIONING COMPOSITION                                                            |
| (51) A61K 8/365                                            |                                                                                                                                          | (73) Kao Germany GmbH                                                                         |
| A61K 8/60                                                  |                                                                                                                                          |                                                                                               |
| A61Q 19/08                                                 |                                                                                                                                          |                                                                                               |
| (11) EP3291792                                             |                                                                                                                                          |                                                                                               |



|                                     |                                                                         |                                                                                |
|-------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| (72) HOFFMANN, Martin<br>NING, Jing | (72) VALDENAIRE, Olivier<br>GILLER, Thomas<br>BERNKOP-SCHNÜRCH, Andreas | (54) NANOSTRUCTURED LIPID CARRIERS<br>AND STABLE EMULSIONS AND USES<br>THEREOF |
| (51) A61K 9/00                      | (31) 20169668                                                           | (73) Access to Advanced Health Institute                                       |
| A61K 9/06                           | (32) 15.04.2020                                                         | (72) LIN, Susan S.                                                             |
| A61K 31/167                         | (33) European Patent Office (EPO)                                       | KHANDHAR, Amit Praful                                                          |
| A61K 31/5415                        | (51) A61K 9/00                                                          | ERASMUS, Jesse H.                                                              |
| A61K 47/34                          | A61K 9/51                                                               | VAN HOEVEN, Neal                                                               |
| C08G 63/664                         | A61P 31/18                                                              | FOX, Christopher B.                                                            |
| C08L 67/04                          | A61K 31/365                                                             | (31) 201862680454 P                                                            |
| C08L 71/02                          | A61K 31/52                                                              | 201862677336 P                                                                 |
| (11) EP3655038                      | A61K 31/09                                                              | 201862669262 P                                                                 |
| (21) EP18746859.0                   | A61K 31/675                                                             | 201862622755 P                                                                 |
| (47) 18.12.2024                     | A61K 47/10                                                              | 201862622748 P                                                                 |
| (87) EP2018069442                   | A61K 31/352                                                             | 201762582859 P                                                                 |
| 24.01.2019                          | (11) EP3250184                                                          | 201762563544 P                                                                 |
| (22) 17.07.2018                     | (21) EP16703887.6                                                       | 201762556291 P                                                                 |
| (54) PHARMACEUTICAL COMPOSITION     | (47) 18.12.2024                                                         | 201762540973 P                                                                 |
| (73) MEDINCELL S.A.                 | (87) US2016014956                                                       | 201762520204 P                                                                 |
| (72) SERINDOUX, Juliette            | 04.08.2016                                                              | (32) 04.06.2018                                                                |
| PEBREL, Lea                         | (22) 26.01.2016                                                         | 29.05.2018                                                                     |
| LÓPEZ-NORIEGA, Adolfo               | (54) HYPOTONIC HYDROGEL                                                 | 09.05.2018                                                                     |
| PETIT, Audrey                       | FORMULATIONS FOR ENHANCED                                               | 26.01.2018                                                                     |
| ABBASSI, Myriam                     | TRANSPORT OF ACTIVE AGENTS AT                                           | 26.01.2018                                                                     |
| CROS, Jean-Manuel                   | MUCOSAL SURFACES                                                        | 07.11.2017                                                                     |
| RECH, Anthony                       | (73) The Johns Hopkins University                                       | 26.09.2017                                                                     |
| ROBERGE, Christophe                 | (72) MAISEL, Katharina                                                  | 08.09.2017                                                                     |
| (31) 201762533370 P                 | ENSIGN, Laura                                                           | 03.08.2017                                                                     |
| (32) 17.07.2017                     | HANES, Justin                                                           | 15.06.2017                                                                     |
| (33) United States of America       | CONE, Richard                                                           | (33) United States of America                                                  |
| (51) A61K 9/00                      | (31) 201562108354 P                                                     | United States of America                                                       |
| A61K 9/107                          | (32) 27.01.2015                                                         | United States of America                                                       |
| A61K 9/20                           | (33) United States of America                                           | United States of America                                                       |
| A61K 47/36                          | (51) A61K 9/00                                                          | United States of America                                                       |
| A61K 31/22                          | A61K 39/395                                                             | United States of America                                                       |
| A61P 3/02                           | A61K 47/10                                                              | United States of America                                                       |
| A61K 9/50                           | A61K 47/32                                                              | United States of America                                                       |
| (11) EP2173321                      | A61K 47/34                                                              | United States of America                                                       |
| (21) EP08784912.1                   | (11) EP4167957                                                          | United States of America                                                       |
| (47) 18.12.2024                     | (21) EP21733136.2                                                       | United States of America                                                       |
| (87) EP2008005945                   | (47) 18.12.2024                                                         | United States of America                                                       |
| 22.01.2009                          | (87) EP2021066670                                                       | (51) A61K 9/28                                                                 |
| (22) 21.07.2008                     | 23.12.2021                                                              | A61K 31/4409                                                                   |
| (54) TABLET TABLE FORMULATIONS OF   | (22) 18.06.2021                                                         | (11) EP3355865                                                                 |
| LIPOPHILIC HEALTH INGREDIENTS       | (54) BIODEGRADABLE COMPOSITIONS                                         | (21) EP16778627.6                                                              |
| (73) DSM IP Assets B.V.             | AND IMPLANTS                                                            | (47) 18.12.2024                                                                |
| (72) DIGUET, Sylvain                | (73) Re-Vana Therapeutics Ltd                                           | (87) US2016054109                                                              |
| ULM, Johann                         | (72) THAKUR, Raghu Raj Singh                                            | 06.04.2017                                                                     |
| LEUENBERGER, Bruno                  | WANG, Yujing                                                            | (22) 28.09.2016                                                                |
| SCHLEGEL, Bernd                     | JONES, David                                                            | (54) SUSTAINED RELEASE                                                         |
| (31) 929945 P                       | SONAWANE, Rahul                                                         | COMPOSITIONS OF 4-                                                             |
| (32) 19.07.2007                     | (31) 20181231                                                           | AMINOPYRIDINE                                                                  |
| (33) United States of America       | (32) 19.06.2020                                                         | (73) Acorda Therapeutics, Inc.                                                 |
| (51) A61K 9/00                      | (33) European Patent Office (EPO)                                       | (72) D'SOUZA, Rohini                                                           |
| A61K 9/19                           | (51) A61K 9/107                                                         | WAY, Susan L.                                                                  |
| A61K 31/357                         | A61K 9/127                                                              | COBB, Joseph E. Jr.                                                            |
| A61K 47/10                          | C07K 16/10                                                              | GOLD, Thomas B.                                                                |
| A61K 47/22                          | C07K 16/20                                                              | (31) 201562234455 P                                                            |
| A61K 47/24                          | A61P 31/14                                                              | (32) 29.09.2015                                                                |
| A61K 47/26                          | A61P 37/04                                                              | (33) United States of America                                                  |
| A61K 47/44                          | (11) EP3638207                                                          | (51) A61K 9/70                                                                 |
| (11) EP4135652                      | (21) EP18742621.8                                                       | A61K 31/565                                                                    |
| (21) EP21717110.7                   | (47) 18.12.2024                                                         | A61K 31/567                                                                    |
| (47) 18.12.2024                     | (87) US2018037783                                                       | (11) EP3294300                                                                 |
| (87) EP2021059562                   | 20.12.2018                                                              | (21) EP16720866.9                                                              |
| 21.10.2021                          | (22) 15.06.2018                                                         | (47) 18.12.2024                                                                |
| (22) 13.04.2021                     |                                                                         | (87) EP2016060298                                                              |
| (54) RESINIFERATOXIN COMPOSITIONS   |                                                                         | 17.11.2016                                                                     |
| (73) Grünenthal GmbH                |                                                                         | (22) 09.05.2016                                                                |

|                                                                                                                            |                                                                                                                                                                              |                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) LONG ACTING DRUG DELIVERY<br>DEVICE IN FORM OF AN IMPLANT OR<br>IUD COMPRISING LEVONORGESTREL<br>AND ETHINYLESTRADIOL | A61K 8/34<br>A61K 8/67<br>A61K 8/73<br>A61K 9/14<br>A61K 47/36<br>A61P 3/02<br>A61P 17/18<br>A61P 39/06<br>A61P 43/00<br>A61K 8/35<br>A61K 9/20<br>A61K 31/122<br>A61Q 19/00 | (33) United States of America<br>United States of America                                                                                                                                                                |
| (73) Bayer Oy                                                                                                              | (11) EP3760196                                                                                                                                                               | (51) A61K 31/341                                                                                                                                                                                                         |
| (72) HOLMBERG, Svante                                                                                                      | (21) EP19760082.8                                                                                                                                                            | A61K 31/00                                                                                                                                                                                                               |
| TALLING, Christine                                                                                                         | (47) 18.12.2024                                                                                                                                                              | A61K 38/28                                                                                                                                                                                                               |
| (31) 15167521                                                                                                              | (87) JP2019005516                                                                                                                                                            | A61P 3/10                                                                                                                                                                                                                |
| (32) 13.05.2015                                                                                                            | 06.09.2019                                                                                                                                                                   | (11) EP3539540                                                                                                                                                                                                           |
| (33) European Patent Office (EPO)                                                                                          | (22) 15.02.2019                                                                                                                                                              | (21) EP19163940.0                                                                                                                                                                                                        |
| (51) A61K 31/045                                                                                                           | (54) REDUCED COENZYME Q10-<br>CONTAINING COMPOSITION AND<br>METHOD FOR PRODUCING SAME                                                                                        | (47) 18.12.2024                                                                                                                                                                                                          |
| A61K 31/05                                                                                                                 | (73) Petroeuroasia Co., Ltd.                                                                                                                                                 | (22) 07.11.2011                                                                                                                                                                                                          |
| A61K 31/22                                                                                                                 | (72) TAKAHASHI Hidehiro                                                                                                                                                      | (54) SGLT2 INHIBITOR 1-CHLORO-4-(BETA-<br>D-GLUCOPYRANOS-1-YL)-2-[4-((S)-<br>TETRAHYDROFURAN-3-YLOXY)-<br>BENZYL]-BENZENE IN COMBINATION<br>WITH INSULIN FOR USE IN A METHOD<br>FOR REDUCING THE RISK OF<br>HYPOGLYCEMIA |
| A61K 31/19                                                                                                                 | (31) 2018034461                                                                                                                                                              | (73) Boehringer Ingelheim International<br>GmbH                                                                                                                                                                          |
| A61P 3/00                                                                                                                  | (32) 28.02.2018                                                                                                                                                              | (72) MARK, Michael                                                                                                                                                                                                       |
| (11) EP3873442                                                                                                             | (33) Japan                                                                                                                                                                   | KLEIN, Thomas                                                                                                                                                                                                            |
| (21) EP19880284.5                                                                                                          | (51) A61K 31/122                                                                                                                                                             | LUIPPOLD, Gerd                                                                                                                                                                                                           |
| (47) 18.12.2024                                                                                                            | A61K 31/593                                                                                                                                                                  | JOHANSEN, Odd-Erik                                                                                                                                                                                                       |
| (87) US2019058676                                                                                                          | A61K 45/06                                                                                                                                                                   | GREMLER, Rolf                                                                                                                                                                                                            |
| 07.05.2020                                                                                                                 | A61P 37/06                                                                                                                                                                   | (31) 11151059                                                                                                                                                                                                            |
| (22) 29.10.2019                                                                                                            | (11) EP2854788                                                                                                                                                               | 10190303                                                                                                                                                                                                                 |
| (54) A COMPOSITION FOR<br>WEIGHT LOSS OR WEIGHT<br>MANAGEMENT COMPRISING<br>BETA-HYDROXYBUTYRATE AND<br>CANNABIDIOL        | (21) EP13729628.1                                                                                                                                                            | (32) 17.01.2011                                                                                                                                                                                                          |
| (73) Axxess Global Sciences, LLC                                                                                           | (47) 18.12.2024                                                                                                                                                              | 08.11.2010                                                                                                                                                                                                               |
| (72) LOWERY, Ryan                                                                                                          | (87) EP2013061518                                                                                                                                                            | (33) European Patent Office (EPO)                                                                                                                                                                                        |
| LACORE, Terry                                                                                                              | 12.12.2013                                                                                                                                                                   | European Patent Office (EPO)                                                                                                                                                                                             |
| WILSON, Jacob                                                                                                              | (22) 04.06.2013                                                                                                                                                              | (51) A61K 31/40                                                                                                                                                                                                          |
| (31) 201862752170 P                                                                                                        | (54) USE OF VITAMIN K TO DECREASE<br>ALLOGRAFT FAILURE AND PATIENT<br>MORTALITY AFTER KIDNEY<br>TRANSPLANTATION                                                              | A61K 31/50                                                                                                                                                                                                               |
| (32) 29.10.2018                                                                                                            | (73) NATTOPHARMA AS                                                                                                                                                          | A61K 31/5025                                                                                                                                                                                                             |
| (33) United States of America                                                                                              | (72) DE BORST, Martin                                                                                                                                                        | C07D 487/00                                                                                                                                                                                                              |
| (51) A61K 31/05                                                                                                            | VERMEER, Cornelis                                                                                                                                                            | C07D 487/02                                                                                                                                                                                                              |
| A61K 31/09                                                                                                                 | (31) 12170756                                                                                                                                                                | C07D 487/04                                                                                                                                                                                                              |
| A61K 31/706                                                                                                                | (32) 04.06.2012                                                                                                                                                              | A61P 9/00                                                                                                                                                                                                                |
| A61K 31/7052                                                                                                               | (33) European Patent Office (EPO)                                                                                                                                            | A61P 11/00                                                                                                                                                                                                               |
| C07C 15/52                                                                                                                 | (51) A61K 31/231                                                                                                                                                             | A61P 5/00                                                                                                                                                                                                                |
| C07C 39/205                                                                                                                | A61P 27/02                                                                                                                                                                   | A61P 35/00                                                                                                                                                                                                               |
| C07H 19/02                                                                                                                 | A61K 31/20                                                                                                                                                                   | (11) EP3697410                                                                                                                                                                                                           |
| C07H 19/048                                                                                                                | A61K 38/13                                                                                                                                                                   | (21) EP18867844.5                                                                                                                                                                                                        |
| A61P 25/28                                                                                                                 | A61K 31/717                                                                                                                                                                  | (47) 18.12.2024                                                                                                                                                                                                          |
| (11) EP3624783                                                                                                             | (11) EP3151827                                                                                                                                                               | (87) US2018056484                                                                                                                                                                                                        |
| (21) EP18803104.1                                                                                                          | (21) EP15803313.4                                                                                                                                                            | 25.04.2019                                                                                                                                                                                                               |
| (47) 18.12.2024                                                                                                            | (47) 18.12.2024                                                                                                                                                              | (22) 18.10.2018                                                                                                                                                                                                          |
| (87) US2018032932                                                                                                          | (87) US2015034279                                                                                                                                                            | (54) BENZIMIDAZOLE DERIVATIVES AND<br>THEIR USES                                                                                                                                                                         |
| 22.11.2018                                                                                                                 | 10.12.2015                                                                                                                                                                   | (73) Teijin Pharma Limited                                                                                                                                                                                               |
| (22) 16.05.2018                                                                                                            | (22) 04.06.2015                                                                                                                                                              | (72) SCHENKEL, Laurie                                                                                                                                                                                                    |
| (54) TREATING AND PREVENTING<br>AMYOTROPHIC LATERAL SCLEROSIS<br>WITH NICOTINAMIDE RIBOSIDE AND<br>PTEROSTILBENE           | (54) METHODS OF TREATING CHRONIC<br>DRY EYE DISEASE USING C16:1N7<br>PALMITOLEATE AND DERIVATIVES<br>THEREOF                                                                 | MILGRAM, Benjamin Charles                                                                                                                                                                                                |
| (73) Universitat de Valencia - Estudi General                                                                              | (73) Tersus Pharmaceuticals, LLC                                                                                                                                             | ZHAO, Wei                                                                                                                                                                                                                |
| Fundación Universidad Católica de                                                                                          | (72) O'HAIMHIRGIN, Lochlainn                                                                                                                                                 | STELLWAGEN, John                                                                                                                                                                                                         |
| Valencia San Vicente Mártir                                                                                                | (31) 201462008489 P                                                                                                                                                          | PANTELEEV, Jane                                                                                                                                                                                                          |
| Elysium Health, Inc.                                                                                                       | 201462007782 P                                                                                                                                                               | CHAKKA, Nagasree                                                                                                                                                                                                         |
| (72) ESTRELA ARIGÜEL, José María                                                                                           | (32) 05.06.2014                                                                                                                                                              | KIEFFER, Madeleine                                                                                                                                                                                                       |
| DELLINGER, Ryan                                                                                                            | 04.06.2014                                                                                                                                                                   | WEISS, Matthew                                                                                                                                                                                                           |
| DE LA RUBIA ORTI, José Enrique                                                                                             |                                                                                                                                                                              | BARTBERGER, Michael D.                                                                                                                                                                                                   |
| (31) 201862614003 P                                                                                                        |                                                                                                                                                                              | HORNE, Daniel B.                                                                                                                                                                                                         |
| 201762507585 P                                                                                                             |                                                                                                                                                                              | HUA, Zihao                                                                                                                                                                                                               |
| (32) 05.01.2018                                                                                                            |                                                                                                                                                                              | GAO, Hua                                                                                                                                                                                                                 |
| 17.05.2017                                                                                                                 |                                                                                                                                                                              | LIN, Daniel C. H.                                                                                                                                                                                                        |
| (33) United States of America                                                                                              |                                                                                                                                                                              | GUZMAN-PEREZ, Angel                                                                                                                                                                                                      |
| United States of America                                                                                                   |                                                                                                                                                                              | WHITE, Ryan D.                                                                                                                                                                                                           |
| (51) A61K 31/09                                                                                                            |                                                                                                                                                                              | (31) 201862671090 P                                                                                                                                                                                                      |
| A23L 33/10                                                                                                                 |                                                                                                                                                                              | 201762574465 P                                                                                                                                                                                                           |
| A61K 8/02                                                                                                                  |                                                                                                                                                                              | (32) 14.05.2018                                                                                                                                                                                                          |
|                                                                                                                            |                                                                                                                                                                              | 19.10.2017                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                            | (87) US2017048458<br>01.03.2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (32) 19.02.2016<br>(33) Italy                                                                                                                                                                                                                                                                                                                                                                   |
| (51) A61K 31/404<br>A61K 9/00<br>A61K 31/4045<br>A61P 25/18<br>A61P 25/24<br>A61P 25/26<br>A61P 25/30                                                                                                                                                                                                                                                                                                                                                                                | (22) 24.08.2017<br>(54) USE OF PRIDOPIDINE FOR TREATING<br>DYSTONIAS<br>(73) Prilenia Neurotherapeutics Ltd.<br>(72) SAVOLA, Juha-MATTI<br>PAPAPETROPOULOS, Spyridon<br>GRACHEV, Igor, D.<br>HAYDEN, Michael<br>GORDON, Mark, Forrest<br>EYAL, Eli<br>BOROWSKY, Beth                                                                                                                                                                                                                                                                                                                                             | (51) A61K 31/47<br>A61K 31/4709<br>A61K 31/497<br>A61K 31/5377<br>C07D 215/38<br>A61P 29/00<br>A61P 1/00<br>A61P 19/02<br>A61P 25/00<br>G01N 33/50<br>C12Q 1/68                                                                                                                                                                                                                                 |
| (11) EP4084791<br>(21) EP21711684.7<br>(47) 18.12.2024<br>(87) US2021018534<br>26.08.2021<br>(22) 18.02.2021<br>(54) SPECIFIC TRYPTAMINES FOR USE<br>IN THE TREATMENT OF MOOD<br>DISORDERS<br>(73) Gilgamesh Pharmaceuticals, Inc.<br>(72) KRUEGEL, Andrew Carry<br>SPORN, Jonathan<br>(31) 202062978075 P<br>(32) 18.02.2020<br>(33) United States of America                                                                                                                       | (31) 201662395319 P<br>201662379175 P<br>(32) 15.09.2016<br>24.08.2016<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | (11) EP3998070<br>(21) EP21211115.7<br>(47) 18.12.2024<br>(22) 17.07.2015<br>(54) MIR-124 AS A BIOMARKER FOR THE<br>TREATMENT OF INFLAMMATORY<br>DISEASES<br>(73) Institut Curie<br>Centre National de la Recherche<br>Scientifique<br>ABIVAX<br>UNIVERSITE DE MONTPELLIER                                                                                                                      |
| (51) A61K 31/4178<br>A61P 31/10<br>A01N 43/653<br>A01P 3/00<br>(11) EP4129284<br>(21) EP21189800.2<br>(47) 18.12.2024<br>(22) 05.08.2021<br>(54) SERTACONAZOL FOR PROVIDING A<br>SPORISTATIC AND/OR SPORICIDAL<br>EFFECT<br>(73) Dr. Pfleger Arzneimittel GmbH<br>(72) Neumeister, Claudia<br>Götz, Marcus Rudolf<br>Schwantes, Ulrich<br>Wiegand, Cornelia<br>Hipler, Uta-Christina                                                                                                 | (51) A61K 31/454<br>A61P 25/00<br>A61P 25/14<br>A61P 25/28<br>A61P 25/22<br>A61P 43/00<br>(11) EP4023222<br>(21) EP22156141.8<br>(47) 18.12.2024<br>(22) 07.09.2016<br>(54) NONSELECTIVE METABOTROPIC<br>GLUTAMATE RECEPTOR ACTIVATOR<br>FOR TREATMENT OF 22Q SYNDROME<br>(73) The Children's Hospital Of Philadelphia<br>(72) Hakonarson, Hakon<br>Kao, Charly<br>(31) 201562215673 P<br>201562215636 P<br>201562215633 P<br>201562215628 P<br>(32) 08.09.2015<br>08.09.2015<br>08.09.2015<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America | (72) SCHERRER, Didier<br>TAZI, Jamal<br>NAJMAN, Romain<br>MAHUTEAU, Florence<br>(31) 14306164<br>(32) 17.07.2014<br>(33) European Patent Office (EPO)                                                                                                                                                                                                                                           |
| (51) A61K 31/445<br>A61P 25/00<br>A61K 45/06<br>A61K 31/137<br>(11) EP3294337<br>(21) EP16723330.3<br>(47) 18.12.2024<br>(87) EP2016060562<br>17.11.2016<br>(22) 11.05.2016<br>(54) TREATMENT OF DEBILITATING<br>FATIGUE BY COMBINED<br>USE OF 3(S)-3-[3-<br>(METHYLSULFONYL)PHENYL]-1-<br>PROPYLPYPERIDINE AND AN ANTI-<br>DEPRESSIVE AGENT<br>(73) Arvid Carlsson Research AB<br>(72) CARLSSON, Arvid<br>GOTTFRIES, Carl-Gerhard<br>(31) 1550618<br>(32) 13.05.2015<br>(33) Sweden | (51) A61K 31/46<br>A61K 31/4535<br>A61K 36/535<br>A61K 9/00<br>A61K 9/08<br>A61P 27/10<br>(11) EP3416617<br>(21) EP17710482.5<br>(47) 18.12.2024<br>(87) EP2017053619<br>24.08.2017<br>(22) 17.02.2017<br>(54) COMBINATION OF AN ANTIALLERGIC<br>AGENT WITH MUSCARINIC<br>ANTAGONIST AND/OR<br>DOPAMINERGIC AGONIST FOR USE<br>IN PREVENTING/STOPPING OF AXIAL<br>MYOPIA IN HUMAN<br>(73) D'Ambrosio, Enzo Maria<br>(72) D'Ambrosio, Enzo Maria<br>(31) UB20160876                                                                                                                                               | (51) A61K 31/4745<br>A61K 9/00<br>A61K 47/34<br>A61P 35/00<br>A61K 45/06<br>A61K 31/47<br>A61K 31/495<br>(11) EP4072552<br>(21) EP20828088.3<br>(47) 18.12.2024<br>(87) GB2020053185<br>17.06.2021<br>(22) 11.12.2020<br>(54) CHEMOTHERAPEUTIC DRUG<br>IMPLANT<br>(73) Extruded Pharmaceuticals Ltd<br>(72) MCCONVILLE, Christopher<br>(31) 201918300<br>(32) 12.12.2019<br>(33) United Kingdom |
| (51) A61K 31/451<br>A61P 21/00<br>(11) EP3503890<br>(21) EP17844432.9<br>(47) 18.12.2024                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (51) A61K 31/496<br>A61K 31/353<br>A61K 31/4025<br>A61K 31/5377<br>C07D 311/66<br>C07D 311/72<br>C07D 311/74<br>C07D 405/06<br>A61P 39/06<br>A61P 3/08<br>A61P 29/00<br>A61P 9/10<br>A61P 9/08<br>A61P 9/12<br>(11) EP3672593<br>(21) EP18769288.4                                                                                                                                              |

|                                    |                                            |                                       |
|------------------------------------|--------------------------------------------|---------------------------------------|
| (47) 18.12.2024                    | A61P 43/00                                 | 11.11.2021                            |
| (87) EP2018072735                  | A61P 35/00                                 | (22) 05.10.2020                       |
| 28.02.2019                         | A61P 25/00                                 | (54) NOVEL CRYSTALLINE FORM OF        |
| (22) 23.08.2018                    | A61P 25/18                                 | VASCULAR LEAKAGE BLOCKER              |
| (54) MEDICAMENTS FOR THE TREATMENT | A61P 25/28                                 | COMPOUND                              |
| OF VASOCONSTRICTION RELATED        | A61P 3/04                                  | (73) CURACLE Co., Ltd.                |
| DISEASES OR DISORDERS              | A61P 3/10                                  | (72) AHN, Koo Hyeon                   |
| (73) Sulfateq B.V.                 | A61P 29/00                                 | PYO, Jung-In                          |
| (72) EUVERINK, Gerrit Jan Willem   | A61P 11/00                                 | BAEK, Chul Su                         |
| HENNING, Robert Henk               | A61K 9/00                                  | KIM, Myung-Hwa                        |
| KRENNING, Guido                    | A61K 31/366                                | KIM, Sung Hwan                        |
| VAN DER GRAAF, Adrianus Cornelis   | A61K 45/06                                 | (31) 20200053232                      |
| (31) 2020985                       | (11) EP3976047                             | (32) 04.05.2020                       |
| 2019446                            | (21) EP20818790.6                          | (33) Korea (Republic)                 |
| (32) 24.05.2018                    | (47) 18.12.2024                            | (51) A61K 31/65                       |
| 25.08.2017                         | (87) IL2020050610                          | C07C 237/26                           |
| (33) Netherlands                   | 10.12.2020                                 | A61P 25/32                            |
| Netherlands                        | (22) 02.06.2020                            | A61P 25/36                            |
| (51) A61K 31/522                   | (54) 5,6-DIHETE LACTONE FOR                | A61P 31/00                            |
| A61K 31/7076                       | TREATMENT OF MICROVASCULAR                 | A61P 25/30                            |
| A61K 31/708                        | DYSFUNCTION                                | A61P 25/34                            |
| A61K 31/4545                       | (73) Migal Galilee Research Institute Ltd. | A61P 29/00                            |
| A61K 39/395                        | (72) SZUCHMAN-SAPIR, Andrea                | (11) EP3806865                        |
| A61P 35/00                         | (31) 201962856266 P                        | (21) EP19820642.7                     |
| A61N 5/10                          | (32) 03.06.2019                            | (47) 18.12.2024                       |
| C07K 16/28                         | (33) United States of America              | (87) US2019036892                     |
| A61K 41/00                         | (51) A61K 31/57                            | 19.12.2019                            |
| (11) EP4117667                     | A61K 31/56                                 | (22) 13.06.2019                       |
| (21) EP21767125.4                  | A61K 9/48                                  | (54) MODIFIED TETRACYCLINE FOR        |
| (47) 18.12.2024                    | A61K 9/20                                  | TREATMENT OF SUBSTANCE USE            |
| (87) US2021022090                  | A61P 3/02                                  | DISORDER                              |
| 16.09.2021                         | A61P 3/12                                  | (73) Texas Tech University System     |
| (22) 12.03.2021                    | A61P 3/14                                  | (72) REID, Ted, W.                    |
| (54) SEQUENTIAL TREATMENT OF       | A61P 15/06                                 | SHASHTRI, Mayank                      |
| CANCERS USING 6-THIO-DG AND        | (11) EP3310359                             | SYAPIN, Peter                         |
| CHECKPOINT INHIBITORS              | (21) EP16815246.0                          | BERGESON, Susan, E.                   |
| (73) THE BOARD OF REGENTS OF THE   | (47) 18.12.2024                            | (31) 201862684509 P                   |
| UNIVERSITY OF TEXAS SYSTEM         | (87) US2016038822                          | 201862684467 P                        |
| (72) FU, Yang-Xin                  | 29.12.2016                                 | (32) 13.06.2018                       |
| MENDER, Ilgen                      | (22) 22.06.2016                            | 13.06.2018                            |
| ZHANG, Anli                        | (54) 17-HYDROXYPROGESTERONE                | (33) United States of America         |
| SHAY, Jerry                        | ESTER-CONTAINING ORAL                      | United States of America              |
| (31) 202062989041 P                | COMPOSITIONS AND RELATED                   | (51) A61K 31/702                      |
| (32) 13.03.2020                    | METHODS                                    | A61K 31/715                           |
| (33) United States of America      | (73) Lipocine Inc.                         | A61P 1/14                             |
| (51) A61K 31/5377                  | (72) NACHAEGARI, Satish K.                 | A23L 33/21                            |
| A61P 17/04                         | PATEL, Mahesh V.                           | C07H 3/06                             |
| (11) EP3681505                     | CHIDAMBARAM, Nachiappan                    | C08B 37/00                            |
| (21) EP18778635.5                  | (31) 201662295951 P                        | C08L 5/00                             |
| (47) 18.12.2024                    | 201562183031 P                             | C12N 9/24                             |
| (87) US2018048825                  | (32) 16.02.2016                            | (11) EP3980024                        |
| 21.03.2019                         | 22.06.2015                                 | (21) EP20817695.8                     |
| (22) 30.08.2018                    | (33) United States of America              | (47) 18.12.2024                       |
| (54) IMPROVED TREATMENT OF ATOPIC  | United States of America                   | (87) US2020035748                     |
| DERMATITIS WITH TRADIPITANT        | (51) A61K 31/58                            | 10.12.2020                            |
| (73) Vanda Pharmaceuticals Inc.    | A61K 31/704                                | (22) 02.06.2020                       |
| (72) BIRZNIEKS, Gunther            | C07J 67/00                                 | (54) SYNTHETIC OLIGOSACCHARIDES       |
| SMIESZEK, Sandra                   | C07J 9/00                                  | PRODUCED FROM                         |
| POLYMERPOULOS, Mihael, H.          | C07J 17/00                                 | POLYSACCHARIDES                       |
| XIAO, Changfu                      | A61K 31/56                                 | (73) The Regents of the University of |
| HEITMAN, Andrew                    | A61P 35/00                                 | California                            |
| (31) 201762572456 P                | A61P 29/00                                 | (72) AMICUCCI, Matthew J.             |
| 201762558303 P                     | A61P 3/10                                  | NANDITA, Eshani                       |
| (32) 14.10.2017                    | C07J 7/00                                  | MILLS, David A.                       |
| 13.09.2017                         | (11) EP3925966                             | LEBRILLA, Carlito B.                  |
| (33) United States of America      | (21) EP20908441.7                          | CASTILLO, Juan                        |
| United States of America           | (47) 18.12.2024                            | GERMAN, Bruce                         |
| (51) A61K 31/558                   | (87) KR2020013505                          | (31) 201962950483 P                   |

|                                          |                                           |                                        |
|------------------------------------------|-------------------------------------------|----------------------------------------|
| 201962857685 P                           | (72) DUSSEAUX, Mathilde                   | (22) 20.04.2016                        |
| (32) 19.12.2019                          | (31) 201570518                            | (54) MODULATION OF AAV VECTOR          |
| 05.06.2019                               | PCT/EP2016/051467                         | TRANSGENE EXPRESSION                   |
| (33) United States of America            | (32) 11.08.2015                           | (73) University of Massachusetts       |
| United States of America                 | 25.01.2016                                | (72) GOLEBIEWSKI, Diane                |
| (51) A61K 31/7068                        | (33) Denmark                              | WEISMANN, Cara                         |
| A61K 31/7012                             | World Intellectual Property Office (WIPO) | STOICA, Lorelei                        |
| A61K 9/00                                | (51) A61K 35/28                           | SENA-ESTEVEZ, Miguel                   |
| A61P 31/04                               | A61P 19/02                                | (31) 201562151988 P                    |
| C07H 19/01                               | A61P 37/06                                | (32) 23.04.2015                        |
| C07H 7/02                                | C12N 5/077                                | (33) United States of America          |
| (11) EP3337488                           | C12N 5/0789                               | (51) A61K 35/76                        |
| (21) EP16836327.3                        | (11) EP3653218                            | C12N 7/00                              |
| (47) 18.12.2024                          | (21) EP19205930.1                         | C12N 15/64                             |
| (87) CA2016050977                        | (47) 18.12.2024                           | (11) EP3352773                         |
| 23.02.2017                               | (22) 04.07.2012                           | (21) EP16849443.3                      |
| (22) 19.08.2016                          | (54) TREATING OR PREVENTING               | (47) 18.12.2024                        |
| (54) TREATMENT AND PREVENTION            | RHEUMATIC DISEASE                         | (87) US2016052716                      |
| OF NEISSERIA GONORRHOEAE                 | (73) Mesoblast, Inc.                      | 30.03.2017                             |
| INFECTION USING CMP-ACTIVATED            | (72) ITESCU, Silviu                       | (22) 20.09.2016                        |
| NONULOSONATE ANALOG                      | GHOSH, Peter                              | (54) ANTIBACTERIAL AND PROTECTIVE      |
| COMPOUNDS                                | (31) 2011902655                           | BACTERIOPHAGE FORMULATIONS             |
| (73) National Research Council of Canada | (32) 04.07.2011                           | AND METHODS FOR MAKING AND             |
| (72) SCHOENHOFEN, Ian C.                 | (33) Australia                            | USING THEM                             |
| (31) 201562207246 P                      | (51) A61K 35/742                          | (73) San Diego State University (SDSU) |
| (32) 19.08.2015                          | A61K 35/744                               | Foundation DBA San Diego State         |
| (33) United States of America            | A61K 35/745                               | University Research Foundation         |
| (51) A61K 31/717                         | A61K 35/00                                | (72) BARR, Jeremy J.                   |
| A61P 31/04                               | (11) EP3074027                            | ROHWER, Forest                         |
| A23L 33/125                              | (21) EP14821918.1                         | (31) 201562232070 P                    |
| A61P 37/04                               | (47) 18.12.2024                           | (32) 24.09.2015                        |
| A61P 1/00                                | (87) US2014067491                         | (33) United States of America          |
| A61P 43/00                               | 28.05.2015                                | (51) A61K 36/064                       |
| (11) EP3701955                           | (22) 25.11.2014                           | A61K 36/9066                           |
| (21) EP18869730.4                        | (54) SYNERGISTIC BACTERIAL                | A61K 31/05                             |
| (47) 18.12.2024                          | COMPOSITIONS AND METHODS OF               | A61P 15/00                             |
| (87) JP2018039373                        | PRODUCTION AND USE THEREOF                | (11) EP4153203                         |
| 02.05.2019                               | (73) Seres Therapeutics, Inc.             | (21) EP21732475.5                      |
| (22) 23.10.2018                          | (72) LITCOFSKY, Kevin, Daniel             | (47) 18.12.2024                        |
| (54) CELLULOSE ACETATE FOR USE IN A      | HENN, Matthew, R.                         | (87) FR2021050864                      |
| METHOD OF PREVENTING AND/OR              | OHSUMI, Toshiro, K.                       | 25.11.2021                             |
| TREATING BACTERIAL INFECTIONS            | AUNINS, John, Grant                       | (22) 18.05.2021                        |
| (73) Daicel Corporation                  | VON MALTZAHN, Geoffrey                    | (54) COMPOSITIONS AND COMBINATIONS     |
| (72) MIYAUCHI, Eiji                      | COOK, David, N.                           | FOR SUBJECTS SUFFERING FROM            |
| OHNO, Hiroshi                            | BERRY, David, Arthur                      | ENDOMETRIOSIS                          |
| TAKEUCHI, Tadashi                        | D'ONOFRIO, Anthony, Mario                 | (73) Gynov                             |
| SHIMAMOTO, Shu                           | MCKENZIE, Mary-Jane, Lombardo             | (72) MOUSSET, Pierre-Yves              |
| MATSUYAMA, Akinobu                       | AFEYAN, Noubar, B.                        | (31) 2005097                           |
| (31) 2017207154                          | (31) 201462004187 P                       | (32) 19.05.2020                        |
| (32) 26.10.2017                          | 201361908698 P                            | (33) France                            |
| (33) Japan                               | 201361908702 P                            | (51) A61K 38/10                        |
| (51) A61K 35/17                          | (32) 28.05.2014                           | A61K 39/00                             |
| A61P 35/00                               | 25.11.2013                                | C07K 7/00                              |
| C12N 5/0783                              | 25.11.2013                                | C07K 7/08                              |
| A61K 39/00                               | (33) United States of America             | C07K 14/005                            |
| A61K 39/395                              | United States of America                  | (11) EP4333867                         |
| C07K 14/705                              | United States of America                  | (21) EP22719598.9                      |
| (11) EP3334442                           | (51) A61K 35/76                           | (47) 18.12.2024                        |
| (21) EP16751219.3                        | A61K 48/00                                | (87) EP2022061825                      |
| (47) 18.12.2024                          | C12N 9/38                                 | 10.11.2022                             |
| (87) EP2016067800                        | C12N 15/35                                | (22) 03.05.2022                        |
| 16.02.2017                               | C12N 15/86                                | (54) PEPTIDES INHIBITING COVID-19      |
| (22) 26.07.2016                          | C12N 15/864                               | (73) QuantBioRes A/S                   |
| (54) CELLS FOR IMMUNOTHERAPY             | (11) EP3285788                            | (72) COSIC, Irena                      |
| ENGINEERED FOR TARGETING CD38            | (21) EP16783726.9                         | COSIC, Drasko                          |
| ANTIGEN AND FOR CD38 GENE                | (47) 18.12.2024                           | (31) 21176473                          |
| INACTIVATION                             | (87) US2016028367                         | 21171841                               |
| (73) Cellectis                           | 27.10.2016                                | (32) 28.05.2021                        |

|                                   |                                       |                                       |
|-----------------------------------|---------------------------------------|---------------------------------------|
| 03.05.2021                        | (73) Abbott GmbH & Co. KG             | BRAGUTI, Lodovico                     |
| (33) European Patent Office (EPO) | Abbott Laboratories GmbH              | (31) 201700078091                     |
| European Patent Office (EPO)      | (72) SHLIEOUT, George                 | (32) 11.07.2017                       |
| (51) A61K 38/16                   | RÜFFER, Frauke-Regina                 | (33) Italy                            |
| A61K 35/545                       | SCZESNY, Frithjof                     | (51) A61K 47/54                       |
| C07K 14/47                        | RUPP, Christopher                     | A61K 47/65                            |
| C12N 5/095                        | BREITENBACH, Jörg                     | A61K 47/68                            |
| C12N 5/0789                       | (31) 15187823                         | A61K 31/404                           |
| A61P 35/00                        | 14191832                              | A61K 31/40                            |
| A61P 35/04                        | (32) 01.10.2015                       | A61P 35/00                            |
| (11) EP3512538                    | 05.11.2014                            | (11) EP3473274                        |
| (21) EP17851436.0                 | (33) European Patent Office (EPO)     | (21) EP17815723.6                     |
| (47) 18.12.2024                   | European Patent Office (EPO)          | (47) 18.12.2024                       |
| (87) US2017051310                 | (51) A61K 39/08                       | (87) KR2017006552                     |
| 22.03.2018                        | A61K 47/26                            | 28.12.2017                            |
| (22) 13.09.2017                   | (11) EP3124044                        | (22) 21.06.2017                       |
| (54) METHODS FOR ENHANCING        | (21) EP16174817.3                     | (54) ANTIBODY-DRUG COMPOSITE          |
| LIFESPAN AND/OR TREATING          | (47) 18.12.2024                       | PLATFORM USING BISPECIFIC             |
| CELLULAR PROLIFERATIVE            | (22) 15.09.2008                       | ANTIBODY                              |
| DISORDERS BY TRANSPLANTATION      | (54) PHARMACEUTICAL COMPOSITIONS      | (73) Seoul National University R & DB |
| (73) Academia Sinica              | CONTAINING CLOSTRIDIUM DIFFICILE      | Foundation                            |
| (72) HUNG, Chun-Hao               | TOXOIDS A AND B                       | (72) KIM, Hyori                       |
| SHYU, Yu-Chiau                    | (73) Sanofi Pasteur Inc.              | KIM, Soohyun                          |
| SHEN, Che-Kun James               | (72) MIDDLEAUGH, Russell C.           | CHUNG, Junho                          |
| (31) 201662393665 P               | FAHRNER, Richard                      | PARK, Gunwoo                          |
| (32) 13.09.2016                   | CIARAMETARO, Peter                    | JIN, Junyeong                         |
| (33) United States of America     | (31) 972496 P                         | (31) 201662352804 P                   |
| (51) A61K 38/20                   | (32) 14.09.2007                       | (32) 21.06.2016                       |
| A61K 31/573                       | (33) United States of America         | (33) United States of America         |
| A61K 38/22                        | (51) A61K 45/06                       | (51) A61L 2/10                        |
| A61K 9/72                         | A61K 47/34                            | A46B 17/04                            |
| A61P 11/06                        | A61K 47/42                            | A46B 17/06                            |
| A61K 45/06                        | A61L 31/14                            | A46B 15/00                            |
| (11) EP3431096                    | A61P 35/00                            | (11) EP4212186                        |
| (21) EP16893885.0                 | C12Q 1/6886                           | (21) EP22210887.0                     |
| (47) 18.12.2024                   | (11) EP3691686                        | (47) 18.12.2024                       |
| (87) CN2016076441                 | (21) EP18865283.8                     | (22) 19.10.2016                       |
| 21.09.2017                        | (47) 18.12.2024                       | (54) KIT FOR STORAGE AND              |
| (22) 16.03.2016                   | (87) US2018054859                     | SANITIZATION OF A TOOTHBRUSH          |
| (54) GLUCOCORTICOID COMBINED WITH | 11.04.2019                            | (73) Colgate-Palmolive Company        |
| POLYETHYLENE GLYCOL-MODIFIED      | (22) 08.10.2018                       | (72) JOHANSSON, Patrik                |
| INTERLEUKIN-2 FOR TREATING        | (54) DETECTION OF METASTATIC DISEASE  | JIMENEZ, Eduardo                      |
| RESPIRATORY DISEASE               | AND RELATED METHODS                   | HOHLBEIN, Douglas, J.                 |
| (73) Xie, Yanhui                  | (73) The Regents Of The University Of | (51) A61L 2/24                        |
| (72) WU, Keifei                   | Michigan                              | A61L 2/10                             |
| MA, Jiexian                       | (72) OAKES, Robert S.                 | (11) EP3888703                        |
| XIE, Yanhui                       | BUSHNELL, Grace                       | (21) EP20167754.9                     |
| (51) A61K 38/48                   | SHEA, Lonnie D.                       | (47) 18.12.2024                       |
| A61P 1/18                         | JERUSS, Jacqueline S.                 | (22) 02.04.2020                       |
| A61K 47/44                        | (31) 201762571702 P                   | (54) METHOD OF AUTONOMOUS MOBILE      |
| A61K 47/34                        | 201762569460 P                        | DISINFECTION                          |
| A61K 9/20                         | (32) 12.10.2017                       | (73) UVD Robots Aps                   |
| A61K 9/14                         | 06.10.2017                            | (72) LARSEN, Rune K                   |
| A61K 38/54                        | (33) United States of America         | RUBAEK, Thomas                        |
| A61P 1/00                         | United States of America              | VITZRABIN, Efraim                     |
| A61P 3/10                         | (51) A61K 47/10                       | ØSTERGAARD, John Erland               |
| (11) EP3215181                    | A61K 47/34                            | (31) 202016836139                     |
| (21) EP15804327.3                 | A61K 47/46                            | (32) 31.03.2020                       |
| (47) 18.12.2024                   | A61K 9/107                            | (33) United States of America         |
| (87) EP2015075787                 | (11) EP3651802                        | (51) A61L 15/42                       |
| 12.05.2016                        | (21) EP18749145.1                     | A61L 15/44                            |
| (22) 05.11.2015                   | (47) 18.12.2024                       | A61L 15/58                            |
| (54) PROCESSES FOR PRODUCING      | (87) IB2018055061                     | A61K 38/00                            |
| COMPOSITIONS WITH IMPROVED        | 17.01.2019                            | A61K 47/64                            |
| SAFETY PROFILE COMPRISING         | (22) 10.07.2018                       | A61K 47/66                            |
| PANCREATIN AND COMPOSITIONS       | (54) NOVEL ANTIFUNGAL COMPOSITIONS    | B82Y 5/00                             |
| SUITABLE FOR PHARMACEUTICAL       | (73) Biokosmes Srl                    | C07K 5/062                            |
| USE                               | (72) RANDALL, Jeremy Anthony Philip   | C07K 5/083                            |

|                                          |                                           |                               |
|------------------------------------------|-------------------------------------------|-------------------------------|
| C07K 5/103                               | A61L 27/50                                | (31) 201962889364 P           |
| C07K 7/02                                | A61L 27/54                                | (32) 20.08.2019               |
| C07K 9/00                                | (11) EP4091640                            | (33) United States of America |
| C07K 5/072                               | (21) EP22181947.7                         | (51) A61M 1/02                |
| (11) EP3536350                           | (47) 18.12.2024                           | A61J 1/10                     |
| (21) EP18215491.4                        | (22) 19.02.2010                           | (11) EP3993848                |
| (47) 18.12.2024                          | (54) SURFACE TREATMENT PROCESS            | (21) EP20749975.7             |
| (22) 03.08.2007                          | FOR IMPLANTABLE MEDICAL DEVICE            | (47) 18.12.2024               |
| (54) BANDAGES FOR THE TREATMENT          | (73) Neoss Limited                        | (87) JP2020027772             |
| OR PREVENTION OF SCARS AND/OR            | (72) MEREDITH, Neil                       | 28.01.2021                    |
| KELOIDS AND METHODS AND KITS             | (31) 0902705                              | (22) 17.07.2020               |
| THEREFOR                                 | (32) 19.02.2009                           | (54) BLOOD BAG SYSTEM AND     |
| (73) The Board of Trustees of the Leland | (33) United Kingdom                       | MANUFACTURING METHOD          |
| Stanford Junior University               | (51) A61L 27/30                           | THEREFOR                      |
| (72) DAUSKARDT, Reinhold H.              | A61L 31/08                                | (73) TERUMO Kabushiki Kaisha  |
| LONGAKER, Michael T.                     | (11) EP3954400                            | (72) IGARASHI, Masatsugu      |
| YOCK, Paul                               | (21) EP20190262.4                         | (31) 2019134526               |
| GURTNER, Geoffrey C.                     | (47) 18.12.2024                           | (32) 22.07.2019               |
| (31) 83565406 P                          | (22) 10.08.2020                           | (33) Japan                    |
| (32) 03.08.2006                          | (54) COATING OF A STRUCTURED              | (51) A61M 1/14                |
| (33) United States of America            | IMPLANT SURFACE                           | (11) EP3582822                |
| (51) A61L 15/42                          | (73) Waldemar Link GmbH & Co. KG          | (21) EP18813474.6             |
| A61L 15/58                               | (72) CSASZAR, Richard                     | (47) 18.12.2024               |
| A61L 24/00                               | SPATH, Sebastian                          | (87) TR2018000010             |
| A61L 24/04                               | LINK, Helmut D.                           | 13.12.2018                    |
| C08G 18/08                               | (51) A61L 31/04                           | (22) 12.02.2018               |
| C08G 18/10                               | A61L 31/14                                | (54) A VENOVENOUS ECMO        |
| C08G 18/22                               | C08B 37/00                                | (EXTRACORPOREAL MEMBRANE      |
| C08G 18/24                               | A61P 41/00                                | OXYGENATION) CANNULA          |
| C08G 18/28                               | C08J 3/24                                 | (73) T.C Medipol Üniversitesi |
| C08G 18/48                               | C08B 37/08                                | (72) SALIHOGLU, Ece           |
| C08G 18/67                               | (11) EP4032562                            | YILDIZ, Yahya                 |
| C08G 18/73                               | (21) EP20865239.6                         | (31) 201702278                |
| C08G 18/79                               | (47) 18.12.2024                           | (32) 15.02.2017               |
| C08L 75/14                               | (87) CN2020082597                         | (33) Türkiye                  |
| C09J 175/14                              | 25.03.2021                                | (51) A61M 1/14                |
| (11) EP4110410                           | (22) 31.03.2020                           | A61M 1/34                     |
| (21) EP21708610.7                        | (54) DISULFIDE BOND-LINKED                | A61M 1/36                     |
| (47) 18.12.2024                          | HYALURONIC ACID GEL FOR                   | A61M 60/279                   |
| (87) EP2021054666                        | PREVENTING TISSUE ADHESION                | A61M 60/113                   |
| 02.09.2021                               | AFTER ABDOMINAL OR PELVIC                 | A61M 60/37                    |
| (22) 25.02.2021                          | CAVITY SURGERY AND PREPARATION            | (11) EP3903845                |
| (54) SWITCHABLE ADHESIVE                 | METHOD THEREFOR                           | (21) EP19901826.8             |
| COMPOSITIONS                             | (73) Bioregen Biomedical (Changzhou) Co., | (47) 18.12.2024               |
| (73) Lumina Adhesives AB                 | Ltd.                                      | (87) JP2019051337             |
| (72) BOSAEUS, Niklas                     | (72) WANG, Yunyun                         | 02.07.2020                    |
| TUNIUS, Mats                             | HU, Mulan                                 | (22) 26.12.2019               |
| (31) 202002659                           | ZHANG, Hongchen                           | (54) ATTACHMENT MEMBER        |
| (32) 25.02.2020                          | SONG, Wenjun                              | (73) Nikkiso Company Limited  |
| (33) United Kingdom                      | WANG, Kun                                 | (72) ARITA Miaki              |
| (51) A61L 27/16                          | SHU, Xiaozheng                            | MORITA Masayuki               |
| A61L 27/32                               | WANG, Xinyu                               | KAWAMURA Shunsuke             |
| A61F 2/08                                | (31) 201910898102                         | (31) 2018246174               |
| (11) EP3432827                           | (32) 21.09.2019                           | (32) 27.12.2018               |
| (21) EP17770696.7                        | (33) China                                | (33) Japan                    |
| (47) 18.12.2024                          | (51) A61M 1/00                            | (51) A61M 1/16                |
| (87) PL2017000028                        | (11) EP4017551                            | A61M 1/28                     |
| 28.09.2017                               | (21) EP20757411.2                         | A61M 1/36                     |
| (22) 23.03.2017                          | (47) 18.12.2024                           | G01N 27/06                    |
| (54) SYNTHETIC LIGAMENT, METHOD          | (87) IB2020057543                         | (11) EP3983029                |
| OF PRODUCING SAME AND USE                | 25.02.2021                                | (21) EP20724374.2             |
| THEREOF                                  | (22) 11.08.2020                           | (47) 18.12.2024               |
| (73) Mrugas, Robert                      | (54) SYSTEM AND METHOD TO CLEAR           | (87) US2020029153             |
| (72) Mrugas, Robert                      | CONDUITS OF FLUIDS AFTER                  | 17.12.2020                    |
| (31) 41663516                            | INSTILLATION TO A WOUND                   | (22) 21.04.2020               |
| (32) 24.03.2016                          | (73) Solventum Intellectual Properties    | (54) SYSTEMS AND METHODS FOR  |
| (33) Poland                              | Company                                   | MEASURING ELECTRICAL          |
| (51) A61L 27/30                          | (72) LOCKE, Christopher Brian             |                               |

|                                                                                                                      |                                                                                      |                                                     |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------|
| CHARACTERISTIC OF MEDICAL FLUIDS                                                                                     | (22) 20.03.2019                                                                      | (22) 21.11.2016                                     |
| (73) Fresenius Medical Care Holdings, Inc.                                                                           | (54) PLASMAPHERESIS CENTRIFUGE BOWL                                                  | (54) MEDICAMENT INJECTION DEVICE                    |
| (72) JAMES, Philip Scott                                                                                             | (73) Haemonetics Corporation                                                         | (73) Sanofi-Aventis Deutschland GmbH                |
| MOSS, Jon F.                                                                                                         | (72) KORYTKO, Taylor                                                                 | (72) VARGA, Michael                                 |
| BARRETT, Spencer                                                                                                     | (31) 201815935476                                                                    | BRAUN, Sebastian                                    |
| JENSEN, Lynn E.                                                                                                      | (32) 26.03.2018                                                                      | HELMER, Michael                                     |
| HOOVER, Mary                                                                                                         | (33) United States of America                                                        | SCHADER, Marc                                       |
| (31) 201962860046 P                                                                                                  | (51) A61M 1/36                                                                       | (31) 15196698                                       |
| (32) 11.06.2019                                                                                                      | A61M 60/109                                                                          | (32) 27.11.2015                                     |
| (33) United States of America                                                                                        | A61M 60/531                                                                          | (33) European Patent Office (EPO)                   |
| (51) A61M 1/34                                                                                                       | A61M 60/554                                                                          | (51) A61M 5/30                                      |
| A61K 47/00                                                                                                           | (11) EP3634532                                                                       | A61M 11/02                                          |
| A61M 1/36                                                                                                            | (21) EP18731024.8                                                                    | A61M 5/31                                           |
| (11) EP4003451                                                                                                       | (47) 18.12.2024                                                                      | (11) EP3777932                                      |
| (21) EP20743701.3                                                                                                    | (87) EP2018065057                                                                    | (21) EP19785272.6                                   |
| (47) 18.12.2024                                                                                                      | 13.12.2018                                                                           | (47) 18.12.2024                                     |
| (87) EP2020070919                                                                                                    | (22) 07.06.2018                                                                      | (87) KR2019003974                                   |
| 04.02.2021                                                                                                           | (54) DEVICE FOR EXTRACORPOREAL BLOOD TREATMENT AND DEVICE FOR COLLECTING BLOOD CLOTS | 17.10.2019                                          |
| (22) 24.07.2020                                                                                                      | (73) Fresenius Medical Care Deutschland GmbH                                         | (22) 04.04.2019                                     |
| (54) DEVICE FOR EXTRACORPOREAL LOWERING OF ASYMMETRIC DIMETHYLARGININE AND MONOMETHYL ARGININE LEVELS IN HUMAN BLOOD | (72) MAIERHOFER, Andreas                                                             | (54) ELECTROHYDRAULIC MICROJET DRUG DELIVERY DEVICE |
| (73) Technische Universität Dresden                                                                                  | (31) 102017005535                                                                    | (73) Medijet Co., Ltd.                              |
| (72) RODIONOV, Roman N.                                                                                              | (32) 10.06.2017                                                                      | (72) KANG, Han Bin                                  |
| TSELMIN, Sergey                                                                                                      | (33) Germany                                                                         | BAEK, In Seok                                       |
| BORNSTEIN, Stefan R.                                                                                                 | (51) A61M 5/142                                                                      | LEE, Seok Soon                                      |
| (31) 19188652                                                                                                        | A61M 5/36                                                                            | CHOI, Jin Kyu                                       |
| (32) 26.07.2019                                                                                                      | A61M 39/22                                                                           | TAK, Seung Min                                      |
| (33) European Patent Office (EPO)                                                                                    | (11) EP4346948                                                                       | (31) 20180040865                                    |
| (51) A61M 1/36                                                                                                       | (21) EP22735640.9                                                                    | (32) 09.04.2018                                     |
| (11) EP3789061                                                                                                       | (47) 18.12.2024                                                                      | (33) Korea (Republic)                               |
| (21) EP20189833.5                                                                                                    | (87) NL2022050369                                                                    | (51) A61M 5/315                                     |
| (47) 18.12.2024                                                                                                      | 12.01.2023                                                                           | A61M 5/20                                           |
| (22) 06.08.2020                                                                                                      | (22) 29.06.2022                                                                      | (11) EP3731905                                      |
| (54) SYSTEM AND METHOD FOR IRRADIATING BIOLOGICAL FLUIDS                                                             | (54) WEARABLE INFUSION DEVICE                                                        | (21) EP18830810.0                                   |
| (73) Fenwal, Inc.                                                                                                    | (73) Ivy Medical Holding B.V.                                                        | (47) 18.12.2024                                     |
| (72) MADSEN, James                                                                                                   | (72) TUIN, Peter Rieko                                                               | (87) EP2018086103                                   |
| (31) 201962884780 P                                                                                                  | (31) 21183717                                                                        | 04.07.2019                                          |
| (32) 09.08.2019                                                                                                      | (32) 05.07.2021                                                                      | (22) 20.12.2018                                     |
| (33) United States of America                                                                                        | (33) European Patent Office (EPO)                                                    | (54) DOSAGE MEASUREMENT SYSTEM                      |
| (51) A61M 1/36                                                                                                       | (51) A61M 5/162                                                                      | (73) SANOFI                                         |
| A61B 34/10                                                                                                           | (11) EP3866886                                                                       | (72) SCHABBACH, Michael                             |
| A61M 60/148                                                                                                          | (21) EP19791015.1                                                                    | JUGL, Michael                                       |
| A61M 60/178                                                                                                          | (47) 18.12.2024                                                                      | (31) 17306954                                       |
| A61M 60/857                                                                                                          | (87) US2019054098                                                                    | (32) 28.12.2017                                     |
| G16H 40/40                                                                                                           | 16.04.2020                                                                           | (33) European Patent Office (EPO)                   |
| (11) EP4039289                                                                                                       | (22) 01.10.2019                                                                      | (51) A61M 5/32                                      |
| (21) EP22162721.9                                                                                                    | (54) SYRINGE ADAPTER                                                                 | (11) EP3958936                                      |
| (47) 18.12.2024                                                                                                      | (73) CareFusion 303, Inc.                                                            | (21) EP20720075.9                                   |
| (22) 25.05.2011                                                                                                      | (72) FRAUSTO, Tomas                                                                  | (47) 18.12.2024                                     |
| (54) ANATOMIC FIT OF A PERCUTANEOUS VAD FOR RIGHT HEART SUPPORT                                                      | MASON, Eugene                                                                        | (87) EP2020061485                                   |
| (73) Abiomed, Inc.                                                                                                   | MANSOUR, George                                                                      | 29.10.2020                                          |
| (72) CORBETT, Scott C.                                                                                               | CALLAHAN, Ryan                                                                       | (22) 24.04.2020                                     |
| (31) 396344 P                                                                                                        | EWING, Linda                                                                         | (54) NEEDLE COVER WITH UNDERCUT                     |
| (32) 26.05.2010                                                                                                      | (31) 201816158179                                                                    | (73) Becton Dickinson France                        |
| (33) United States of America                                                                                        | (32) 11.10.2018                                                                      | (72) HUANG, Longxiang                               |
| (51) A61M 1/36                                                                                                       | (33) United States of America                                                        | YAN, Bo                                             |
| A61M 1/34                                                                                                            | (51) A61M 5/178                                                                      | ZUCCELLI, Jeremy                                    |
| (11) EP3755399                                                                                                       | A61M 5/20                                                                            | (31) 19305540                                       |
| (21) EP19715327.3                                                                                                    | A61M 5/28                                                                            | (32) 26.04.2019                                     |
| (47) 18.12.2024                                                                                                      | A61M 5/32                                                                            | (33) European Patent Office (EPO)                   |
| (87) US2019023100                                                                                                    | (11) EP3380135                                                                       | (51) A61M 5/46                                      |
| 03.10.2019                                                                                                           | (21) EP16798498.8                                                                    | A61M 5/34                                           |
|                                                                                                                      | (47) 18.12.2024                                                                      | (11) EP4166173                                      |
|                                                                                                                      | (87) EP2016078266                                                                    | (21) EP22202876.3                                   |
|                                                                                                                      | 01.06.2017                                                                           | (47) 18.12.2024                                     |
|                                                                                                                      |                                                                                      | (22) 29.01.2016                                     |
|                                                                                                                      |                                                                                      | (54) PEN NEEDLE HUB WITH A PATIENT CONTACT SURFACE  |



|                                           |                                     |                                     |
|-------------------------------------------|-------------------------------------|-------------------------------------|
| (73) Embecta Corp.                        | (47) 18.12.2024                     | (87) CN2019090389                   |
| (72) RINI, Christopher                    | (87) FR2022050400                   | 10.12.2020                          |
| PETTIS, Ronald                            | 15.09.2022                          | (22) 06.06.2019                     |
| MOREL, Didier                             | (22) 07.03.2022                     | (54) RESPIRATORY APPARATUS WITH     |
| SULLIVAN, Sean                            | (54) DEVICE FOR NASAL DELIVERY OF A | NOISE-DAMPING MEMBER                |
| HILL, Brendon                             | FLUID PRODUCT                       | (73) Vincent Medical (Dong Guan)    |
| ROBERTS, Bruce                            | (73) APTAR France SAS               | Technology Co., Ltd                 |
| HUANG, David                              | (72) HERRY, Serge                   | Vincent Medical (Dong Guan)         |
| SRINIVASAN, Sudarsan                      | (31) 2102304                        | Manufacturing Co., Ltd.             |
| KLUG, Richard                             | (32) 09.03.2021                     | (72) XU, Jiebing                    |
| (31) 201562109826 P                       | (33) France                         | HU, Zhenxiang                       |
| (32) 30.01.2015                           | (51) A61M 16/00                     | YU, Haibin                          |
| (33) United States of America             | A61B 5/024                          | LEI, Yu                             |
| (51) A61M 11/00                           | A61B 5/113                          | (51) A61M 16/00                     |
| B05B 9/08                                 | A61B 5/085                          | F17C 11/00                          |
| A61M 15/00                                | A61B 5/087                          | A61M 16/10                          |
| (11) EP4126134                            | A61B 5/11                           | A61M 16/20                          |
| (21) EP21713993.0                         | A61B 5/00                           | A61M 16/22                          |
| (47) 18.12.2024                           | G16H 20/40                          | A61M 16/06                          |
| (87) EP2021058102                         | G16H 40/63                          | A61M 16/08                          |
| 07.10.2021                                | G16H 50/20                          | A62B 7/02                           |
| (22) 29.03.2021                           | (11) EP4444393                      | A62B 7/08                           |
| (54) INHALATION DEVICE SYSTEM             | (21) EP23817757.0                   | A62B 21/00                          |
| (73) invoX Belgium NV                     | (47) 18.12.2024                     | B01D 53/04                          |
| (72) DUDLEY, Steven                       | (87) EP2023084192                   | (11) EP4227575                      |
| RAWERT, Jürgen                            | 20.06.2024                          | (21) EP23153708.5                   |
| (31) 202063002812 P                       | (22) 05.12.2023                     | (47) 18.12.2024                     |
| 20167228                                  | (54) DETECTING, IDENTIFYING AND     | (22) 27.01.2023                     |
| (32) 31.03.2020                           | ALLEVIATING CAUSES FOR              | (54) PORTABLE EMERGENCY OXYGEN      |
| 31.03.2020                                | PRESSURE BURDEN USING POSITIVE      | DELIVERY ASSEMBLY INCLUDING         |
| (33) United States of America             | AIRWAY PRESSURE DEVICES             | OXYGEN STORAGE CARTRIDGE            |
| European Patent Office (EPO)              | (73) Koninklijke Philips N.V.       | (73) L'AIR LIQUIDE, SOCIETE ANONYME |
| (51) A61M 13/00                           | (72) FERREIRA DOS SANTOS DA         | POUR L'ETUDE ET L'EXPLOITATION      |
| (11) EP4166096                            | FONSECA, Pedro Miguel               | DES PROCEDES GEORGES CLAUDE         |
| (21) EP21825811.9                         | HENDRIKS, Cornelis Petrus           | (72) PATEL, Akshar                  |
| (47) 18.12.2024                           | GRASSI, Angela                      | BOULANGER, Thierry                  |
| (87) CN2021100203                         | VAN ZANTEN, Joyce                   | (31) 2201224                        |
| 23.12.2021                                | KAHLERT, Joachim Johannes           | (32) 11.02.2022                     |
| (22) 15.06.2021                           | (31) 22214321                       | (33) France                         |
| (54) CONSTANT-PRESSURE VARIABLE-          | (32) 16.12.2022                     | (51) A61M 16/04                     |
| FLOW INSUFFLATOR                          | (33) European Patent Office (EPO)   | A61B 17/34                          |
| (73) Nanjing Tuge Healthcare Co., Ltd.    | (51) A61M 16/00                     | A61M 29/00                          |
| (72) XU, Jianglin                         | A61M 16/10                          | (11) EP4110444                      |
| ZHAO, Weiwei                              | A61M 16/12                          | (21) EP21706539.0                   |
| HUANG, Xinjun                             | (11) EP3980101                      | (47) 18.12.2024                     |
| (31) 202010540723                         | (21) EP19932111.8                   | (87) EP2021053808                   |
| (32) 15.06.2020                           | (47) 18.12.2024                     | 02.09.2021                          |
| (33) China                                | (87) CN2019090387                   | (22) 17.02.2021                     |
| (51) A61M 15/00                           | 10.12.2020                          | (54) DEVICE FOR PERCUTANEOUS        |
| (11) EP3687607                            | (22) 06.06.2019                     | DILATIONAL TRACHEOTOMY              |
| (21) EP18863196.4                         | (54) NOISE REDUCTION DEVICE FOR     | (73) Coloplast A/S                  |
| (47) 18.12.2024                           | RESPIRATORY APPARATUS               | (72) SCHNELL, Ralf                  |
| (87) JP2018035560                         | (73) Vincent Medical (Dong Guan)    | (31) 102020105048                   |
| 04.04.2019                                | Manufacturing Co., Ltd.             | (32) 26.02.2020                     |
| (22) 26.09.2018                           | Vincent Medical (Dong Guan)         | (33) Germany                        |
| (54) INTRANASAL DELIVERY DEVICES          | Technology Co., Ltd                 | (51) A61M 16/06                     |
| (73) Shin Nippon Biomedical Laboratories, | (72) YU, Haibin                     | A61M 16/16                          |
| Ltd.                                      | HU, Zhenxiang                       | F16M 13/04                          |
| (72) HARUTA, Shunji                       | XU, Jiebing                         | F16M 11/04                          |
| (31) 201762563244 P                       | LEI, Yu                             | (11) EP3846889                      |
| (32) 26.09.2017                           | (51) A61M 16/00                     | (21) EP19857912.0                   |
| (33) United States of America             | A61M 16/10                          | (47) 18.12.2024                     |
| (51) A61M 15/08                           | A61M 16/12                          | (87) IB2019057226                   |
| A61M 11/00                                | A61M 16/16                          | 12.03.2020                          |
| A61M 15/00                                | A61M 16/20                          | (22) 28.08.2019                     |
| B05B 11/02                                | (11) EP3980105                      | (54) SUPPORT FOR A BREATHING        |
| (11) EP4304685                            | (21) EP19931932.8                   | ASSISTANCE APPARATUS AND/OR         |
| (21) EP22714476.3                         | (47) 18.12.2024                     | ACCESSORIES                         |

|                                         |                                  |                                     |
|-----------------------------------------|----------------------------------|-------------------------------------|
| (73) Fisher & Paykel Healthcare Limited | (21) EP19853606.2                | A61M 60/857                         |
| (72) VAN SCHALKWYK, Andre               | (47) 18.12.2024                  | A61M 60/859                         |
| O'DONNELL, Kevin Peter                  | (87) US2019048303                | (11) EP3986529                      |
| SALMON, Andrew Paul Maxwell             | 05.03.2020                       | (21) EP20775489.6                   |
| (31) 201962855243 P                     | (22) 27.08.2019                  | (47) 18.12.2024                     |
| 201862726717 P                          | (54) NEGATIVE PRESSURE DEVICE    | (87) US2020049286                   |
| (32) 31.05.2019                         | HAVING OXYGEN SCAVENGER AND      | 11.03.2021                          |
| 04.09.2018                              | VOLUME REDUCTION                 | (22) 03.09.2020                     |
| (33) United States of America           | (73) Aatru Medical, LLC          | (54) CIRCULATORY SUPPORT DEVICE     |
| United States of America                | (72) MIDDLEAUGH, Richard L.      | WITH INTEGRATED CANNULA             |
| (51) A61M 16/08                         | WOJCIECHOWSKI, Timothy           | (73) Boston Scientific Scimed, Inc. |
| A61M 16/20                              | BUAN, John                       | (72) RIGALOS, Gerasimos             |
| A62B 18/08                              | LASH, Thomas E.                  | ROBINSON, David B.                  |
| A61M 16/06                              | (31) 201862723772 P              | JANCARIC, Thomas P.                 |
| (11) EP3815730                          | (32) 28.08.2018                  | TORMEY, James                       |
| (21) EP20201227.4                       | (33) United States of America    | CHOUINARD, Paul F.                  |
| (47) 18.12.2024                         | (51) A61M 27/00                  | (31) 201962896379 P                 |
| (22) 24.12.2004                         | A61F 13/00                       | (32) 05.09.2019                     |
| (54) ORONASAL PATIENT INTERFACE         | A61M 1/00                        | (33) United States of America       |
| (73) ResMed Pty Ltd                     | A61F 13/02                       | (51) A61M 60/178                    |
| (72) ROBINSON, Gary                     | A61F 13/15                       | A61M 60/232                         |
| SMART, Gregory                          | A61H 7/00                        | A61M 60/242                         |
| DAVIDSON, Aaron                         | A61L 15/42                       | A61M 60/422                         |
| KWOK, Philip                            | A61L 15/58                       | A61M 60/523                         |
| SCHEINER, Rupert                        | (11) EP3829689                   | A61M 60/531                         |
| GUNARATNAM, Michael                     | (21) EP19856309.0                | A61M 60/538                         |
| RAJE, Milind                            | (47) 18.12.2024                  | A61M 60/562                         |
| LUBKE, Steven                           | (87) US2019012298                | A61M 60/585                         |
| LYNCH, Susan                            | 05.03.2020                       | (11) EP3930782                      |
| (31) 53321403 P                         | (22) 04.01.2019                  | (21) EP20709985.4                   |
| (32) 31.12.2003                         | (54) NEGATIVE PRESSURE TREATMENT | (47) 18.12.2024                     |
| (33) United States of America           | INCLUDING MECHANICAL AND         | (87) US2020017587                   |
| (51) A61M 25/01                         | CHEMICAL PUMP                    | 03.09.2020                          |
| A61M 25/00                              | (73) Aatru Medical, LLC          | (22) 11.02.2020                     |
| A61M 25/06                              | (72) LASH, Thomas E.             | (54) DETECTION OF HYPERTENSION      |
| A61M 25/09                              | BUAN, John                       | IN LVAD PATIENTS USING SPEED        |
| (11) EP3849648                          | WOJCIECHOWSKI, Timothy           | CHANGE                              |
| (21) EP19860216.1                       | MIDDLEAUGH, Richard L.           | (73) Medtronic, Inc.                |
| (47) 18.12.2024                         | (31) 201862724159 P              | (72) KUDLIK, D'Anne E.              |
| (87) US2019013219                       | (32) 29.08.2018                  | STADLER, Robert W.                  |
| 19.03.2020                              | (33) United States of America    | (31) 202016775982                   |
| (22) 11.01.2019                         | (51) A61M 60/113                 | 201962811625 P                      |
| (54) VARIABLE FLEXIBILITY CATHETER      | A61M 60/279                      | (32) 29.01.2020                     |
| SUPPORT FRAME                           | A61M 60/37                       | 28.02.2019                          |
| (73) OrbusNeich Medical Pte. Ltd.       | A61M 60/849                      | (33) United States of America       |
| (72) JUMAN, Mohamad, Ike                | A61M 1/14                        | United States of America            |
| COTTONE, Robert                         | A61M 1/16                        | (51) A61N 1/04                      |
| (31) 201862729282 P                     | A61M 1/36                        | A61N 1/36                           |
| (32) 10.09.2018                         | F04B 43/12                       | A61H 39/00                          |
| (33) United States of America           | F04C 5/00                        | A61H 39/04                          |
| (51) A61M 25/09                         | (11) EP3689387                   | (11) EP3983051                      |
| (11) EP4223351                          | (21) EP18863574.2                | (21) EP20736506.5                   |
| (21) EP21886119.3                       | (47) 18.12.2024                  | (47) 18.12.2024                     |
| (47) 18.12.2024                         | (87) JP2018034972                | (87) US2020037625                   |
| (87) JP2021039235                       | 04.04.2019                       | 17.12.2020                          |
| 05.05.2022                              | (22) 21.09.2018                  | (22) 12.06.2020                     |
| (22) 25.10.2021                         | (54) TUBE SET AND TUBE PUMP WITH | (54) SYSTEM FOR DELIVERING PULSED   |
| (54) GUIDE WIRE AND METHOD OF           | SAME                             | ELECTRIC CURRENT TO LIVING          |
| MANUFACTURING GUIDE WIRE                | (73) Nipro Corporation           | TISSUE                              |
| (73) TERUMO Kabushiki Kaisha            | (72) SONODA, Yoshiyuki           | (73) Truerelief, LLC                |
| (72) MARUYAMA, Akihiro                  | ISHIKURA, Kohzo                  | (72) CROSSON, John                  |
| (31) 2020183259                         | YAMAGUCHI, Takeshi               | (31) 201962860678 P                 |
| (32) 30.10.2020                         | (31) 2017185302                  | (32) 12.06.2019                     |
| (33) Japan                              | (32) 26.09.2017                  | (33) United States of America       |
| (51) A61M 27/00                         | (33) Japan                       | (51) A61N 1/05                      |
| A61F 13/00                              | (51) A61M 60/139                 | A61N 1/375                          |
| A61M 1/00                               | A61M 60/174                      | A61N 1/36                           |
| (11) EP3820557                          | A61M 60/237                      | A61B 5/24                           |

|                                        |                                  |                                             |
|----------------------------------------|----------------------------------|---------------------------------------------|
| A61B 5/291                             | ORTIS, Sondra                    | (87) US2018026096                           |
| A61B 5/00                              | EBY, Thomas B                    | 11.10.2018                                  |
| (11) EP3852864                         | PASPA, Paul                      | (22) 04.04.2018                             |
| (21) EP19778771.6                      | LEE, Stephen                     | (54) MAGNETIC APPARATUS                     |
| (47) 18.12.2024                        | MAR, Craig E                     | (73) Howard Hughes Medical Institute        |
| (87) US2019051168                      | (31) 201862750034 P              | (72) BARBIC, Mladen                         |
| 26.03.2020                             | 201862700112 P                   | (31) 201862632201 P                         |
| (22) 13.09.2019                        | 201862646247 P                   | 201762482072 P                              |
| (54) STIMULATION SYSTEM WITH           | 201862637257 P                   | (32) 19.02.2018                             |
| MONOLITHIC-LEAD COMPONENT              | 201762582125 P                   | 05.04.2017                                  |
| CONNECTED TO SKULL MOUNT               | (32) 24.10.2018                  | (33) United States of America               |
| PACKAGE                                | 18.07.2018                       | United States of America                    |
| (73) Verily Life Sciences LLC          | 21.03.2018                       |                                             |
| (72) KARICHERLA, Annapurna             | 01.03.2018                       | (51) A61N 2/12                              |
| LU, Bo                                 | 06.11.2017                       | A61N 2/02                                   |
| SABESAN, Shivkumar                     | (33) United States of America    | (11) EP3793675                              |
| (31) 201862732671 P                    | United States of America         | (21) EP19730205.2                           |
| (32) 18.09.2018                        | United States of America         | (47) 18.12.2024                             |
| (33) United States of America          | United States of America         | (87) FR2019051109                           |
| (51) A61N 1/32                         | United States of America         | 21.11.2019                                  |
| A61N 1/05                              | (51) A61N 1/39                   | (22) 15.05.2019                             |
| A61N 1/36                              | A61B 5/01                        | (54) DEVICE FOR GENERATING A                |
| A61N 1/362                             | A61B 5/08                        | VERY-LOW-FREQUENCY PULSED                   |
| (11) EP4025294                         | A61B 5/00                        | MAGNETIC FIELD CARRIED                      |
| (21) EP20793042.1                      | A61N 1/372                       | BY A VERY-LOW-FREQUENCY                     |
| (47) 18.12.2024                        | (11) EP3932478                   | ALTERNATING MAGNETIC FIELD                  |
| (87) GB2020052134                      | (21) EP21193137.3                | (73) G.C. Technology                        |
| 11.03.2021                             | (47) 18.12.2024                  | (72) CREPIN, Gérard                         |
| (22) 04.09.2020                        | (22) 27.06.2014                  | RUDENT, Pascal                              |
| (54) APPARATUS AND METHOD              | (54) AMBULATORY MEDICAL DEVICE   | (31) 1854157                                |
| (73) IMPERIAL COLLEGE INNOVATIONS      | CAPABLE OF DELIVERING THERAPY    | (32) 18.05.2018                             |
| LIMITED                                | TO A PATIENT                     | (33) France                                 |
| (72) DZIALECKA, Patrycja               | (73) ZOLL Medical Corporation    | (51) A61N 5/10                              |
| GROSSMAN, Nir                          | (72) KAIB, Thomas E.             | (11) EP4082609                              |
| (31) 201912887                         | LINDER, Marshal W.               | (21) EP21170669.2                           |
| (32) 06.09.2019                        | (31) 201361840787 P              | (47) 18.12.2024                             |
| (33) United Kingdom                    | (32) 28.06.2013                  | (22) 27.04.2021                             |
| (51) A61N 1/36                         | (33) United States of America    | (54) OPTIMIZATION OF                        |
| A61N 1/372                             | (51) A61N 1/39                   | THERMORADIOTHERAPY                          |
| (11) EP4284491                         | A61N 1/04                        | TREATMENT                                   |
| (21) EP22704479.9                      | A61B 5/00                        | (73) RaySearch Laboratories AB              |
| (47) 18.12.2024                        | A61N 1/32                        | (72) Fredriksson, Albin                     |
| (87) US2022014622                      | (11) EP3585479                   | Öden, Jakob                                 |
| 04.08.2022                             | (21) EP18710612.5                | Eriksson, Kjell                             |
| (22) 31.01.2022                        | (47) 18.12.2024                  | Traneus, Erik                               |
| (54) SELECTABLE LATERAL SPINAL CORD    | (87) US2018019618                | (51) A61N 5/10                              |
| STIMULATION                            | 30.08.2018                       | A61B 6/00                                   |
| (73) Boston Scientific Neuromodulation | (22) 26.02.2018                  | A61B 6/03                                   |
| Corporation                            | (54) SUPPORT GARMENT FOR A       | G06T 7/00                                   |
| (72) ESTELLER, Rosana                  | WEARABLE MEDICAL DEVICE          | G06T 7/11                                   |
| BLOCK, Jessica                         | (73) Zoll Medical Corporation    | G06T 7/13                                   |
| CARBUNARU, Rafael                      | (72) SKALOS, Phil                | G16H 50/20                                  |
| (31) 202163144387 P                    | OWENS, Mark, Jerome              | (11) EP3813940                              |
| (32) 01.02.2021                        | HILL, Erin, Elaine               | (21) EP19825536.6                           |
| (33) United States of America          | PAVEL, Trisha, A.                | (47) 18.12.2024                             |
| (51) A61N 1/375                        | SWENGLISH, Christopher, Lawrence | (87) US2019039159                           |
| A61N 1/372                             | (31) 201715443856                | 02.01.2020                                  |
| A61N 1/05                              | (32) 27.02.2017                  | (22) 26.06.2019                             |
| (11) EP4233997                         | (33) United States of America    | (54) SYSTEMS AND METHODS FOR                |
| (21) EP23180009.5                      | (51) A61N 2/00                   | ACCELERATED ONLINE ADAPTIVE                 |
| (47) 18.12.2024                        | A61B 5/01                        | RADIATION THERAPY                           |
| (22) 05.11.2018                        | A61B 5/05                        | (73) The Medical College of Wisconsin, Inc. |
| (54) BIOSTIMULATOR HAVING FIXATION     | G01R 33/28                       | (72) ZHANG, Ying                            |
| ELEMENT                                | G01R 33/56                       | ZHANG, Jingqiao                             |
| (73) Pacesetter, Inc.                  | A61B 5/0515                      | LI, Allen X.                                |
| (72) FISHLER, Matthew G                | (11) EP3607335                   | THAPA, Ranjeeta                             |
| BOLING, Carl Lance                     | (21) EP18780541.1                | NASIEF, Haidy                               |
| LUHRS, Thomas Robert                   | (47) 18.12.2024                  | LIM, Sara                                   |
|                                        |                                  | AHUNBAY, Ergun                              |

|                                         |                                       |                                   |
|-----------------------------------------|---------------------------------------|-----------------------------------|
| (31) 201862690289 P                     | PREVENTION OF HEART FAILURE           | (51) A62B 9/00                    |
| (32) 26.06.2018                         | (HF)                                  | (11) EP3284522                    |
| (33) United States of America           | (73) Universitätsmedizin der Johannes | (21) EP17401088.4                 |
| (51) A61N 7/00                          | Gutenberg-Universität Mainz           | (47) 18.12.2024                   |
| A61H 23/00                              | (72) WENZEL, Philip                   | (22) 18.08.2017                   |
| A61B 18/00                              | RUF, Wolfram                          | (54) TEMPERATURE CONTROL DEVICE   |
| (11) EP2519323                          | (31) 21194468                         | AND INSTALLATION METHOD OF A      |
| (21) EP11728554.4                       | 20208835                              | TEMPERATURE CONTROL DEVICE        |
| (47) 18.12.2024                         | (32) 02.09.2021                       | FOR HEATING AND/OR COOLING        |
| (87) US2011020061                       | 20.11.2020                            | OF GASES OR GAS MIXTURES, IN      |
| 07.07.2011                              | (33) European Patent Office (EPO)     | PARTICULAR FOR USE IN THE AREA    |
| (22) 03.01.2011                         | European Patent Office (EPO)          | OF BREATHING PROTECTION           |
| (54) PORTABLE ULTRASOUND SYSTEM         | (51) A61P 35/00                       | (73) SATA GmbH & Co. KG           |
| (73) ZetROZ Systems, LLC                | C07D 471/04                           | (72) SCHÖNEMANN, Marco            |
| (72) LEWIS, George K., Jr.,             | A61K 31/437                           | BROSE, Jens                       |
| (31) 291732 P                           | (11) EP4188551                        | (31) 102016009956                 |
| 291779 P                                | (21) EP21758611.4                     | (32) 19.08.2016                   |
| 291804 P                                | (47) 18.12.2024                       | (33) Germany                      |
| (32) 31.12.2009                         | (87) EP2021070994                     | (51) A62B 9/04                    |
| 31.12.2009                              | 03.02.2022                            | A62B 25/00                        |
| 31.12.2009                              | (22) 27.07.2021                       | B63C 11/02                        |
| (33) United States of America           | (54) ARYL SUBSTITUTED PYRROLO-        | (11) EP3871739                    |
| United States of America                | PYRIDINONES AND THERAPEUTIC           | (21) EP20159485.0                 |
| United States of America                | USES THEREOF                          | (47) 18.12.2024                   |
| (51) A61N 7/02                          | (73) The Broad Institute, Inc.        | (22) 26.02.2020                   |
| A61N 7/00                               | Dana-Farber Cancer Institute, Inc.    | (54) CYLINDER-RETAINING APPARATUS |
| (11) EP3744397                          | Bayer Aktiengesellschaft              | FOR A BREATHING APPARATUS         |
| (21) EP18901604.1                       | (72) MCKINNEY, David                  | (73) Draeger Safety UK Limited    |
| (47) 18.12.2024                         | LECHNER, Christian                    | (72) FERGUSON, Darin              |
| (87) CN2018104623                       | HILLIG, Roman                         | WRIGLEY, Gordon                   |
| 25.07.2019                              | MENGEL, Anne                          | HANNARD, Evan                     |
| (22) 07.09.2018                         | FARIA ALVARES DE LEMOS, Adelaide      | (51) A62B 18/08                   |
| (54) IN VITRO FOCUSED ULTRASOUND        | Clara                                 | H04R 1/02                         |
| TREATMENT DEVICE FOR PELVIC             | HANDING, Kartarzyna                   | H04R 1/10                         |
| DISEASE                                 | KAULFUSS, Stefan                      | (11) EP3826729                    |
| (73) Chongqing Haifu Medical Technology | CORSELLO, Steven                      | (21) EP19744807.9                 |
| Co., Ltd.                               | RAUH, Ulrike                          | (47) 18.12.2024                   |
| (72) SUN, Jun                           | SHEKHAR, Mrinal                       | (87) GB2019051941                 |
| CHENG, Zhengming                        | FURST, Laura                          | 30.01.2020                        |
| HU, Hongbing                            | BÖMER, Ulf                            | (22) 11.07.2019                   |
| FU, Bing                                | MADEC, Amael                          | (54) A WEARABLE AIR PURIFIER      |
| HUANG, Haoran                           | MORTIER, Jeremie, Xavier G.           | (73) DYSON TECHNOLOGY LIMITED     |
| HU, Liang                               | SCHULZE, Volker                       | (72) MUNDY, Matthew               |
| WU, Xiaobing                            | (31) 202063058229 P                   | FAVENTI, Roberto                  |
| MA, Wenying                             | (32) 29.07.2020                       | JONES, Benjamin                   |
| YE, Fangwei                             | (33) United States of America         | MOONE, George                     |
| WEN, Hongjun                            | (51) A61Q 13/00                       | (31) 201811995                    |
| ZOU, Ying                               | A61K 8/11                             | (32) 23.07.2018                   |
| HU, Zheng                               | A61K 8/58                             | (33) United Kingdom               |
| (31) 201810059205                       | B01J 13/14                            | (51) A62C 3/07                    |
| (32) 22.01.2018                         | C11B 9/00                             | (11) EP3881903                    |
| (33) China                              | B01J 13/18                            | (21) EP20163314.6                 |
| (51) A61P 9/04                          | B01J 13/22                            | (47) 18.12.2024                   |
| A61K 38/17                              | C09B 67/02                            | (22) 16.03.2020                   |
| A61K 45/06                              | (11) EP4082622                        | (54) FIRE EXTINGUISHING ASSEMBLY  |
| C07K 16/00                              | (21) EP20905346.1                     | (73) Castellan AG                 |
| G01N 33/50                              | (47) 18.12.2024                       | (72) Castellan, Stefan Hans-Georg |
| (11) EP4247408                          | (87) JP2020049257                     | (51) A62C 27/00                   |
| (21) EP21820471.7                       | 01.07.2021                            | A62C 5/02                         |
| (47) 18.12.2024                         | (22) 28.12.2020                       | (11) EP4326405                    |
| (87) EP2021082355                       | (54) METHOD FOR PRODUCING             | (21) EP22719365.3                 |
| 27.05.2022                              | MICROCAPSULES                         | (47) 18.12.2024                   |
| (22) 19.11.2021                         | (73) Kao Corporation                  | (87) IB2022053718                 |
| (54) INHIBITORS OF THE TISSUE FACTOR-   | (72) MOROFUJI, Tatsuya                | 27.10.2022                        |
| PROTEASE ACTIVATED RECEPTOR             | YAMAZAKI, Daisuke                     | (22) 21.04.2022                   |
| 2 (TF-PAR2) SIGNALING PATHWAY           | (31) 2019239908                       | (54) COMPRESSED AIR FOAM SYSTEM   |
| FOR USE IN THE TREATMENT OR             | (32) 27.12.2019                       | PROVIDED WITH AN IMPROVED         |
|                                         | (33) Japan                            | MIXING SYSTEM                     |

|                                     |                                        |                                          |
|-------------------------------------|----------------------------------------|------------------------------------------|
| (73) IVECO MAGIRUS AG               | HOSOI, Kazuhiro                        | (31) 20175921                            |
| (72) FOEKEN, Peter                  | OKAMURA, Takanori                      | (32) 19.10.2017                          |
| RIETSCHEL, Simon                    | YAMAMOTO, Shinji                       | (33) Finland                             |
| HUMMERJOHANN, Tim                   | IKUTA, Hiroki                          | (51) A63C 19/10                          |
| (31) 202100010364                   | OSAKO, Satoru                          | A63C 19/02                               |
| (32) 23.04.2021                     | (31) 2014211713                        | A63C 19/08                               |
| (33) Italy                          | (32) 16.10.2014                        | E04H 3/14                                |
| (51) A62C 35/62                     | (33) Japan                             | (11) EP3990135                           |
| A62C 35/68                          | (51) A63B 53/04                        | (21) EP19766072.3                        |
| A62C 37/50                          | A63B 60/42                             | (47) 18.12.2024                          |
| A62C 3/00                           | (11) EP4028138                         | (87) IB2019055437                        |
| (11) EP3925674                      | (21) EP20863578.9                      | 30.12.2020                               |
| (21) EP21176224.0                   | (47) 18.12.2024                        | (22) 27.06.2019                          |
| (47) 18.12.2024                     | (87) US2020050763                      | (54) SYSTEM FOR THE MOVEMENT             |
| (22) 27.05.2021                     | 18.03.2021                             | OF AT LEAST ONE PARTITION, IN            |
| (54) SYSTEM FOR MAINTAINING         | (22) 14.09.2020                        | PARTICULAR THE PARTITION OF A            |
| INTEGRITY OF A DRY PIPE SYSTEM      | (54) GOLF CLUB HEADS HAVING A          | BALUSTRADE OF AN ICE RINK, AND           |
| WITH HEATED CABINET AND FLOW        | LOCALIZED HEAT AFFECTED ZONE           | METHOD FOR THE MOVEMENT OF AT            |
| RESTRICTOR VALVE                    | (73) Karsten Manufacturing Corporation | LEAST ONE PARTITION                      |
| (73) AGF Manufacturing, Inc.        | (72) MORALES, Eric J.                  | (73) Technoalpin Holding S.p.A.          |
| (72) FERRUCCI, Michael B.           | SIMONE, Matthew W.                     | (72) RIEDER, Walter                      |
| GLEESON, Bentley F.                 | STOKKE, Ryan M.                        | (51) A63F 13/30                          |
| McHUGH, George J. IV                | (31) 201962900378 P                    | A63F 13/335                              |
| McHUGH, James P.                    | (32) 13.09.2019                        | A63F 13/49                               |
| (31) 202016884281                   | (33) United States of America          | A63F 13/355                              |
| (32) 27.05.2020                     | (51) A63B 63/00                        | (11) EP4030304                           |
| (33) United States of America       | A63B 71/02                             | (21) EP22157540.0                        |
| (51) A62C 37/14                     | (11) EP4302842                         | (47) 18.12.2024                          |
| (11) EP3762109                      | (21) EP22183423.7                      | (22) 08.07.2014                          |
| (21) EP19764075.8                   | (47) 18.12.2024                        | (54) INFORMATION PROCESSING DEVICE       |
| (47) 18.12.2024                     | (22) 06.07.2022                        | AND INFORMATION PROCESSING               |
| (87) US2019019213                   | (54) ADJUSTABLE GOAL                   | SYSTEM                                   |
| 12.09.2019                          | (73) Lynxsport GmbH                    | (73) Sony Interactive Entertainment Inc. |
| (22) 22.02.2019                     | (72) HACKING, Andrew                   | (72) YAMAMOTO, Toru                      |
| (54) FIRE SUPPRESSION SPRINKLER AND | (51) A63B 69/12                        | TANAKA, Shinichi                         |
| DEFLECTOR                           | A63B 24/00                             | (31) 2013273238                          |
| (73) Victaulic Company              | (11) EP4029576                         | (32) 27.12.2013                          |
| (72) WANCHO, Thomas, F.             | (21) EP22151471.4                      | (33) Japan                               |
| (31) 201862640208 P                 | (47) 18.12.2024                        | (51) A63G 7/00                           |
| (32) 08.03.2018                     | (22) 13.01.2022                        | (11) EP3946664                           |
| (33) United States of America       | (54) SWIM IN PLACE POOL/SPA            | (21) EP20720577.4                        |
| (51) A63B 5/10                      | (73) Hydropool Inc.                    | (47) 18.12.2024                          |
| A63B 69/12                          | (72) WYATT Jr., Douglas Robert         | (87) US2020024207                        |
| A63B 71/06                          | BADITA, Nicolae                        | 08.10.2020                               |
| (11) EP4166201                      | (31) 202163136828 P                    | (22) 23.03.2020                          |
| (21) EP21202607.4                   | (32) 13.01.2021                        | (54) ROTATING PLATFORM COASTER           |
| (47) 18.12.2024                     | (33) United States of America          | (73) Universal City Studios LLC          |
| (22) 14.10.2021                     | (51) A63C 5/07                         | (72) MCVEEN, Keith, Michael              |
| (54) SUPPORT PART FOR A STARTING    | A63C 11/00                             | HALL, Gregory, S.                        |
| BLOCK IN SWIMMING                   | A63C 3/02                              | (31) 201916696653                        |
| (73) Swiss Timing Ltd               | A63C 9/20                              | 201962827690 P                           |
| (72) GRASSO, Christophe             | A63C 9/00                              | (32) 26.11.2019                          |
| MAIROT, Camille                     | A63C 9/16                              | 01.04.2019                               |
| CHOFFAT, Frédéric                   | A63C 1/28                              | (33) United States of America            |
| (51) A63B 24/00                     | A63C 3/00                              | United States of America                 |
| A63F 13/245                         | A63C 5/06                              | (51) A63H 3/00                           |
| (11) EP3207962                      | A63C 9/08                              | A63H 3/50                                |
| (21) EP15850661.8                   | A63C 9/086                             | A63H 3/38                                |
| (47) 18.12.2024                     | (11) EP3697508                         | A63H 33/22                               |
| (87) JP2015076622                   | (21) EP18849397.7                      | (11) EP4034273                           |
| 21.04.2016                          | (47) 18.12.2024                        | (21) EP20868668.3                        |
| (22) 18.09.2015                     | (87) FI2018050315                      | (47) 18.12.2024                          |
| (54) TRAINING IMPLEMENT, TRAINING   | 25.04.2019                             | (87) US2020053121                        |
| SYSTEM, AND INPUT DEVICE            | (22) 30.04.2018                        | 01.04.2021                               |
| (73) Nintendo Co., Ltd.             | (54) A LATERAL SUPPORT AND AN          | (22) 28.09.2020                          |
| (72) JIN, Xiaoming                  | ASSEMBLY                               | (54) TOY WITH INTEGRATED LIGHT PIPES     |
| TSUCHIYA, Hitoshi                   | (73) Innon Oy                          | (73) The Marketing Store Worldwide, LP   |
| KURODA, Ryoji                       | (72) MATTILA, Arto                     | (72) KRONBERGER, Warren                  |

|                                                |                                      |                                      |
|------------------------------------------------|--------------------------------------|--------------------------------------|
| NG, Francis                                    | KARAKI, Keisuke                      | E03F 5/14                            |
| BROSSEAU, Tom                                  | EMORI, Kenta                         | B01D 21/00                           |
| NOVAK, Steve                                   | (31) 2019225908                      | B01D 21/24                           |
| (31) 201962907067 P                            | (32) 13.12.2019                      | C02F 1/38                            |
| (32) 27.09.2019                                | (33) Japan                           | C02F 103/00                          |
| (33) United States of America                  | (51) B01D 15/08                      | E03F 5/04                            |
| (51) A63H 27/10                                | B01D 53/02                           | (11) EP3585497                       |
| (11) EP3976216                                 | G01N 30/60                           | (21) EP18758004.8                    |
| (21) EP20730694.5                              | (11) EP3334508                       | (47) 18.12.2024                      |
| (47) 18.12.2024                                | (21) EP16835971.9                    | (87) US2018019382                    |
| (87) GB2020051286                              | (47) 18.12.2024                      | 30.08.2018                           |
| 03.12.2020                                     | (87) US2016046752                    | (22) 23.02.2018                      |
| (22) 28.05.2020                                | 16.02.2017                           | (54) LIQUID QUALITY SYSTEM WITH DRAG |
| (54) POUCH ASSEMBLY                            | (22) 12.08.2016                      | INDUCING PORTIONS                    |
| (73) Seatriever International Holdings Limited | (54) ALLOY MATERIAL DEVICES AND      | (73) Advanced Drainage Systems, Inc. |
| (72) HALLIBURTON, James                        | COMPONENTS                           | (72) FRANCIS, Corey M.               |
| (31) 201907746                                 | (73) Waters Technologies Corporation | LIU, Bo                              |
| (32) 31.05.2019                                | (72) WYNDHAM, Kevin, Daniel          | ATCHISON, Owen Michael               |
| (33) United Kingdom                            | DELANO, Mathew                       | MARTIN, Terrianne Elizabeth          |
| (51) A63H 33/04                                | BOUVIER, Edouard, S.P.               | VANHOOSE, Bill Russell               |
| A63H 33/08                                     | BELANGER, Jonathan, L.               | FIGOLA, Daniel J.                    |
| (11) EP4313341                                 | LEVEILLE, Wade, P.                   | BITLER, Charles Robert               |
| (21) EP22718149.2                              | HEWITSON, Hillary, B.                | VITARELLI, Ronald R.                 |
| (47) 18.12.2024                                | FISK, Raymond, P.                    | BABCANEC, Joseph Andrew              |
| (87) EP2022057796                              | YANG, Hua                            | (31) 201715646794                    |
| 29.09.2022                                     | (31) 201562204769 P                  | 201762463322 P                       |
| (22) 24.03.2022                                | (32) 13.08.2015                      | (32) 11.07.2017                      |
| (54) MODULAR CONSTRUCTION SYSTEM               | (33) United States of America        | 24.02.2017                           |
| MOTOR UNIT                                     | (51) B01D 15/16                      | (33) United States of America        |
| (73) LEGO A/S                                  | B01D 15/20                           | United States of America             |
| (72) LYSEMOSE, Joachim Panduro                 | B01D 15/36                           | (51) B01D 24/12                      |
| HANSEN, Jørn Skovløber                         | B01D 15/38                           | C02F 1/00                            |
| (31) PA202170133                               | G01N 30/34                           | B01D 24/46                           |
| (32) 25.03.2021                                | B01J 20/281                          | (11) EP3641904                       |
| (33) Denmark                                   | G01N 30/56                           | (21) EP18743688.6                    |
| (51) B01D 3/00                                 | G01N 30/72                           | (47) 18.12.2024                      |
| B01D 3/14                                      | B01D 15/32                           | (87) EP2018066733                    |
| C07D 301/32                                    | G01N 30/96                           | 27.12.2018                           |
| B01D 3/34                                      | (11) EP3829733                       | (22) 22.06.2018                      |
| B01D 3/38                                      | (21) EP19773535.0                    | (54) UNDERDRAIN SYSTEM USING ONE-    |
| B01D 53/14                                     | (47) 18.12.2024                      | PIECE CELL DIVIDERS                  |
| (11) EP3801803                                 | (87) IB2019056379                    | (73) Suez Groupe S.A.S.              |
| (21) EP19815996.4                              | 30.01.2020                           | (72) GILBERT, Emily                  |
| (47) 18.12.2024                                | (22) 25.07.2019                      | THRUSTON, Andy                       |
| (87) US2019032179                              | (54) LIQUID CHROMATOGRAPHY/MASS      | MATANOSKI, Gregory                   |
| 12.12.2019                                     | SPECTROMETRY METHODS FOR THE         | (31) 201762523399 P                  |
| (22) 14.05.2019                                | ANALYSIS OF POLAR MOLECULES          | (32) 22.06.2017                      |
| (54) A METHOD FOR RECOVERY OF                  | (73) Waters Technologies Corporation | (33) United States of America        |
| ETHYLENE OXIDE                                 | (72) SMITH, Kerri M.                 | (51) B01D 25/12                      |
| (73) Ozero, Brian                              | RAINVILLE, Paul D.                   | B01D 25/19                           |
| (72) Ozero, Brian                              | (31) 201862711093 P                  | (11) EP4271498                       |
| (31) 201862680210 P                            | (32) 27.07.2018                      | (21) EP21847708.1                    |
| (32) 04.06.2018                                | (33) United States of America        | (47) 18.12.2024                      |
| (33) United States of America                  | (51) B01D 15/20                      | (87) EP2021087736                    |
| (51) B01D 3/42                                 | B01D 15/22                           | 07.07.2022                           |
| B01D 3/14                                      | G01N 30/60                           | (22) 28.12.2021                      |
| B01D 3/32                                      | B01D 15/18                           | (54) FILTER PRESS LOCKING MEANS      |
| (11) EP4074393                                 | (11) EP3694622                       | (73) Metso Finland Oy                |
| (21) EP20898041.7                              | (21) EP17911403.8                    | (72) LI, Zhihong                     |
| (47) 18.12.2024                                | (47) 18.12.2024                      | ILLI, Mika                           |
| (87) JP2020034406                              | (87) FR2017000192                    | YAN, Huan                            |
| 17.06.2021                                     | 18.04.2019                           | (31) 202011618687                    |
| (22) 11.09.2020                                | (22) 12.10.2017                      | (32) 31.12.2020                      |
| (54) DISTILLATION TOWER MANAGEMENT             | (54) CHROMATOGRAPHY METHOD           | (33) China                           |
| SYSTEM AND DISTILLATION TOWER                  | (73) Parmentier, François            | (51) B01D 29/15                      |
| MANAGEMENT METHOD                              | (72) Parmentier, François            | B01D 35/147                          |
| (73) Kurita Water Industries Ltd.              | (51) B01D 21/26                      | B01D 35/153                          |
| (72) MINAMI, Hiroaki                           | E03F 1/00                            | (11) EP4357000                       |

|                                                                                                                     |                                                                                                                               |                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| (21) EP24151211.0                                                                                                   | (54) PARTICULATE DISCHARGE APPARATUS, FILTER ASSEMBLY AND METHOD                                                              | (73) SAINT-GOBAIN CENTRE DE RECHERCHES ET D'ETUDES EUROPEEN                                                                |
| (47) 18.12.2024                                                                                                     |                                                                                                                               |                                                                                                                            |
| (22) 27.04.2022                                                                                                     |                                                                                                                               |                                                                                                                            |
| (54) FILTER DEVICE                                                                                                  | (73) MANN+HUMMEL GmbH                                                                                                         | (72) VINCENT, Adrien                                                                                                       |
| (73) Hydac Filbertechnik GmbH                                                                                       | (72) KAUFMANN, Michael                                                                                                        | COEURET, Xavier                                                                                                            |
| (72) Röder, Dirk                                                                                                    | RUHLAND, Klaus-Dieter                                                                                                         | (31) 1908171                                                                                                               |
| Braune, Martin Rudi                                                                                                 | (31) 102020108055                                                                                                             | (32) 18.07.2019                                                                                                            |
| Sakraschinsky, Michael                                                                                              | (32) 24.03.2020                                                                                                               | (33) France                                                                                                                |
| (31) 102021002511                                                                                                   | (33) Germany                                                                                                                  |                                                                                                                            |
| (32) 12.05.2021                                                                                                     | (51) B01D 53/04                                                                                                               | (51) B01D 63/02                                                                                                            |
| (33) Germany                                                                                                        | A23B 7/148                                                                                                                    | B01D 65/02                                                                                                                 |
| (51) B01D 39/16                                                                                                     | (11) EP3919161                                                                                                                | C02F 1/44                                                                                                                  |
| B01D 39/18                                                                                                          | (21) EP20382472.7                                                                                                             | (11) EP3967389                                                                                                             |
| B01D 39/20                                                                                                          | (47) 18.12.2024                                                                                                               | (21) EP20876255.9                                                                                                          |
| (11) EP3212304                                                                                                      | (22) 02.06.2020                                                                                                               | (47) 18.12.2024                                                                                                            |
| (21) EP15795080.9                                                                                                   | (54) SCRUBBER APPARATUS FOR CARBON DIOXIDE REMOVAL BY TEMPERATURE SWING ADSORPTION AND CONTROLLED ATMOSPHERE OPERATING METHOD | (87) CN2020115881                                                                                                          |
| (47) 18.12.2024                                                                                                     |                                                                                                                               | 22.04.2021                                                                                                                 |
| (87) US2015058306                                                                                                   |                                                                                                                               | (22) 17.09.2020                                                                                                            |
| 06.05.2016                                                                                                          |                                                                                                                               | (54) EXTERNAL PRESSURE TYPE HOLLOW FIBER MEMBRANE COMPONENT, FILTRATION MEMBRANE COMPONENT, AND MEMBRANE FILTRATION MODULE |
| (22) 30.10.2015                                                                                                     | (73) Thermo King LLC                                                                                                          | (73) Hainan Litree Purifying Technology Co., Ltd                                                                           |
| (54) SELF-SUPPORTING PLEATABLE FIBROUS WEB ESPECIALLY USEFUL AS OIL FILTER MEDIA AND OIL FILTER COMPRISING THE SAME | (72) VOJIK, Martin                                                                                                            | (72) CHEN, Chen                                                                                                            |
| (73) Ahlstrom Oyj                                                                                                   | KOHOUTEK, Tomá                                                                                                                | CHEN, Qing                                                                                                                 |
| (72) ARRINGTON, Crawford, Garland                                                                                   | STAVOVA, Petra                                                                                                                | CHEN, Lianggang                                                                                                            |
| TOPOLENSKI, David, Alan                                                                                             | KOLDA, Michal                                                                                                                 | (31) 201910978302                                                                                                          |
| (31) 20146043                                                                                                       | FERRER BLAS, Miguel Angel                                                                                                     | 201910979092                                                                                                               |
| 201462073066 P                                                                                                      | (51) B01D 53/94                                                                                                               | (32) 15.10.2019                                                                                                            |
| (32) 28.11.2014                                                                                                     | B01J 23/44                                                                                                                    | 15.10.2019                                                                                                                 |
| 31.10.2014                                                                                                          | B01J 23/46                                                                                                                    | (33) China                                                                                                                 |
| (33) Finland                                                                                                        | B01J 23/63                                                                                                                    | China                                                                                                                      |
| United States of America                                                                                            | B01J 35/00                                                                                                                    |                                                                                                                            |
| (51) B01D 46/24                                                                                                     | B01J 37/02                                                                                                                    | (51) B01D 63/02                                                                                                            |
| B01D 46/44                                                                                                          | B01J 37/08                                                                                                                    | C02F 1/00                                                                                                                  |
| B01D 46/48                                                                                                          | F01N 3/035                                                                                                                    | (11) EP4397396                                                                                                             |
| B01D 50/00                                                                                                          | B01J 23/00                                                                                                                    | (21) EP23168977.9                                                                                                          |
| F02M 35/02                                                                                                          | B01J 35/56                                                                                                                    | (47) 18.12.2024                                                                                                            |
| F02M 35/08                                                                                                          | F01N 3/022                                                                                                                    | (22) 20.04.2023                                                                                                            |
| F02M 35/09                                                                                                          | F01N 3/08                                                                                                                     | (54) PUSH-TYPE WATER PURIFICATION CUP                                                                                      |
| F02M 35/10                                                                                                          | F01N 3/10                                                                                                                     | (73) Yongkang Vanvosanso Houseware Co., Ltd                                                                                |
| (11) EP4121194                                                                                                      | F01N 3/20                                                                                                                     | (72) YAN, Huachao                                                                                                          |
| (21) EP21718386.2                                                                                                   | (11) EP4313376                                                                                                                | ZHOU, Xueyue                                                                                                               |
| (47) 18.12.2024                                                                                                     | (21) EP22722411.0                                                                                                             | (31) 202318093160                                                                                                          |
| (87) US2021023321                                                                                                   | (47) 18.12.2024                                                                                                               | (32) 04.01.2023                                                                                                            |
| 23.09.2021                                                                                                          | (87) EP2022057418                                                                                                             | (33) United States of America                                                                                              |
| (22) 19.03.2021                                                                                                     | 29.09.2022                                                                                                                    | (51) B01D 65/00                                                                                                            |
| (54) AIR CLEANER ASSEMBLY                                                                                           | (22) 22.03.2022                                                                                                               | B01D 63/10                                                                                                                 |
| (73) Donaldson Company, Inc.                                                                                        | (54) PARTICLE FILTER FOR EXHAUST GAS OF GASOLINE ENGINES                                                                      | B01D 63/12                                                                                                                 |
| (72) NEUDECKER, Nathan D.                                                                                           | (73) Umicore AG & Co. KG                                                                                                      | B01D 69/00                                                                                                                 |
| MOERS, Anthonius Jan-Baptist Maria                                                                                  | (72) DEIBEL, Naina                                                                                                            | (11) EP3894055                                                                                                             |
| DECOSTER, Kristof                                                                                                   | SCHOENHABER, Jan                                                                                                              | (21) EP19895395.2                                                                                                          |
| STOUTHUYSEN, Gwenole                                                                                                | KUCEROVA, Gabriela                                                                                                            | (47) 18.12.2024                                                                                                            |
| BONDARENKO, Sergey                                                                                                  | GOTTHARDT, Meike Antonia                                                                                                      | (87) US2019064580                                                                                                          |
| BILLIAU, Tim                                                                                                        | (31) 102021107129                                                                                                             | 18.06.2020                                                                                                                 |
| MCCONNELL, Jason P.                                                                                                 | (32) 23.03.2021                                                                                                               | (22) 05.12.2019                                                                                                            |
| NUMRICH, John R.L.                                                                                                  | (33) Germany                                                                                                                  | (54) SPIRAL WOUND FILTRATION DEVICE AND METHODS OF MANUFACTURE                                                             |
| BURTON, David J.                                                                                                    | (51) B01D 61/14                                                                                                               | (73) EMD Millipore Corporation                                                                                             |
| (31) 202062992834 P                                                                                                 | B01D 67/00                                                                                                                    | (72) STRAEFFER, Gregory                                                                                                    |
| (32) 20.03.2020                                                                                                     | B01D 71/02                                                                                                                    | NATALE, Matthew                                                                                                            |
| (33) United States of America                                                                                       | B01D 63/06                                                                                                                    | LANDRY, Nathan                                                                                                             |
| (51) B01D 46/48                                                                                                     | (11) EP3999217                                                                                                                | (31) 201862780689 P                                                                                                        |
| B01D 50/00                                                                                                          | (21) EP20736748.3                                                                                                             | 201862780634 P                                                                                                             |
| B01D 46/42                                                                                                          | (47) 18.12.2024                                                                                                               | 201862779867 P                                                                                                             |
| (11) EP3885026                                                                                                      | (87) EP2020069675                                                                                                             | 201862779860 P                                                                                                             |
| (21) EP21162991.0                                                                                                   | 21.01.2021                                                                                                                    |                                                                                                                            |
| (47) 18.12.2024                                                                                                     | (22) 10.07.2020                                                                                                               |                                                                                                                            |
| (22) 16.03.2021                                                                                                     | (54) FILTER COMPRISING A SILICONE CARBIDE SEPARATOR LAYER                                                                     |                                                                                                                            |

|                                       |                                     |                                             |
|---------------------------------------|-------------------------------------|---------------------------------------------|
| (32) 17.12.2018                       | 202063037577 P                      | (11) EP3624935                              |
| 17.12.2018                            | (32) 23.07.2020                     | (21) EP18802699.1                           |
| 14.12.2018                            | 10.06.2020                          | (47) 18.12.2024                             |
| 14.12.2018                            | (33) United States of America       | (87) SG2018050235                           |
| (33) United States of America         | United States of America            | 22.11.2018                                  |
| United States of America              | (51) B01J 13/14                     | (22) 15.05.2018                             |
| United States of America              | A61K 8/81                           | (54) METHOD OF FORMING COMPOSITE            |
| United States of America              | A61K 8/11                           | STRUCTURES                                  |
| (51) B01D 71/80                       | B01J 13/20                          | (73) Agency for Science, Technology and     |
| G01N 33/544                           | B01J 13/22                          | Research                                    |
| G01N 33/68                            | C11D 3/50                           | (72) YAP, Chin Chong Ray                    |
| B01J 20/28                            | (11) EP3615198                      | WONG, Siew Yee                              |
| B01J 20/289                           | (21) EP18717931.2                   | LI, Xu                                      |
| C12Q 1/6825                           | (47) 18.12.2024                     | HE, Jiating                                 |
| B01J 20/32                            | (87) EP2018059764                   | (31) 10201704083X                           |
| (11) EP3585506                        | 01.11.2018                          | (32) 18.05.2017                             |
| (21) EP18757325.8                     | (22) 17.04.2018                     | (33) Singapore                              |
| (47) 18.12.2024                       | (54) IMPROVEMENTS IN OR RELATING TO | (51) B01J 20/04                             |
| (87) US2018019173                     | ORGANIC COMPOUNDS                   | B01J 20/28                                  |
| 30.08.2018                            | (73) Givaudan SA                    | B01J 20/30                                  |
| (22) 22.02.2018                       | (72) GUINEBRETIERE, Sandra          | C02F 1/28                                   |
| (54) LIGAND BOUND MBP MEMBRANES       | AUSSANT, Emmanuel                   | (11) EP4003586                              |
| AND USES                              | (31) 201706762                      | (21) EP20750216.2                           |
| (73) Terapore Technologies, Inc.      | (32) 28.04.2017                     | (47) 18.12.2024                             |
| (72) ROBBINS, Spencer                 | (33) United Kingdom                 | (87) EP2020071354                           |
| DORIN, Rachel M.                      | (51) B01J 19/00                     | 04.02.2021                                  |
| HURWITZ, Mark                         | (11) EP3697528                      | (22) 29.07.2020                             |
| (31) 201762462161 P                   | (21) EP18803734.5                   | (54) FILTER MATERIAL FOR WATER              |
| (32) 22.02.2017                       | (47) 18.12.2024                     | TREATMENT                                   |
| (33) United States of America         | (87) FR2018052540                   | (73) Lhoist Recherche et Développement S.A. |
| (51) B01J 8/18                        | 25.04.2019                          | (72) VEDDER, Heidrun                        |
| C08F 10/00                            | (22) 12.10.2018                     | (31) 102019120629                           |
| (11) EP4301503                        | (54) MICROFLUIDIC CASSETTE FOR      | (32) 31.07.2019                             |
| (21) EP22714971.3                     | SYNTHESISING A RADIOTRACER          | (33) Germany                                |
| (47) 18.12.2024                       | AND METHOD FOR SYNTHESISING         | (51) B01J 31/40                             |
| (87) US2022070841                     | A RADIO-TRACER WITH SUCH A          | B01J 38/60                                  |
| 09.09.2022                            | CASSETTE                            | B01J 38/62                                  |
| (22) 25.02.2022                       | (73) P M B                          | B01J 31/18                                  |
| (54) PROCESSES FOR VENTING OLEFIN     | (72) HOUTANE, Virginie              | (11) EP4054762                              |
| POLYMERIZATION SYSTEMS                | PINEDA, Florian                     | (21) EP20807190.2                           |
| (73) ExxonMobil Chemical Patents Inc. | TANGUY, Laurent                     | (47) 18.12.2024                             |
| (72) LUCAS, Michael, D.               | (31) 1759802                        | (87) US2020056414                           |
| GUY, Nathaniel, B.                    | (32) 18.10.2017                     | 14.05.2021                                  |
| MCGINNIS, Aaron, C.                   | (33) France                         | (22) 20.10.2020                             |
| LAKIN, David, T.                      | (51) B01J 19/00                     | (54) PROCESSES FOR RECOVERY                 |
| BENNETT, Handel, D.                   | (11) EP4405094                      | OF RHODIUM FROM A                           |
| OHRAN, Benjamin, J.                   | (21) EP23744343.7                   | HYDROFORMYLATION PROCESS                    |
| APUGO, Stacy, N.                      | (47) 18.12.2024                     | (73) Dow Technology Investments LLC         |
| (31) 202163157392 P                   | (87) US2023069222                   | (72) BIGI, Marinus A.                       |
| (32) 05.03.2021                       | 04.01.2024                          | BRAMMER, Michael A.                         |
| (33) United States of America         | (22) 28.06.2023                     | EISENSCHMID, Thomas C.                      |
| (51) B01J 13/04                       | (54) HIGH DEFINITION MOLECULAR      | PHILLIPS, George R.                         |
| A61K 9/50                             | ARRAY FEATURE GENERATION            | MILLER, Glenn A.                            |
| A61K 31/19                            | USING PHOTORESIST                   | SINGH, Amarnath                             |
| A61K 38/00                            | (73) 10X Genomics, Inc.             | (31) 201962930833 P                         |
| (11) EP3922347                        | (72) WILK, Dieter                   | (32) 05.11.2019                             |
| (21) EP21178828.6                     | PATTERSON, David, Michael           | (33) United States of America               |
| (47) 18.12.2024                       | ZIRALDO, Solongo Batjargal          | (51) B01J 35/59                             |
| (22) 10.06.2021                       | SHORT, Steven, William              | B01D 71/00                                  |
| (54) SUPRAMOLECULAR SYSTEMS BASED     | ZHUANG, Pingwei                     | B01D 69/10                                  |
| ON DYNAMIC SELF-ORGANIZING            | (31) 202263356928 P                 | B01D 69/04                                  |
| NANOSTRUCTURES WITH ANTIVIRAL         | (32) 29.06.2022                     | B01D 71/02                                  |
| PROPERTIES                            | (33) United States of America       | B01J 20/28                                  |
| (73) Farber, Boris Slavinovich        | (51) B01J 20/02                     | B01D 67/00                                  |
| Martynov, Artur Viktorovich           | B01J 20/20                          | B01J 20/18                                  |
| (72) Farber, Boris Slavinovich        | B01J 20/30                          | B01D 63/06                                  |
| Martynov, Artur Viktorovich           | B01J 20/32                          | B01D 71/60                                  |
| (31) 202016936667                     | B82Y 40/00                          | (11) EP3678761                              |



|                                   |                                       |                                     |
|-----------------------------------|---------------------------------------|-------------------------------------|
| (21) EP18773942.0                 | 18.08.2022                            | (31) 102017115796                   |
| (47) 18.12.2024                   | (22) 09.02.2022                       | (32) 13.07.2017                     |
| (87) EP2018073913                 | (54) CONTAINER LID PROVIDED WITH A    | (33) Germany                        |
| 14.03.2019                        | CLOSABLE THROUGH OPENING              | (51) B01L 9/00                      |
| (22) 05.09.2018                   | (73) Bios - Health Diagnostics S.r.l. | B01L 3/00                           |
| (54) METHODS FOR PREPARING        | (72) BIOCCHI, Enrico                  | (11) EP3711859                      |
| SUPPORTED ZEOLITE FILMS           | (31) 202100002909                     | (21) EP20162624.9                   |
| (73) ZeoMem Sweden AB             | (32) 10.02.2021                       | (47) 18.12.2024                     |
| (72) YU, LIANG                    | (33) Italy                            | (22) 12.03.2020                     |
| HOLMGREN, ALLAN                   | (51) B01L 3/00                        | (54) SPECIMEN SLIDE CHAMBER         |
| HEDLUND, JONAS                    | G01N 21/64                            | (73) Miltenyi Biotec B.V. & Co. KG  |
| (31) 201714269                    | G01N 33/68                            | (72) BOSIO, Andreas                 |
| (32) 05.09.2017                   | C12M 1/00                             | PETERS, Mr. Ralf-Peter              |
| (33) United Kingdom               | C12N 15/09                            | KESEBERG, Jan                       |
| (51) B01J 39/04                   | C12Q 1/68                             | KABAH, Herr Eiad                    |
| C02F 1/42                         | G01N 37/00                            | (31) 19163639                       |
| C07C 51/48                        | (11) EP3450958                        | (32) 19.03.2019                     |
| C22B 23/02                        | (21) EP17789682.6                     | (33) European Patent Office (EPO)   |
| C22B 34/36                        | (47) 18.12.2024                       | (51) B02C 21/02                     |
| B01J 39/05                        | (87) JP2017016828                     | (11) EP4309795                      |
| C02F 1/26                         | 02.11.2017                            | (21) EP23185111.4                   |
| C22B 3/42                         | (22) 27.04.2017                       | (47) 18.12.2024                     |
| B01J 39/20                        | (54) REACTION CONTAINER AND           | (22) 12.07.2023                     |
| B01J 47/02                        | BIOCHEMICAL ANALYSIS METHOD           | (54) MOBILE ROCK PROCESSING         |
| (11) EP3444032                    | (73) Toppan Printing Co., Ltd.        | APPARATUS WITH IMPROVED             |
| (21) EP18192663.5                 | (72) HOSHINO Akihiro                  | SCHEDULING OF DISCONTINUOUS         |
| (47) 18.12.2024                   | MAKINO Yoichi                         | MATERIAL FEED                       |
| (22) 20.01.2016                   | MATSUKAWA Masahiro                    | (73) Kleemann GmbH                  |
| (54) PROCESS FOR THE RECOVERY     | (31) 2016089362                       | (72) Kühnle, Thomas                 |
| OF COBALT AND TUNGSTIC ACID       | (32) 27.04.2016                       | Böckle, Tobias                      |
| AND/OR ITS DERIVATIVES FROM       | (33) Japan                            | (31) 102022118032                   |
| AQUEOUS SOLUTIONS                 | (51) B01L 3/00                        | (32) 19.07.2022                     |
| (73) Novamont S.p.A.              | G01N 27/414                           | (33) Germany                        |
| (72) Borsotti, Giampietro         | G01N 33/53                            | (51) B03B 5/62                      |
| Digioia, Francesca                | G01N 33/487                           | B03B 5/00                           |
| (31) MI20150060                   | (11) EP3953043                        | B01L 3/00                           |
| (32) 22.01.2015                   | (21) EP20787831.5                     | G01N 37/00                          |
| (33) Italy                        | (47) 18.12.2024                       | G01N 15/14                          |
| (51) B01L 3/00                    | (87) US2020027550                     | C12M 1/00                           |
| (11) EP4157532                    | 15.10.2020                            | (11) EP3845309                      |
| (21) EP21740606.5                 | (22) 09.04.2020                       | (21) EP19854444.7                   |
| (47) 18.12.2024                   | (54) NANOSENSOR CHIP WITH             | (47) 18.12.2024                     |
| (87) GB2021051311                 | COMPOUND NANOPORES                    | (87) JP2019033524                   |
| 02.12.2021                        | (73) Pinpoint Science Inc.            | 05.03.2020                          |
| (22) 28.05.2021                   | (72) DIAMOND, Lisa                    | (22) 27.08.2019                     |
| (54) SPATIAL AND TEMPORAL NECKING | (31) 201916383491                     | (54) PARTICLE SEPARATION DEVICE AND |
| FOR ROBUST MULTI-SIZE             | (32) 12.04.2019                       | PARTICLE SEPARATION APPARATUS       |
| DISPENSING OF LIQUIDS ON HIGH     | (33) United States of America         | (73) Kyocera Corporation            |
| ELECTRODE DENSITY ELECTRO-        | (51) B01L 3/02                        | (72) MASUDA, Yui                    |
| WETTING ARRAYS                    | G01N 35/10                            | NAKAZONO, Jumpei                    |
| (73) Nuclera Ltd                  | (11) EP3651904                        | YONETA, Masashi                     |
| (72) ZHITOMIRSKY, David           | (21) EP18737239.6                     | (31) 2018159201                     |
| (31) 202063031000 P               | (47) 18.12.2024                       | (32) 28.08.2018                     |
| (32) 28.05.2020                   | (87) EP2018067822                     | (33) Japan                          |
| (33) United States of America     | 17.01.2019                            | (51) B04B 1/08                      |
| (51) B01L 3/00                    | (22) 02.07.2018                       | B04B 7/08                           |
| A61B 10/00                        | (54) INTEGRATED MOTOR CASSETTE        | B04B 11/02                          |
| B65B 3/00                         | FOR CONNECTION TO AND FOR             | (11) EP4086005                      |
| B65B 31/04                        | USE IN A PIPETTING SYSTEM,            | (21) EP21171838.2                   |
| B65B 59/00                        | PIPETTING SYSTEM, AND METHOD          | (47) 18.12.2024                     |
| B65B 55/02                        | FOR EXCHANGING AN INTEGRATED          | (22) 03.05.2021                     |
| B65B 55/22                        | MOTOR CASSETTE OF A PIPETTING         | (54) MODULAR CENTRIFUGAL            |
| G01N 1/31                         | SYSTEM                                | SEPARATOR SYSTEM AND                |
| B65B 7/28                         | (73) Hamilton Bonaduz AG              | COMPONENTS THEREOF                  |
| (11) EP4291332                    | (72) GYSEL, Fridolin                  | (73) Alfa Laval Corporate AB        |
| (21) EP22706914.3                 | ROMER, Hanspeter                      | (72) HÖGLUND, Kasper                |
| (47) 18.12.2024                   | WALPEN, Silvio                        | EKSTRÖM, Anders                     |
| (87) IB2022051166                 | ETTINGER, Reto                        |                                     |

|                                    |                                    |                                    |
|------------------------------------|------------------------------------|------------------------------------|
| (51) B05B 1/28                     | (11) EP3988217                     | (32) 30.08.2019                    |
| B05B 12/18                         | (21) EP21200875.9                  | (33) Japan                         |
| B05B 14/30                         | (47) 18.12.2024                    | (51) B07B 1/24                     |
| B05B 12/08                         | (22) 05.10.2021                    | B07B 4/08                          |
| B05B 7/16                          | (54) A MOISTENING SYSTEM FOR PAPER | B07B 9/02                          |
| B05B 7/24                          | SHEETS                             | B07B 1/20                          |
| G01N 15/0205                       | (73) Penati, Vincenzo              | B65G 53/60                         |
| B05B 9/01                          | (72) Penati, Vincenzo              | B04C 9/00                          |
| G01N 15/00                         | (31) 202000024976                  | B65G 53/48                         |
| (11) EP3976266                     | (32) 22.10.2020                    | (11) EP4013552                     |
| (21) EP20727319.4                  | (33) Italy                         | (21) EP20775819.4                  |
| (47) 18.12.2024                    | (51) B05C 19/04                    | (47) 18.12.2024                    |
| (87) EP2020064633                  | B27N 3/14                          | (87) EP2020072882                  |
| 03.12.2020                         | (11) EP3980195                     | 18.02.2021                         |
| (22) 27.05.2020                    | (21) EP20726714.7                  | (22) 14.08.2020                    |
| (54) SYSTEM AND METHOD FOR COATING | (47) 18.12.2024                    | (54) PNEUMATIC CONVEYING SYSTEM    |
| A SURFACE                          | (87) EP2020062577                  | FOR SEPARATING BULK PRODUCT        |
| (73) Qlayers Holding B.V.          | 10.12.2020                         | (73) Schenck Process LLC           |
| (72) GEUTJENS, Ruben               | (22) 06.05.2020                    | (72) LUCAS, Matheus Johannes       |
| (31) 2023224                       | (54) SPREADER ROLL FOR A           | GOODWIN, Anthony                   |
| 2023223                            | DISTRIBUTING DEVICE                | (31) 201914172                     |
| (32) 28.05.2019                    | (73) IPCO Germany GmbH             | 201911632                          |
| 28.05.2019                         | (72) HOFFMEYER, Frank              | (32) 01.10.2019                    |
| (33) Netherlands                   | SCHROMM, Hans-Kurt                 | 14.08.2019                         |
| Netherlands                        | (31) 202019002531 U                | (33) United Kingdom                |
| (51) B05B 1/30                     | (32) 07.06.2019                    | United Kingdom                     |
| B05B 1/18                          | (33) Germany                       | (51) B08B 1/32                     |
| E03C 1/04                          | (51) B05D 1/26                     | H01L 21/67                         |
| B05B 1/26                          | B05D 3/06                          | (11) EP3636356                     |
| B05B 1/20                          | B05D 3/12                          | (21) EP19202831.4                  |
| B05B 15/652                        | B05D 7/06                          | (47) 18.12.2024                    |
| B05B 1/12                          | B05D 7/00                          | (22) 11.10.2019                    |
| (11) EP3954466                     | (11) EP4249135                     | (54) SUBSTRATE CLEANING MEMBER AND |
| (21) EP21189517.2                  | (21) EP23162916.3                  | SUBSTRATE CLEANING APPARATUS       |
| (47) 18.12.2024                    | (47) 18.12.2024                    | (73) EBARA CORPORATION             |
| (22) 03.08.2021                    | (22) 20.03.2023                    | (72) ISHIBASHI, Tomoatsu           |
| (54) SPRAY ASSEMBLY                | (54) METHOD FOR COATING PANEL      | (31) 2018193312                    |
| (73) Kohler Co.                    | EDGES THROUGH VACUUM COATING       | (32) 12.10.2018                    |
| (72) Erickson, Perry               | HEADS                              | (33) Japan                         |
| (31) 202117377006                  | (73) CEFLA SOCIETA' COOPERATIVA    | (51) B08B 9/045                    |
| 202163209789 P                     | (72) PETRUCCI, Roberto             | B08B 9/047                         |
| 202063063489 P                     | (31) 202200005738                  | B08B 9/027                         |
| (32) 15.07.2021                    | (32) 23.03.2022                    | B08B 1/00                          |
| 11.06.2021                         | (33) Italy                         | A46B 13/02                         |
| 10.08.2020                         | (51) B06B 1/06                     | A46B 5/00                          |
| (33) United States of America      | H02N 2/04                          | (11) EP3268139                     |
| United States of America           | G02B 7/04                          | (21) EP16761149.0                  |
| United States of America           | G06F 3/01                          | (47) 18.12.2024                    |
| (51) B05B 5/00                     | B06B 1/02                          | (87) FI2016050146                  |
| (11) EP4215281                     | G02B 7/09                          | 15.09.2016                         |
| (21) EP22152324.4                  | H10N 30/20                         | (22) 10.03.2016                    |
| (47) 18.12.2024                    | H10N 30/50                         | (54) FLEXIBLE TORSION SHAFT,       |
| (22) 19.01.2022                    | H10N 30/87                         | ARRANGEMENT AND DEVICE FOR         |
| (54) POWDER SPRAY NOZZLE FOR       | (11) EP4009509                     | CLEANING AIR-CONDITIONING          |
| SPRAYING COATING POWDER,           | (21) EP20859370.7                  | DUCTS                              |
| COMBINATION OF ELECTRODE           | (47) 18.12.2024                    | (73) Bierkühl OY                   |
| HOLDER AND POWDER SPRAY            | (87) JP2020031401                  | (72) HILTUNEN, Pentti              |
| NOZZLE, AND SPRAY APPLICATOR       | 04.03.2021                         | (31) 20165025                      |
| WITH POWDER SPRAY NOZZLE           | (22) 20.08.2020                    | 20155157                           |
| (73) Wagner International AG       | (54) ACTUATOR, DRIVE DEVICE AND    | (32) 15.01.2016                    |
| (72) Loos, Eugen                   | ELECTRONIC DEVICE                  | 10.03.2015                         |
| Donati, Thomas                     | (73) Sony Group Corporation        | (33) Finland                       |
| (51) B05B 7/06                     | (72) NAKAO, Michiko                | Finland                            |
| B05B 7/08                          | NAKATA, Akihiro                    | (51) B08B 9/24                     |
| B05B 7/16                          | GOTO, Yoshio                       | B08B 9/30                          |
| B05B 13/02                         | MIYAHARA, Kazuhiko                 | C23C 16/02                         |
| B31F 1/28                          | NAKAMARU, Satoshi                  | C23C 16/517                        |
| B05B 1/00                          | (31) 2019158597                    | (11) EP4045695                     |

|                                              |                                              |                                                            |
|----------------------------------------------|----------------------------------------------|------------------------------------------------------------|
| (21) EP20800017.4                            | (47) 18.12.2024                              | (54) METHOD FOR PRODUCING SHAFT, AND CASTING MOLD ASSEMBLY |
| (47) 18.12.2024                              | (87) IB2021058333                            | (73) Nishioka Malleable Iron Ind. Co., Ltd.                |
| (87) EP2020079055                            | 24.03.2022                                   | (72) NISHIOKA, Manabu                                      |
| 22.04.2021                                   | (22) 14.09.2021                              | (31) 2018233187                                            |
| (22) 15.10.2020                              | (54) EQUIPMENT FOR HIGH                      | (32) 13.12.2018                                            |
| (54) APPARATUS AND METHOD FOR                | TEMPERATURE HEAT-TREATMENT                   | (33) Japan                                                 |
| RECYCLING DRINKS BOTTLES MADE                | OF MANUFACTURED ITEMS, IN                    | (51) B22F 3/00                                             |
| FROM PLASTIC                                 | PARTICULAR FOR CONTROLLED                    | B22F 3/115                                                 |
| (73) Vereinigung zur Förderung des Instituts | COOLING OF ALUMINUM EXTRUDED                 | B33Y 10/00                                                 |
| für Kunststoffverarbeitung in Industrie      | SECTION BARS                                 | B33Y 30/00                                                 |
| und Handwerk An der Rhein.- Westf.           | (73) Danieli & C. Officine Meccaniche S.p.A. | B33Y 50/02                                                 |
| Technischen Hochschule                       | (72) GALLI, Alessandro Mario                 | B22F 10/22                                                 |
| KHS GmbH                                     | FEDELE, Mauro                                | B22F 10/68                                                 |
| (72) VOGELSANG, Andreas                      | MERLINI, Mattia                              | B22F 12/53                                                 |
| KYTZIA, Sebastian                            | (31) 202000021730                            | B33Y 40/20                                                 |
| JARITZ, Montgomery                           | (32) 15.09.2020                              | B22F 12/17                                                 |
| DAHLMANN, Rainer                             | (33) Italy                                   | B22F 10/30                                                 |
| KONRAD, Joachim                              | (51) B21D 22/20                              | B22F 10/38                                                 |
| (31) 102019127845                            | (11) EP3260214                               | B22F 12/57                                                 |
| (32) 15.10.2019                              | (21) EP16752596.3                            | B22F 12/90                                                 |
| (33) Germany                                 | (47) 18.12.2024                              | B05B 15/50                                                 |
| (51) B08B 9/36                               | (87) JP2016054936                            | B08B 1/00                                                  |
| (11) EP3771501                               | 25.08.2016                                   | (11) EP3852956                                             |
| (21) EP20188419.4                            | (22) 19.02.2016                              | (21) EP19863811.6                                          |
| (47) 18.12.2024                              | (54) METHOD OF PRESS FORMING METAL           | (47) 18.12.2024                                            |
| (22) 29.07.2020                              | SHEET                                        | (87) US2019052297                                          |
| (54) AN APPARATUS AND A METHOD FOR           | (73) Nippon Steel Corporation                | 26.03.2020                                                 |
| WASHING CONTAINERS FOR FLUIDS                | (72) YOSHIDA, Tohru                          | (22) 20.09.2019                                            |
| (73) W.B.L. Systems S.r.l.                   | SAITO, Masahiro                              | (54) TECHNIQUES TO IMPROVE MHD                             |
| (72) TAVELLA, Giovanni                       | (31) 2015031029                              | JETTING PERFORMANCE                                        |
| (31) 201900013725                            | (32) 19.02.2015                              | (73) Desktop Metal, Inc.                                   |
| (32) 01.08.2019                              | (33) Japan                                   | (72) SACHS, Emanuel Michael                                |
| (33) Italy                                   | (51) B21D 26/047                             | BELL, Julian                                               |
| (51) B08B 13/00                              | B21D 37/16                                   | GIBSON, Mark Gardner                                       |
| D21H 19/74                                   | B21D 43/00                                   | (31) 201962830744 P                                        |
| (11) EP3516111                               | B21D 43/26                                   | 201962823757 P                                             |
| (21) EP17851761.1                            | B21D 26/039                                  | 201962823748 P                                             |
| (47) 18.12.2024                              | B21D 26/041                                  | 201962823171 P                                             |
| (87) US2017052195                            | B21D 26/043                                  | 201862734015 P                                             |
| 22.03.2018                                   | (11) EP3603837                               | 201862734025 P                                             |
| (22) 19.09.2017                              | (21) EP18774337.2                            | 201862733980 P                                             |
| (54) ABSORBENT PAPER PRODUCTS                | (47) 18.12.2024                              | (32) 08.04.2019                                            |
| HAVING UNIQUE PHYSICAL                       | (87) JP2018012966                            | 26.03.2019                                                 |
| STRENGTH PROPERTIES                          | 04.10.2018                                   | 26.03.2019                                                 |
| (73) Mercer International inc.               | (22) 28.03.2018                              | 25.03.2019                                                 |
| (72) ZIEGENBEIN, Tobias                      | (54) MOLDING DEVICE                          | 20.09.2018                                                 |
| (31) 201662396812 P                          | (73) Sumitomo Heavy Industries, Ltd.         | 20.09.2018                                                 |
| (32) 19.09.2016                              | (72) KAN, Hiroyuki                           | 20.09.2018                                                 |
| (33) United States of America                | SAIKA, Masayuki                              | (33) United States of America                              |
| (51) B09C 1/00                               | NOGIWA, Kimihiro                             | United States of America                                   |
| B09C 1/02                                    | UENO, Norieda                                | United States of America                                   |
| B09C 1/06                                    | ISHIZUKA, Masayuki                           | United States of America                                   |
| B09C 1/08                                    | IDE, Akihiro                                 | United States of America                                   |
| B09C 1/10                                    | (31) 2017067968                              | United States of America                                   |
| (11) EP3878568                               | (32) 30.03.2017                              | United States of America                                   |
| (21) EP20162758.5                            | (33) Japan                                   | United States of America                                   |
| (47) 18.12.2024                              | (51) B22C 9/10                               | (51) B22F 3/105                                            |
| (22) 12.03.2020                              | B22C 9/24                                    | B29C 67/00                                                 |
| (54) A DECONTAMINATION                       | B23B 1/00                                    | E04B 1/02                                                  |
| SET, A DECONTAMINATION                       | B22C 9/02                                    | B33Y 70/00                                                 |
| ARRANGEMENT AND A METHOD FOR                 | B23P 15/00                                   | B29C 64/106                                                |
| DECONTAMINATING SOIL                         | F16C 3/02                                    | B29C 64/314                                                |
| (73) Globe Water AB                          | (11) EP3895826                               | B29C 64/124                                                |
| (72) SCHWALBE, Pontus                        | (21) EP19895146.9                            | B29C 64/153                                                |
| (51) B21C 29/00                              | (47) 18.12.2024                              | B22F 7/08                                                  |
| C21D 1/667                                   | (87) JP2019022863                            | B29L 31/00                                                 |
| (11) EP4214007                               | 18.06.2020                                   | B33Y 80/00                                                 |
| (21) EP21786569.0                            | (22) 10.06.2019                              | B22F 10/20                                                 |

|                                                                                    |                                                             |                                                                              |
|------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------|
| B33Y 10/00                                                                         | (54) THREE-DIMENSIONAL PRINTING DEVICE                      | (73) Schunk GmbH & Co. KG Spann- und Greiftechnik                            |
| (11) EP3455016                                                                     | (73) Roland DG Corporation                                  | (72) Schöttle, Daniel                                                        |
| (21) EP17729920.3                                                                  | (72) Iwase, Fumiyoshi                                       | (31) 102019112629                                                            |
| (47) 18.12.2024                                                                    | (51) B22F 10/22                                             | (32) 14.05.2019                                                              |
| (87) IB2017052698                                                                  | B22F 10/364                                                 | (33) Germany                                                                 |
| 16.11.2017                                                                         | B22F 12/10                                                  | (51) B23B 35/00                                                              |
| (22) 09.05.2017                                                                    | B22F 12/50                                                  | B23C 3/00                                                                    |
| (54) PROCESS FOR THE REALIZATION OF A WINDOW/DOOR FRAMEWORK FOR WALLS OF BUILDINGS | B22F 12/53                                                  | B26F 1/16                                                                    |
| (73) Graf Synergy S.r.l.                                                           | B29C 64/112                                                 | B23P 15/28                                                                   |
| (72) VACCARI, Andrea                                                               | B33Y 30/00                                                  | (11) EP3539697                                                               |
| (31) UA20163274                                                                    | B33Y 40/00                                                  | (21) EP17869893.2                                                            |
| (32) 09.05.2016                                                                    | B33Y 40/20                                                  | (47) 18.12.2024                                                              |
| (33) Italy                                                                         | B41J 2/04                                                   | (87) JP2017039226                                                            |
| (51) B22F 7/06                                                                     | (11) EP4011527                                              | 17.05.2018                                                                   |
| C22C 33/02                                                                         | (21) EP21210618.1                                           | (22) 31.10.2017                                                              |
| C22C 38/40                                                                         | (47) 18.12.2024                                             | (54) MATERIAL FOR BUILT-UP EDGE FORMATION AND BUILT-UP EDGE FORMATION METHOD |
| B21D 22/02                                                                         | (22) 25.11.2021                                             | (73) Mitsubishi Gas Chemical Company, Inc.                                   |
| B21D 22/20                                                                         | (54) ADDITIVE MANUFACTURING SYSTEMS AND METHOD FOR THE SAME | (72) MATSUYAMA, Yousuke                                                      |
| B21D 37/16                                                                         | (73) Additive Technologies, LLC dba ADDITEC                 | HORIE, Shigeru                                                               |
| C21D 1/18                                                                          | (72) MAEDA, Patrick Y                                       | (31) 2016221942                                                              |
| C21D 1/667                                                                         | LEE, Joanne L                                               | (32) 14.11.2016                                                              |
| C21D 1/673                                                                         | (31) 202017114607                                           | (33) Japan                                                                   |
| C21D 6/00                                                                          | (32) 08.12.2020                                             | (51) B23C 3/06                                                               |
| C21D 8/02                                                                          | (33) United States of America                               | B23C 5/26                                                                    |
| C21D 8/10                                                                          | (51) B23B 3/28                                              | (11) EP3493935                                                               |
| C21D 9/08                                                                          | B32B 5/18                                                   | (21) EP17745334.7                                                            |
| C21D 9/46                                                                          | B32B 7/12                                                   | (47) 18.12.2024                                                              |
| C22C 9/00                                                                          | B32B 23/04                                                  | (87) EP2017069143                                                            |
| C22C 14/00                                                                         | B32B 23/08                                                  | 08.02.2018                                                                   |
| C22C 19/03                                                                         | B32B 25/04                                                  | (22) 28.07.2017                                                              |
| C22C 19/07                                                                         | B32B 27/06                                                  | (54) INTERNAL MILLING MACHINE                                                |
| C22C 21/00                                                                         | B32B 27/32                                                  | (73) MAG IAS GmbH                                                            |
| C22C 23/00                                                                         | B32B 27/30                                                  | (72) FLEISCHER, Achim                                                        |
| (11) EP4227023                                                                     | B03C 3/28                                                   | PUSCHINA, Günther                                                            |
| (21) EP23167350.0                                                                  | B32B 25/08                                                  | SCHWEIZER, Andreas                                                           |
| (47) 18.12.2024                                                                    | B32B 27/08                                                  | ANDERS, Helmut                                                               |
| (22) 24.09.2019                                                                    | B32B 27/18                                                  | POMPE, Walter                                                                |
| (54) METHOD OF COOLING A SHEET FORMED IN A HOT STAMPING DIE OR MOULD               | B32B 27/20                                                  | RUMMEL, Ralf                                                                 |
| (73) Valls Besitz GmbH                                                             | H01G 7/02                                                   | OST, Daniel                                                                  |
| (72) VALLS ANGLÉS, Isaac                                                           | B01D 39/16                                                  | FRINKE, Manuel                                                               |
| (31) 201930509                                                                     | (11) EP3593883                                              | (31) 102016114252                                                            |
| 201930311                                                                          | (21) EP18763935.6                                           | (32) 02.08.2016                                                              |
| 201830920                                                                          | (47) 18.12.2024                                             | (33) Germany                                                                 |
| 19382437                                                                           | (87) JP2018008877                                           | (51) B23D 61/02                                                              |
| 19382153                                                                           | 13.09.2018                                                  | B23D 61/18                                                                   |
| (32) 05.06.2019                                                                    | (22) 07.03.2018                                             | (11) EP3993938                                                               |
| 05.04.2019                                                                         | (54) ELECTRET-TREATED SHEET AND FILTER                      | (21) EP20733424.4                                                            |
| 24.09.2018                                                                         | (73) Yupo Corporation                                       | (47) 18.12.2024                                                              |
| 30.05.2019                                                                         | (72) SUGAMATA, Yutaro                                       | (87) EP2020066756                                                            |
| 01.03.2019                                                                         | KOIKE, Hiroshi                                              | 07.01.2021                                                                   |
| (33) Spain                                                                         | IIDA, Seiichiro                                             | (22) 17.06.2020                                                              |
| Spain                                                                              | (31) 2017046213                                             | (54) MACHINING TOOL HAVING ASYMMETRICAL TEETH HAVING CUTTING PARTICLES       |
| Spain                                                                              | (32) 10.03.2017                                             | (73) WIKUS-Sägenfabrik Wilhelm H. Kullmann GmbH & Co. KG                     |
| European Patent Office (EPO)                                                       | (33) Japan                                                  | (72) KULLMANN, Jörg H.                                                       |
| European Patent Office (EPO)                                                       | (51) B23B 31/02                                             | (31) 102019117799                                                            |
| (51) B22F 10/14                                                                    | B23B 31/117                                                 | (32) 02.07.2019                                                              |
| B22F 12/53                                                                         | (11) EP3738699                                              | (33) Germany                                                                 |
| B22F 12/55                                                                         | (21) EP20174774.8                                           | (51) B23K 9/04                                                               |
| B33Y 30/00                                                                         | (47) 18.12.2024                                             | B23K 9/095                                                                   |
| B33Y 50/02                                                                         | (22) 14.05.2020                                             | B23K 9/10                                                                    |
| (11) EP4163032                                                                     | (54) CLAMPING DEVICE FOR CLAMPING A COMPONENT               | B23K 37/02                                                                   |
| (21) EP21200946.8                                                                  |                                                             | B23K 37/04                                                                   |
| (47) 18.12.2024                                                                    |                                                             |                                                                              |
| (22) 05.10.2021                                                                    |                                                             |                                                                              |

|                                 |                                         |                                    |
|---------------------------------|-----------------------------------------|------------------------------------|
| B23K 9/32                       | (11) EP4313463                          | (54) METHOD AND DEVICE FOR OPTICAL |
| (11) EP4176997                  | (21) EP22717663.3                       | QUALITY CONTROL IN LASER           |
| (21) EP20956757.7               | (47) 18.12.2024                         | DEPOSITION WELDING                 |
| (47) 18.12.2024                 | (87) IB2022052741                       | (73) Zierhut, Jochen               |
| (87) JP2020038244               | 29.09.2022                              | (72) Zierhut, Jochen               |
| 14.04.2022                      | (22) 25.03.2022                         | (31) 102020109648                  |
| (22) 09.10.2020                 | (54) PROCESS FOR WELDING COPPER         | (32) 07.04.2020                    |
| (54) MACHINE TOOL, WORKPIECE    | COMPONENTS                              | (33) Germany                       |
| SUPPORTING TOOL FOR MACHINE     | (73) ATB RIVA CALZONI S.P.A.            | (51) B23K 26/062                   |
| TOOL, METHOD FOR OPERATING      | (72) VIELMI, Mattia                     | B23K 26/38                         |
| MACHINE TOOL, AND PROGRAM       | (31) 202100007253                       | B23K 26/70                         |
| (73) Yamazaki Mazak Corporation | (32) 25.03.2021                         | B23K 101/04                        |
| (72) OUCHI, Seigo               | (33) Italy                              | B23K 101/18                        |
| SUZUKI, Atsushi                 | (51) B23K 26/00                         | (11) EP4228849                     |
| ISHIBASHI, Kazuhiro             | B23K 26/03                              | (21) EP21794141.8                  |
| (51) B23K 9/12                  | B23K 26/08                              | (47) 18.12.2024                    |
| B23K 9/133                      | B23K 26/352                             | (87) EP2021078616                  |
| B23K 9/173                      | B23K 26/362                             | 21.04.2022                         |
| (11) EP3656497                  | B23K 26/40                              | (22) 15.10.2021                    |
| (21) EP19203376.9               | (11) EP4100196                          | (54) METHOD, COMPUTER PROGRAM      |
| (47) 18.12.2024                 | (21) EP21710404.1                       | AND LASER CUTTING SYSTEM FOR       |
| (22) 15.10.2019                 | (47) 18.12.2024                         | SMART CORNER CUTTING               |
| (54) WELDING OR ADDITIVE        | (87) EP2021052435                       | (73) Bystronic Laser AG            |
| MANUFACTURING DUAL WIRE DRIVE   | 12.08.2021                              | (72) HELD, Michael                 |
| SYSTEM                          | (22) 02.02.2021                         | HAAS, Titus                        |
| (73) Lincoln Global, Inc.       | (54) LASER MARKING SYSTEM AND           | INGOLD, Elio                       |
| (72) PETOT, Bradford W.         | METHOD OF MANUFACTURING A               | BORER, Daniel                      |
| PETERS, Steven R.               | LASER MARKING SYSTEM                    | (31) 20202245                      |
| WEEKS, Matthew A.               | (73) ALLTEC ANGEWANDTE LASERLICHT       | (32) 16.10.2020                    |
| MEHLMAN, Alexander C.           | TECHNOLOGIE GMBH                        | (33) European Patent Office (EPO)  |
| (31) 201916527328               | (72) RYAN, Daniel J.                    | (51) B23K 26/21                    |
| 201962815036 P                  | (31) 202062969273 P                     | B23K 26/34                         |
| 201816159805                    | (32) 03.02.2020                         | B33Y 10/00                         |
| (32) 31.07.2019                 | (33) United States of America           | B33Y 30/00                         |
| 07.03.2019                      | (51) B23K 26/00                         | B29C 64/141                        |
| 15.10.2018                      | B23K 26/0622                            | B29C 64/314                        |
| (33) United States of America   | B23K 26/352                             | B29C 64/321                        |
| United States of America        | B23K 26/53                              | B22F 3/105                         |
| United States of America        | B23K 103/00                             | B22F 3/16                          |
| (51) B23K 9/133                 | (11) EP4126436                          | B22F 1/00                          |
| B23K 26/352                     | (21) EP21716073.8                       | B22F 10/20                         |
| B23K 26/362                     | (47) 18.12.2024                         | B22F 10/25                         |
| B65H 51/10                      | (87) EP2021057440                       | B22F 12/55                         |
| (11) EP3795284                  | 07.10.2021                              | B29C 64/153                        |
| (21) EP20196632.2               | (22) 23.03.2021                         | B33Y 40/00                         |
| (47) 18.12.2024                 | (54) METHOD FOR PRODUCING A LIGHT       | (11) EP4129557                     |
| (22) 17.09.2020                 | DEFLECTION STRUCTURE, USE               | (21) EP21774620.5                  |
| (54) SURFACE MODIFICATION OF    | OF A SUBSTRATE WITH A LIGHT             | (47) 18.12.2024                    |
| WELDING WIRE DRIVE ROLLS        | DEFLECTION STRUCTURE OF THIS            | (87) JP2021008546                  |
| (73) Lincoln Global, Inc.       | TYPE, AND LIGHT DEFLECTION UNIT         | 30.09.2021                         |
| (72) PETERS, Steven R.          | COMPRISING A LIGHT DEFLECTION           | (22) 04.03.2021                    |
| ALBRIGHT, Matthew A.            | STRUCTURE OF THIS TYPE                  | (54) MIXED POWDER PRODUCTION       |
| PETOT, Bradford W.              | (73) TRUMPF Laser- und Systemtechnik SE | METHOD, MIXED POWDER               |
| (31) 202016987537               | (72) ZIMMERMANN, Felix                  | PRODUCTION DEVICE, ADDITIVE        |
| 201962902085 P                  | KUMKAR, Malte                           | MANUFACTURING METHOD, AND          |
| (32) 07.08.2020                 | (31) 102020204123                       | ADDITIVE MANUFACTURING DEVICE      |
| 18.09.2019                      | (32) 30.03.2020                         | (73) Proterial, Ltd.               |
| (33) United States of America   | (33) Germany                            | (72) KOSEKI, Shuho                 |
| United States of America        | (51) B23K 26/03                         | SUGAWARA, Hiroki                   |
| (51) B23K 9/16                  | B23K 26/342                             | KAWABATA, Yuji                     |
| B23K 9/23                       | B23K 31/12                              | (31) 2020056742                    |
| B23K 35/00                      | B33Y 10/00                              | (32) 26.03.2020                    |
| B23K 35/30                      | B33Y 30/00                              | (33) Japan                         |
| B23K 9/167                      | (11) EP3900869                          | (51) B23K 35/02                    |
| B23K 35/38                      | (21) EP21165331.6                       | B23K 1/00                          |
| B23K 103/12                     | (47) 18.12.2024                         | B23K 35/28                         |
| B23K 103/22                     | (22) 26.03.2021                         | B23K 35/38                         |
| B23K 9/173                      |                                         | B32B 15/01                         |

|                                    |                                         |                                          |
|------------------------------------|-----------------------------------------|------------------------------------------|
| C22C 21/00                         | (87) IB2021060703                       | (51) B24D 3/28                           |
| C22C 21/02                         | 27.05.2022                              | B24D 11/00                               |
| B23K 103/10                        | (22) 18.11.2021                         | B24D 18/00                               |
| B23K 101/14                        | (54) PALLET CLAMPING AND POSITIONING    | B24D 3/20                                |
| (11) EP4164836                     | SYSTEM                                  | (11) EP3784436                           |
| (21) EP21732580.2                  | (73) SINCO D.O.O.                       | (21) EP19727069.7                        |
| (47) 18.12.2024                    | (72) SINKO, Stanko                      | (47) 18.12.2024                          |
| (87) IB2021055264                  | SINKO, David                            | (87) IB2019053147                        |
| 23.12.2021                         | (31) 202000214                          | 31.10.2019                               |
| (22) 15.06.2021                    | (32) 20.11.2020                         | (22) 16.04.2019                          |
| (54) ALUMINIUM ALLOY MULTI-LAYERED | (33) Slovenia                           | (54) METHOD OF MAKING A COATED           |
| BRAZING SHEET MATERIAL FOR         | (51) B23Q 3/155                         | ABRASIVE ARTICLE                         |
| FLUX-FREE BRAZING                  | B23P 19/00                              | (73) 3M Innovative Properties Company    |
| (73) Novelis Koblenz GmbH          | B23P 19/06                              | (72) ECKEL, Joseph B.                    |
| (72) KIRKHAM, Steven               | B27F 7/17                               | NIENABER, Aaron K.                       |
| JACOBY, Bernd                      | B27F 7/02                               | JESME, Ronald D.                         |
| RITZ, Fabian                       | B27G 11/00                              | (31) 201862661789 P                      |
| SMEYERS, Axel Alexander Maria      | B27F 7/00                               | (32) 24.04.2018                          |
| (31) 20180172                      | B23Q 1/01                               | (33) United States of America            |
| (32) 16.06.2020                    | B27M 3/00                               | (51) B24D 3/28                           |
| (33) European Patent Office (EPO)  | (11) EP3819076                          | B24D 13/08                               |
| (51) B23P 6/00                     | (21) EP20204928.4                       | B24D 18/00                               |
| G05B 19/402                        | (47) 18.12.2024                         | (11) EP4309845                           |
| F01D 5/00                          | (22) 30.10.2020                         | (21) EP23183555.4                        |
| (11) EP3936278                     | (54) MACHINE TOOL WITH CHANGE           | (47) 18.12.2024                          |
| (21) EP21184104.4                  | DEVICE FOR FIXING UNITS                 | (22) 05.07.2023                          |
| (47) 18.12.2024                    | (73) Weinmann Holzbausystemtechnik GmbH | (54) SYNTHETIC GRINDSTONE,               |
| (22) 06.07.2021                    | (72) Ott, Hansbert                      | SYNTHETIC GRINDSTONE ASSEMBLY,           |
| (54) METHOD OF REPAIRING A         | (31) 102019130059                       | AND METHOD OF MANUFACTURING              |
| COMBUSTOR LINER OF A GAS           | (32) 07.11.2019                         | SYNTHETIC GRINDSTONE                     |
| TURBINE ENGINE                     | (33) Germany                            | (73) Tokyo Diamond Tools Mfg.co., Ltd.   |
| (73) PRATT & WHITNEY CANADA CORP.  | (51) B24B 27/06                         | (72) Kyoshima, Kai                       |
| (72) DROUIN LABERGE, Clement       | C09J 7/29                               | Yagi, Takeshi                            |
| RAHMAN, Mizanur                    | H01L 21/301                             | (31) 2022138397                          |
| (31) 202016920868                  | H01L 21/00                              | 2022115035                               |
| (32) 06.07.2020                    | (11) EP3950226                          | (32) 31.08.2022                          |
| (33) United States of America      | (21) EP20781959.0                       | 19.07.2022                               |
| (51) B23P 15/00                    | (47) 18.12.2024                         | (33) Japan                               |
| B23P 15/04                         | (87) JP2020011930                       | Japan                                    |
| B23P 15/02                         | 08.10.2020                              | (51) B25B 21/02                          |
| B22F 10/66                         | (22) 18.03.2020                         | B25F 5/02                                |
| B22F 5/00                          | (54) METHOD FOR PRODUCING               | (11) EP3908428                           |
| B22F 10/60                         | ELECTRONIC DEVICE                       | (21) EP20738975.0                        |
| B33Y 40/20                         | (73) Mitsui Chemicals ICT Materia, Inc. | (47) 18.12.2024                          |
| B23B 31/00                         | (72) HAYASHISHITA Eiji                  | (87) US2020012836                        |
| B24B 31/06                         | (31) 2019067115                         | 16.07.2020                               |
| B24B 23/02                         | (32) 29.03.2019                         | (22) 09.01.2020                          |
| B24B 49/00                         | (33) Japan                              | (54) ROTARY IMPACT TOOL                  |
| (11) EP4313480                     | (51) B24B 55/02                         | (73) Milwaukee Electric Tool Corporation |
| (21) EP22717217.8                  | (11) EP4166276                          | (72) SANDE, Michael, R.                  |
| (47) 18.12.2024                    | (21) EP22188015.6                       | NICK, Mackenzie, J.                      |
| (87) FR2022050509                  | (47) 18.12.2024                         | SCHNEIDER, Jacob, P.                     |
| 29.09.2022                         | (22) 01.08.2022                         | DUNCAN, Ian, A.                          |
| (22) 21.03.2022                    | (54) COOLANT NOZZLE SUPPORT FOR         | (31) 201962816263 P                      |
| (54) METHOD FOR MANUFACTURING A    | A GRINDING MACHINE, GRINDING            | 201962790350 P                           |
| METAL ALLOY PART FOR A TURBINE     | MACHINE COMPRISING SUCH A               | (32) 11.03.2019                          |
| ENGINE                             | COOLING LUBRICANT NOZZLE                | 09.01.2019                               |
| (73) SAFRAN AIRCRAFT ENGINES       | SUPPORT AND METHOD FOR                  | (33) United States of America            |
| (72) VOIRON, Mickaël               | OPERATING A COOLANT LUBRICANT           | United States of America                 |
| TUREL, Arnaud                      | NOZZLE SUPPORT                          | (51) B25B 27/30                          |
| (31) 2103084                       | (73) Adelbert Haas GmbH                 | B25B 27/00                               |
| (32) 26.03.2021                    | (72) Klotzin, Werner Hartmut            | B62D 65/12                               |
| (33) France                        | Stange, David                           | (11) EP4282593                           |
| (51) B23Q 1/00                     | Kern, Tim                               | (21) EP23161134.4                        |
| B23Q 3/18                          | Bader, Thomas                           | (47) 18.12.2024                          |
| (11) EP4247587                     | (31) 102021126504                       | (22) 10.03.2023                          |
| (21) EP21835823.2                  | (32) 13.10.2021                         | (54) TOOL FOR LIFTING A SHOCK            |
| (47) 18.12.2024                    | (33) Germany                            | ABSORBER STRUT                           |

|                                                     |                                                                                |                                                                                                                               |
|-----------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| (73) Hubitools                                      | (72) TANAKA, Yasushi                                                           | BROSSETTE, Stanislas                                                                                                          |
| (72) DUDOT, Yannick                                 | KANAZAWA, Masao                                                                | MOLLÉRO, Roch                                                                                                                 |
| (31) 2205091                                        | (31) 2020021628                                                                | RISBOURG, Fanny                                                                                                               |
| (32) 27.05.2022                                     | (32) 12.02.2020                                                                | BUONDONNO, Gabriele                                                                                                           |
| (33) France                                         | (33) Japan                                                                     | (31) 2013340                                                                                                                  |
| (51) B25C 1/04                                      | (51) B25J 5/00                                                                 | (32) 16.12.2020                                                                                                               |
| (11) EP3756829                                      | B62D 55/065                                                                    | (33) France                                                                                                                   |
| (21) EP19754749.0                                   | B62D 55/116                                                                    | (51) B25J 9/00                                                                                                                |
| (47) 18.12.2024                                     | B25J 11/00                                                                     | B64F 5/00                                                                                                                     |
| (87) JP2019002479                                   | (11) EP3808510                                                                 | B64F 5/10                                                                                                                     |
| 22.08.2019                                          | (21) EP19382905.8                                                              | (11) EP2221151                                                                                                                |
| (22) 25.01.2019                                     | (47) 18.12.2024                                                                | (21) EP10250320.8                                                                                                             |
| (54) DRIVING DEVICE                                 | (22) 16.10.2019                                                                | (47) 18.12.2024                                                                                                               |
| (73) Koki Holdings Co., Ltd.                        | (54) TELE-COMMANDED ROBOT                                                      | (22) 24.02.2010                                                                                                               |
| (72) OOTSUKA Kazuhiro                               | (73) Escribano Mechanical and Engineering, S.L.                                | (54) Autonomous robotic assembly system comprising a plurality of mobile robotic machines and a wireless communication system |
| (31) 2018027010                                     | (72) DE SOLIS MONTES, Rafael                                                   | (73) The Boeing Company                                                                                                       |
| (32) 19.02.2018                                     | (51) B25J 7/00                                                                 | (72) Branko, Sarh                                                                                                             |
| (33) Japan                                          | B25J 9/00                                                                      | Amirehteshami, David H.                                                                                                       |
| (51) B25C 1/04                                      | (11) EP4058254                                                                 | (31) 391780                                                                                                                   |
| B25C 1/06                                           | (21) EP20803175.7                                                              | (32) 24.02.2009                                                                                                               |
| (11) EP3939747                                      | (47) 18.12.2024                                                                | (33) United States of America                                                                                                 |
| (21) EP20748737.2                                   | (87) EP2020081837                                                              | (51) B25J 9/16                                                                                                                |
| (47) 18.12.2024                                     | 20.05.2021                                                                     | (11) EP3624999                                                                                                                |
| (87) CN2020071177                                   | (22) 12.11.2020                                                                | (21) EP18779999.4                                                                                                             |
| 06.08.2020                                          | (54) DEVICE FOR A MICROACTUATOR, AND MICROACTUATOR EQUIPPED WITH SUCH A DEVICE | (47) 18.12.2024                                                                                                               |
| (22) 09.01.2020                                     | (73) Percipio Robotics                                                         | (87) US2018051175                                                                                                             |
| (54) NAIL GUN                                       | (72) HERIBAN, David                                                            | 21.03.2019                                                                                                                    |
| (73) Zhang, Huading                                 | (31) 1912663                                                                   | (22) 14.09.2018                                                                                                               |
| (72) Zhang, Huading                                 | (32) 13.11.2019                                                                | (54) MACHINE LEARNING METHODS AND APPARATUS FOR ROBOTIC MANIPULATION AND THAT UTILIZE MULTI-TASK DOMAIN ADAPTATION            |
| (31) 201910099968                                   | (33) France                                                                    | (73) GOOGLE LLC                                                                                                               |
| (32) 31.01.2019                                     | (51) B25J 9/00                                                                 | (72) FANG, Kuan                                                                                                               |
| (33) China                                          | A61H 1/02                                                                      | BAI, Yunfei                                                                                                                   |
| (51) B25F 5/02                                      | A61H 3/00                                                                      | HINTERSTOISSER, Stefan                                                                                                        |
| (11) EP4123784                                      | (11) EP3810376                                                                 | KALAKRISHNAN, Mrinal                                                                                                          |
| (21) EP22185794.9                                   | (21) EP20739936.1                                                              | (31) 201815913212                                                                                                             |
| (47) 18.12.2024                                     | (47) 18.12.2024                                                                | 201762559279 P                                                                                                                |
| (22) 18.12.2017                                     | (87) EP2020069379                                                              | (32) 06.03.2018                                                                                                               |
| (54) BATTERY PACK INTERFACE                         | 14.01.2021                                                                     | 15.09.2017                                                                                                                    |
| (73) Milwaukee Electric Tool Corporation            | (22) 09.07.2020                                                                | (33) United States of America                                                                                                 |
| (72) MARX, John, G.                                 | (54) MOVEMENT-DEPENDENT STABILISATION SUPPORT SYSTEM                           | United States of America                                                                                                      |
| CARLSON, Mitchell                                   | (73) Kusmartsev, Feodor                                                        | (51) B25J 9/16                                                                                                                |
| RADOVICH, Kyle, J.                                  | Kuhn, Elvira                                                                   | (11) EP3743250                                                                                                                |
| ROSETTO, Paul                                       | (72) KUHN, Elvira                                                              | (21) EP18782270.5                                                                                                             |
| SCHULZ, Cameron, R.                                 | KUSMARTSEV, Feodor                                                             | (47) 18.12.2024                                                                                                               |
| SCHWALBACH, David, M.                               | KÖPF, Florian                                                                  | (87) US2018050862                                                                                                             |
| (31) 201762463427 P                                 | FLAD, Michael                                                                  | 06.09.2019                                                                                                                    |
| 201662435443 P                                      | HOHMANN, Sören                                                                 | (22) 13.09.2018                                                                                                               |
| (32) 24.02.2017                                     | (31) 102019210232                                                              | (54) REINFORCEMENT LEARNING FOR CONTACT-RICH TASKS IN AUTOMATION SYSTEMS                                                      |
| 16.12.2016                                          | (32) 10.07.2019                                                                | (73) The Regents of the University of California                                                                              |
| (33) United States of America                       | (33) Germany                                                                   | Siemens Aktiengesellschaft                                                                                                    |
| (51) B25J 3/00                                      | (51) B25J 9/00                                                                 | (72) WEN, Chengtao                                                                                                            |
| A61B 34/30                                          | B25J 9/16                                                                      | LUO, Jianlan                                                                                                                  |
| B25J 9/16                                           | A61H 1/02                                                                      | APARICIO OJEA, Juan L.                                                                                                        |
| B25J 13/02                                          | A61H 3/00                                                                      | SOLOWJOW, Eugen                                                                                                               |
| A61B 34/00                                          | (11) EP4263146                                                                 | (31) 201862635771 P                                                                                                           |
| A61B 34/37                                          | (21) EP21851677.1                                                              | 201862635757 P                                                                                                                |
| A61B 90/00                                          | (47) 18.12.2024                                                                | (32) 27.02.2018                                                                                                               |
| A61B 18/14                                          | (87) FR2021052335                                                              | 27.02.2018                                                                                                                    |
| (11) EP4098405                                      | 23.06.2022                                                                     | (33) United States of America                                                                                                 |
| (21) EP21752911.4                                   | (22) 15.12.2021                                                                |                                                                                                                               |
| (47) 18.12.2024                                     | (54) METHOD FOR MOVING AN EXOSKELETON                                          |                                                                                                                               |
| (87) JP2021001322                                   | (73) Wandercraft                                                               |                                                                                                                               |
| 19.08.2021                                          | (72) BOÉRIS, Guilhem                                                           |                                                                                                                               |
| (22) 15.01.2021                                     |                                                                                |                                                                                                                               |
| (54) SURGICAL ROBOT AND SURGICAL ROBOT CONTROL UNIT |                                                                                |                                                                                                                               |
| (73) RIVERFIELD Inc.                                |                                                                                |                                                                                                                               |

|                                      |                                   |                                            |
|--------------------------------------|-----------------------------------|--------------------------------------------|
| United States of America             | (33) Austria                      | SYSTEM FOR A CUTTING AND SPLITTING MACHINE |
| (51) B25J 13/08                      | (51) B26B 21/52                   | (73) Uniforest, D.o.o.                     |
| B25J 5/00                            | B26B 21/22                        | (72) Horvat, Robert                        |
| B62D 57/032                          | (11) EP3878615                    | Pintar, Drago                              |
| B25J 9/16                            | (21) EP19941556.3                 | Polak, Marko                               |
| (11) EP3785867                       | (47) 18.12.2024                   | (31) 202000108                             |
| (21) EP19815726.5                    | (87) CN2019099937                 | (32) 17.06.2020                            |
| (47) 18.12.2024                      | 18.02.2021                        | (33) Slovenia                              |
| (87) JP2019010454                    | (22) 09.08.2019                   | (51) B26D 7/06                             |
| 12.12.2019                           | (54) INTERCONNECTING MEMBER AND   | B25B 11/00                                 |
| (22) 14.03.2019                      | HANDLE FOR SHAVER                 | B26D 7/01                                  |
| (54) INFORMATION PROCESSING          | (73) Wenzhou Mers R&D Ltd.        | B23Q 3/08                                  |
| DEVICE, INFORMATION PROCESSING       | (72) REN, Xiangrong               | (11) EP4237196                             |
| METHOD, AND PROGRAM                  | REN, Chi                          | (21) EP22723091.9                          |
| (73) Sony Group Corporation          | (51) B26B 25/00                   | (47) 18.12.2024                            |
| (72) KINOSHITA, Masaya               | B26D 7/26                         | (87) EP2022060079                          |
| HONGO, Kazuo                         | (11) EP4082733                    | 27.10.2022                                 |
| SAIJO, Hiroki                        | (21) EP22170716.9                 | (22) 14.04.2022                            |
| (31) 2018107773                      | (47) 18.12.2024                   | (54) DEVICE FOR THE KNIFE CUTTING OR       |
| (32) 05.06.2018                      | (22) 29.04.2022                   | SAWING OF WORKPIECES                       |
| (33) Japan                           | (54) BLADE RECEIVER ASSEMBLY AND  | (73) ALBRECHT BÄUMER GmbH & Co. KG         |
| (51) B25J 21/00                      | CUTTING DEVICE                    | (72) MOISEL, Christoph                     |
| B65G 1/04                            | (73) Fiskars Finland Oy Ab        | HORSTHEMKE, Jan                            |
| B23P 21/00                           | (72) Dechant, Stephen P.          | (31) 102021109780                          |
| (11) EP3878611                       | Lipscomb, Daniel                  | (32) 19.04.2021                            |
| (21) EP20162144.8                    | Huesman, Alexander                | (33) Germany                               |
| (47) 18.12.2024                      | (31) 202117245244                 | (51) B26D 7/32                             |
| (22) 10.03.2020                      | (32) 30.04.2021                   | (11) EP3868528                             |
| (54) PARTIALLY AUTOMATED             | (33) United States of America     | (21) EP21167542.6                          |
| MANUFACTURING CELL                   | (51) B26D 1/36                    | (47) 18.12.2024                            |
| (73) Hochschule für angewandte       | B26D 1/00                         | (22) 24.02.2018                            |
| Wissenschaften Landshut              | B26D 3/24                         | (54) CUTTING MACHINE FOR STRAND-           |
| (72) SCHNEIDER, Markus               | B26D 7/06                         | SHAPED FOOD PRODUCTS                       |
| RITTBERGER, Sven                     | B26D 7/26                         | (73) Siller Holding GmbH                   |
| BÜTTNER, Konstantin                  | (11) EP3638468                    | (72) Siller, Rudi                          |
| ETTENGRUBER, Tobias                  | (21) EP18816863.7                 | (31) 102017002052                          |
| (51) B26B 5/00                       | (47) 18.12.2024                   | (32) 06.03.2017                            |
| B25G 3/22                            | (87) US2018037499                 | (33) Germany                               |
| A61B 17/3213                         | 20.12.2018                        | (51) B27K 3/15                             |
| (11) EP4026671                       | (22) 14.06.2018                   | A45D 40/20                                 |
| (21) EP21201310.6                    | (54) SIZE-REDUCTION MACHINE AND   | B43K 19/00                                 |
| (47) 18.12.2024                      | SIZE-REDUCTION UNIT THEREFOR      | C08L 5/00                                  |
| (22) 06.10.2021                      | (73) Urschel Laboratories, Inc.   | (11) EP3810381                             |
| (54) UTILITY KNIFE                   | (72) BANOWETZ, Daniel Lawrence    | (21) EP19733705.8                          |
| (73) Techtronic Cordless GP          | KING, Daniel Wade                 | (47) 18.12.2024                            |
| (72) FAUSS, Trevor                   | (31) 201762519227 P               | (87) EP2019066183                          |
| CRAIG, Cam                           | (32) 14.06.2017                   | 26.12.2019                                 |
| CHAN, Rony                           | (33) United States of America     | (22) 19.06.2019                            |
| WILLS, Patrick L                     | (51) B26D 1/40                    | (54) WOOD-ENCASED PENCIL                   |
| DAVIDIAN, Richard M.                 | (11) EP4215321                    | (73) Schwan-STABILO Cosmetics GmbH &       |
| FEDRIGON, Jeremy                     | (21) EP22153098.3                 | Co. KG                                     |
| NELSON, Samuel                       | (47) 18.12.2024                   | (72) HEIDENREITER, Thomas                  |
| (31) 202063088144 P                  | (22) 25.01.2022                   | KAHLE, Ingolf                              |
| (32) 06.10.2020                      | (54) APPARATUS AND METHOD FOR     | SPROGAR, Christian                         |
| (33) United States of America        | CUTTING A SUBSTRATE               | (31) 202018103461 U                        |
| (51) B26B 13/16                      | (73) The Procter & Gamble Company | (32) 19.06.2018                            |
| (11) EP4117871                       | (72) BUSCH, James William         | (33) Germany                               |
| (21) EP21705865.0                    | BITTNER, Dale Francis             | (51) B27N 1/00                             |
| (47) 18.12.2024                      | (51) B26D 5/00                    | B27N 3/14                                  |
| (87) AT2021060043                    | B27L 7/00                         | B27N 3/18                                  |
| 16.09.2021                           | G01F 17/00                        | B27N 5/00                                  |
| (22) 05.02.2021                      | (11) EP3925740                    | B27N 5/02                                  |
| (54) CUTTING TOOL, IN PARTICULAR FOR | (21) EP21178458.2                 | B29C 53/56                                 |
| CUTTING FLAT FOODSTUFFS              | (47) 18.12.2024                   | B29C 64/147                                |
| (73) Vrdoljak, Ivica                 | (22) 09.06.2021                   | B29C 70/38                                 |
| (72) Vrdoljak, Ivica                 | (54) METHOD FOR MEASURING THE     | (11) EP3650184                             |
| (31) 502152020                       | AMOUNT OF LOGS AND MEASURING      | (21) EP19208029.9                          |
| (32) 13.03.2020                      |                                   |                                            |



- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(47) 18.12.2024<br/> (22) 08.11.2019<br/> (54) METHOD FOR PRODUCING COMPONENTS MADE FROM SOLID WOOD, ENDLESS STRAND MADE FROM SOLID WOOD FOR THIS METHOD AND SOLID WOOD COMPONENT PRODUCED WITH SAME<br/> (73) Universität Kassel<br/> (72) Heise, Jannis<br/> Dawod, Mohamed<br/> Eversmann, Philipp<br/> Klussmann, Heike<br/> Kohl, Daniel<br/> Böhm, Stefan<br/> Akbar, Zuardin<br/> Deetman, Aart Harmen<br/> Silbermann, Stefanie<br/> (31) 102018127956<br/> (32) 08.11.2018<br/> (33) Germany<br/> <hr/> (51) B28B 5/02<br/> B28B 3/04<br/> (11) EP3909734<br/> (21) EP21173381.1<br/> (47) 18.12.2024<br/> (22) 11.05.2021<br/> (54) EQUIPMENT FOR THE MANUFACTURE OF SLABS OF CERAMIC MATERIAL<br/> (73) Siti - B&amp;T Group S.p.A.<br/> (72) TAROZZI, Fabio<br/> (31) 202000010708<br/> (32) 12.05.2020<br/> (33) Italy<br/> <hr/> (51) B28B 7/00<br/> B28B 7/36<br/> B28B 23/00<br/> B28B 23/02<br/> B32B 1/00<br/> B32B 9/00<br/> B32B 9/04<br/> B32B 13/04<br/> B32B 13/12<br/> B32B 27/40<br/> (11) EP3993977<br/> (21) EP20743176.8<br/> (47) 18.12.2024<br/> (87) FI2020050450<br/> 07.01.2021<br/> (22) 24.06.2020<br/> (54) METHOD FOR PRODUCING CONSTRUCTION ELEMENT<br/> (73) Stonelement Oy<br/> (72) VUOHELAINEN, Teppo<br/> (31) 20195594<br/> (32) 01.07.2019<br/> (33) Finland<br/> <hr/> (51) B29B 11/16<br/> B29K 105/06<br/> B29K 105/08<br/> B29C 70/06<br/> B29C 70/68<br/> C08J 7/00<br/> (11) EP3950249<br/> (21) EP20778231.9<br/> (47) 18.12.2024</p> | <p>(87) JP2020013259<br/> 01.10.2020<br/> (22) 25.03.2020<br/> (54) MOLDED ARTICLE OF CARBON-FIBER-REINFORCED COMPOSITE MATERIAL AND PRODUCTION METHOD FOR MOLDED ARTICLE OF CARBON-FIBER-REINFORCED COMPOSITE MATERIAL<br/> (73) Toray Industries, Inc.<br/> (72) MITSUOKA, Hideto<br/> OZEKI, Yuji<br/> (31) 2019063617<br/> (32) 28.03.2019<br/> (33) Japan<br/> <hr/> (51) B29C 43/20<br/> B29C 43/18<br/> B29C 43/00<br/> B60R 13/02<br/> B29C 65/00<br/> B27N 5/00<br/> B29C 70/08<br/> B29C 70/46<br/> B32B 3/26<br/> B32B 3/28<br/> B32B 5/26<br/> B32B 7/04<br/> B32B 7/08<br/> B29K 301/12<br/> B29K 311/00<br/> B29C 43/40<br/> B29K 105/08<br/> B60R 13/08<br/> B29K 223/00<br/> B29L 31/30<br/> B27N 3/04<br/> B29C 70/10<br/> B60R 13/01<br/> (11) EP4019222<br/> (21) EP21215440.5<br/> (47) 18.12.2024<br/> (22) 17.12.2021<br/> (54) COMPOSITE PANEL STRUCTURE FOR MOTOR VEHICLES AND THE LIKE MADE OF NATURAL FIBRES AND THERMOPLASTIC SYNTHETIC FIBRES<br/> (73) STR Automotive S.R.L.<br/> (72) Corraducci, Roberto<br/> (31) 202000032078<br/> (32) 23.12.2020<br/> (33) Italy<br/> <hr/> (51) B29C 44/12<br/> F16L 59/14<br/> (11) EP4275858<br/> (21) EP22172491.7<br/> (47) 18.12.2024<br/> (22) 10.05.2022<br/> (54) METHOD OF MANUFACTURING A PRE-INSULATED PIPE<br/> (73) Georg Fischer Rohrleitungssysteme AG<br/> (72) Breyer, Markus<br/> <hr/> (51) B29C 45/14<br/> B29L 31/36<br/> (11) EP3870420<br/> (21) EP20797669.7<br/> (47) 18.12.2024<br/> (87) DE2020200081<br/> 08.04.2021</p> | <p>(22) 30.09.2020<br/> (54) METHOD FOR PRODUCING A MEDIA-TIGHT MATERIAL COMPOSITE, METAL SLEEVE AND SENSOR HAVING A METAL SLEEVE OF THIS TYPE<br/> (73) Franz Binder GmbH + Co. Elektrische Bauelemente KG<br/> (72) FINKE, Hans Michael<br/> NEUNER, Andreas Armin<br/> (31) 102019215065<br/> (32) 30.09.2019<br/> (33) Germany<br/> <hr/> (51) B29C 45/40<br/> B22D 17/22<br/> (11) EP3722068<br/> (21) EP20169351.2<br/> (47) 18.12.2024<br/> (22) 14.04.2020<br/> (54) EJECTION PIN WITH ANTI-ROTATION FEATURE<br/> (73) KNARR Vertriebs GmbH<br/> (72) KNARR, Rainer<br/> (31) 202019102059 U<br/> (32) 10.04.2019<br/> (33) Germany<br/> <hr/> (51) B29C 45/76<br/> G05B 19/418<br/> (11) EP4108411<br/> (21) EP22179113.0<br/> (47) 18.12.2024<br/> (22) 15.06.2022<br/> (54) METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR MONITORING A FORMING PROCESS<br/> (73) ENGEL AUSTRIA GmbH<br/> (72) KOPPAUER, Herwig<br/> BRAUN, Patrick<br/> (31) 505052021<br/> (32) 21.06.2021<br/> (33) Austria<br/> <hr/> (51) B29C 48/25<br/> B29C 48/00<br/> B29C 48/265<br/> B29C 48/30<br/> (11) EP4338928<br/> (21) EP23192982.9<br/> (47) 18.12.2024<br/> (22) 23.08.2023<br/> (54) EXTRUDER HEAD ASSEMBLY WITH QUICK RELEASE DEVICE OF THE EXTRUSION LINE<br/> (73) S.T. Soffiaggio Tecnica Srl<br/> (72) ROTOLO, VLADIMIRO<br/> (31) 202200017724<br/> (32) 29.08.2022<br/> (33) Italy<br/> <hr/> (51) B29C 48/92<br/> B29C 48/09<br/> G01N 21/3581<br/> B29C 48/30<br/> G01N 21/41<br/> B29C 48/90<br/> B29C 48/88<br/> G01B 11/06<br/> G01B 11/10<br/> (11) EP4353441<br/> (21) EP22201433.4<br/> (47) 18.12.2024</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                             |                                                                                           |                                                                                                                       |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| (22) 13.10.2022                                                                             | B29C 49/78                                                                                | B33Y 40/00                                                                                                            |
| (54) METHOD AND DEVICE FOR CHECKING AN EXTRUSION DEVICE                                     | B29K 67/00                                                                                | (11) EP4100238                                                                                                        |
| (73) SIKORA AG                                                                              | B29L 31/00                                                                                | (21) EP21710094.0                                                                                                     |
| (72) MIESNER, Sebastian                                                                     | (11) EP4197740                                                                            | (47) 18.12.2024                                                                                                       |
| BOLTE, Hilmar                                                                               | (21) EP22212218.6                                                                         | (87) US2021016572                                                                                                     |
| SIKORA, Harald                                                                              | (47) 18.12.2024                                                                           | 12.08.2021                                                                                                            |
| SCHUH, Kolja Tobias                                                                         | (22) 08.12.2022                                                                           | (22) 04.02.2021                                                                                                       |
| (51) B29C 49/06                                                                             | (54) DEVICE AND METHOD FOR HEATING PLASTIC PRE-FORMS WITH ADJUSTMENT OF THE HEATING POWER | (54) SELECTIVE LASER SINTERING FABRICATION DEVICE                                                                     |
| B29C 35/08                                                                                  | (73) Kronos AG                                                                            | (73) Formlabs, Inc.                                                                                                   |
| B29C 49/64                                                                                  | (72) Tauber, Jan                                                                          | (72) KEENAN, Justin                                                                                                   |
| B29C 49/68                                                                                  | Senn, Konrad                                                                              | (31) 202062970352 P                                                                                                   |
| (11) EP3990249                                                                              | (31) 102021132983                                                                         | (32) 05.02.2020                                                                                                       |
| (21) EP20733824.5                                                                           | (32) 14.12.2021                                                                           | (33) United States of America                                                                                         |
| (47) 18.12.2024                                                                             | (33) Germany                                                                              | (51) B29C 64/336                                                                                                      |
| (87) EP2020067601                                                                           | (51) B29C 64/106                                                                          | B29C 64/106                                                                                                           |
| 30.12.2020                                                                                  | B23P 23/04                                                                                | B33Y 30/00                                                                                                            |
| (22) 24.06.2020                                                                             | B23Q 39/02                                                                                | B29C 64/194                                                                                                           |
| (54) UNIT FOR HEATING HOLLOW BODIES FOR MACHINE FOR MANUFACTURING PLASTIC CONTAINERS        | B29C 64/188                                                                               | B29C 64/209                                                                                                           |
| (73) Sidel Participations                                                                   | B22F 10/66                                                                                | B29C 64/264                                                                                                           |
| (72) FEUILLOLEY, Guy                                                                        | B23K 28/02                                                                                | B29C 64/393                                                                                                           |
| LAHOUE, Yoann                                                                               | B23Q 3/12                                                                                 | B33Y 40/00                                                                                                            |
| (31) 1906877                                                                                | B23Q 37/00                                                                                | B33Y 50/02                                                                                                            |
| (32) 25.06.2019                                                                             | B22F 12/00                                                                                | B33Y 70/10                                                                                                            |
| (33) France                                                                                 | B22F 12/82                                                                                | B22F 10/00                                                                                                            |
| (51) B29C 49/42                                                                             | B33Y 10/00                                                                                | B22F 12/00                                                                                                            |
| B29C 49/58                                                                                  | B33Y 30/00                                                                                | B29C 48/02                                                                                                            |
| B29C 49/78                                                                                  | B33Y 40/00                                                                                | B29C 48/16                                                                                                            |
| B29C 49/36                                                                                  | (11) EP3835030                                                                            | B29C 48/92                                                                                                            |
| (11) EP3431252                                                                              | (21) EP20210778.5                                                                         | B33Y 10/00                                                                                                            |
| (21) EP18194200.4                                                                           | (47) 18.12.2024                                                                           | B29C 48/05                                                                                                            |
| (47) 18.12.2024                                                                             | (22) 30.11.2020                                                                           | (11) EP3812133                                                                                                        |
| (22) 01.12.2011                                                                             | (54) CNC MACHINING CENTRE                                                                 | (21) EP19826183.6                                                                                                     |
| (54) DEVICE FOR BLOW MOULDING CONTAINERS                                                    | (73) C.M.S. S.p.A.                                                                        | (47) 18.12.2024                                                                                                       |
| (73) Kronos AG                                                                              | (72) LAZZARINI, Ramon                                                                     | (87) JP2019024957                                                                                                     |
| (72) Geltinger, Florian                                                                     | RINALDI, Nicola                                                                           | 02.01.2020                                                                                                            |
| Voth, Klaus                                                                                 | (31) 201900023982                                                                         | (22) 24.06.2019                                                                                                       |
| Hands Schuh, Eduard                                                                         | (32) 13.12.2019                                                                           | (54) THREE-DIMENSIONAL SHAPING DEVICE AND THREE-DIMENSIONAL SHAPING METHOD USING HETEROGENEOUS MATERIALS              |
| (31) 102010052903                                                                           | (33) Italy                                                                                | (73) KJ Chemicals Corporation                                                                                         |
| (32) 01.12.2010                                                                             | (51) B29C 64/118                                                                          | (72) ISHIMARU, Yuya                                                                                                   |
| (33) Germany                                                                                | B29C 64/209                                                                               | KUNIHIO, Yoshio                                                                                                       |
| (51) B29C 49/42                                                                             | B29C 64/227                                                                               | (31) 2018120140                                                                                                       |
| B65G 47/64                                                                                  | B29C 64/321                                                                               | (32) 25.06.2018                                                                                                       |
| B65G 47/84                                                                                  | B33Y 10/00                                                                                | (33) Japan                                                                                                            |
| B65G 51/03                                                                                  | B33Y 30/00                                                                                | (51) B29C 64/371                                                                                                      |
| B29C 49/46                                                                                  | B33Y 40/00                                                                                | B29C 64/153                                                                                                           |
| B29C 49/06                                                                                  | (11) EP4304835                                                                            | B33Y 50/02                                                                                                            |
| (11) EP3423255                                                                              | (21) EP22725159.2                                                                         | B22F 3/105                                                                                                            |
| (21) EP17700033.8                                                                           | (47) 18.12.2024                                                                           | B22F 12/90                                                                                                            |
| (47) 18.12.2024                                                                             | (87) CZ2022050028                                                                         | B22F 12/70                                                                                                            |
| (87) EP2017050012                                                                           | 15.09.2022                                                                                | B22F 10/322                                                                                                           |
| 08.09.2017                                                                                  | (22) 11.03.2022                                                                           | B33Y 30/00                                                                                                            |
| (22) 02.01.2017                                                                             | (54) PRINTING HEAD ASSEMBLY FOR A 3D PRINTER AND A 3D PRINTER WITH THIS ASSEMBLY          | (11) EP3840939                                                                                                        |
| (54) SYSTEM AND METHOD FOR TREATING PLASTIC PREFORMS WITH AIR CONVEYOR OR TRANSPORT SHUTTLE | (73) Sitar, Libor                                                                         | (21) EP19762626.0                                                                                                     |
| (73) Kronos AG                                                                              | Hájek, Václav                                                                             | (47) 18.12.2024                                                                                                       |
| (72) HIRDINA, Jochen                                                                        | (72) HÁJEK, Václav                                                                        | (87) US2019047479                                                                                                     |
| DÜNZINGER, Bernhard                                                                         | (31) 202100124 U                                                                          | 27.02.2020                                                                                                            |
| (31) 102016103756                                                                           | (32) 12.03.2021                                                                           | (22) 21.08.2019                                                                                                       |
| (32) 02.03.2016                                                                             | (33) Czech Republic                                                                       | (54) ADDITIVE MANUFACTURING SYSTEM COMPRISING A LOWER GAS FLOW INJECTION SYSTEM AND METHOD FOR ADDITIVE MANUFACTURING |
| (33) Germany                                                                                | (51) B29C 64/25                                                                           | (73) General Electric Company                                                                                         |
| (51) B29C 49/64                                                                             | G01N 21/15                                                                                | (72) RAMAKRISHNAN, Kishore                                                                                            |
| B29C 49/68                                                                                  | B22F 12/70                                                                                | DE NAZELLE, Rene du Cauze                                                                                             |
|                                                                                             | B22F 12/90                                                                                |                                                                                                                       |
|                                                                                             | B29C 64/364                                                                               |                                                                                                                       |

|                                      |                                     |                                              |
|--------------------------------------|-------------------------------------|----------------------------------------------|
| STAMMBERGER, Jens                    | B29L 31/30                          | (73) The Boeing Company                      |
| WAKELAM, Christian Thomas            | (11) EP4212314                      | (72) SONG, Weidong                           |
| SHALABY, Mohammed Mounir             | (21) EP22217292.6                   | (31) 201715583322                            |
| (31) 201816107696                    | (47) 18.12.2024                     | (32) 01.05.2017                              |
| (32) 21.08.2018                      | (22) 30.12.2022                     | (33) United States of America                |
| (33) United States of America        | (54) METHOD AND SYSTEM FOR          | (51) B29C 70/38                              |
| (51) B29C 65/02                      | WELDING THERMOPLASTIC PANELS        | B29C 31/00                                   |
| B29C 65/22                           | (73) Rohr, Inc.                     | B29B 11/16                                   |
| B29C 65/78                           | (72) LECHNER, Robert                | (11) EP3697601                               |
| B64F 5/10                            | HUANG, Jonathan S.                  | (21) EP18795776.6                            |
| B64C 1/06                            | VAN TOOREN, Michael                 | (47) 18.12.2024                              |
| B29C 65/18                           | (31) 202117566265                   | (87) GB2018053037                            |
| B29K 105/06                          | (32) 30.12.2021                     | 25.04.2019                                   |
| B29L 31/30                           | (33) United States of America       | (22) 19.10.2018                              |
| B64C 1/12                            | (51) B29C 65/64                     | (54) COMPOSITE MANUFACTURING                 |
| B64C 3/26                            | B29C 65/60                          | (73) McLaren Automotive Limited              |
| (11) EP4289604                       | B29C 65/78                          | (72) SANTONI, Claudio                        |
| (21) EP22382545.6                    | B29C 65/08                          | (31) 201717317                               |
| (47) 18.12.2024                      | (11) EP3204214                      | (32) 20.10.2017                              |
| (22) 08.06.2022                      | (21) EP15784265.9                   | (33) United Kingdom                          |
| (54) COMPOSITE MANUFACTURING         | (47) 18.12.2024                     | (51) B29C 70/46                              |
| METHOD                               | (87) CH2015000149                   | B29B 11/16                                   |
| (73) Airbus Operations, S.L.U.       | 14.04.2016                          | B29C 70/22                                   |
| (72) MENÉNDEZ MARTÍN, José Manuel    | (22) 02.10.2015                     | B29C 70/24                                   |
| (51) B29C 65/08                      | (54) ANCHORING A JOINING ELEMENT IN | B29B 15/10                                   |
| B29C 65/16                           | AN OBJECT                           | B29K 101/12                                  |
| B29C 65/18                           | (73) WoodWelding AG                 | B29C 43/36                                   |
| B29C 65/34                           | Inter IKEA Systems B.V.             | (11) EP3658360                               |
| B29C 65/36                           | (72) AESCHLIMANN, Marcel            | (21) EP18740863.8                            |
| B29L 31/30                           | DIZDAR, Nihat                       | (47) 18.12.2024                              |
| B29K 105/06                          | TORRIANI, Laurent                   | (87) EP2018069958                            |
| (11) EP4347225                       | SANKARAN, Muthumariappan            | 31.01.2019                                   |
| (21) EP22727246.5                    | HÅKANSSON, Pontus                   | (22) 23.07.2018                              |
| (47) 18.12.2024                      | LEHMANN, Mario                      | (54) METHOD FOR THE MANUFACTURE              |
| (87) AT2022060182                    | KÅLL, Håkan                         | OF A COMPOSITE COMPONENT OF                  |
| 01.12.2022                           | MAYER, Jörg                         | COMPLEX SHAPE                                |
| (22) 27.05.2022                      | (31) 15392014                       | (73) Roctool                                 |
| (54) METHOD FOR JOINING FIBER-       | (32) 09.10.2014                     | Louis Vuitton Malletier                      |
| PLASTIC COMPOSITE COMPONENTS,        | (33) Switzerland                    | (72) FEIGENBLUM, José                        |
| AND STABILIZING DEVICE               | (51) B29C 67/00                     | (31) 1770791                                 |
| (73) FACC AG                         | B33Y 10/00                          | (32) 25.07.2017                              |
| (72) ETZL, Christoph                 | B22F 12/90                          | (33) France                                  |
| LANG, Markus                         | B22F 10/85                          | (51) B29C 70/88                              |
| GÜROCAK, Maximilian                  | B33Y 50/02                          | B29C 70/54                                   |
| (31) 504232021                       | B22F 10/36                          | B32B 5/12                                    |
| (32) 27.05.2021                      | B22F 10/37                          | B32B 5/26                                    |
| (33) Austria                         | B22F 10/38                          | B32B 15/14                                   |
| (51) B29C 65/22                      | B22F 10/28                          | B32B 15/08                                   |
| B31D 5/00                            | (11) EP2942132                      | (11) EP4238758                               |
| B29C 65/74                           | (21) EP15167213.6                   | (21) EP23159928.3                            |
| B29C 65/78                           | (47) 18.12.2024                     | (47) 18.12.2024                              |
| (11) EP3752343                       | (22) 11.05.2015                     | (22) 03.03.2023                              |
| (21) EP19707660.7                    | (54) DATA FUSION FROM SENSORS FOR   | (54) REINFORCEMENT THERMOPLASTIC-            |
| (47) 18.12.2024                      | PROCESS CONTROL OF ADDITIVE         | BASED FIBRE-METAL LAMINATE                   |
| (87) US2019018090                    | MANUFACTURING FROM POWDERS          | COMPOSITE FRAME AND                          |
| 22.08.2019                           | (73) RTX Corporation                | MANUFACTURING METHOD THEREOF                 |
| (22) 14.02.2019                      | (72) Boyer, Jesse R.                | (73) INEGI - Instituto de Ciência e Inovação |
| (54) DEVICES FOR THE FORMATION OF    | (31) 201461991041 P                 | em Engenharia Mecânica e Engenharia          |
| PROTECTIVE PACKAGING                 | (32) 09.05.2014                     | Industrial                                   |
| (73) Pregis Innovative Packaging LLC | (33) United States of America       | (72) PEREIRA, RÚBEN LEANDRO LEITÃO           |
| (72) WETSCH, Thomas D.               | (51) B29C 70/08                     | CORREIA, NUNO ANDRÉ CURADO                   |
| MILCHUCK, Stephen J.                 | (11) EP3401085                      | MATEUS                                       |
| (31) 201862630750 P                  | (21) EP18163956.8                   | RIBEIRO DA SILVA, FERNANDO                   |
| (32) 14.02.2018                      | (47) 18.12.2024                     | DANIEL                                       |
| (33) United States of America        | (22) 26.03.2018                     | KAUL, ROBIN                                  |
| (51) B29C 65/36                      | (54) COMPOSITE MATERIALS CURED      | GOMES, RUI PEDRO MOURÃO                      |
| B29C 65/78                           | WITH THERMOPLASTIC THIN FILM        | (31) 2022117835                              |
| B29C 65/08                           | COATING                             | (32) 04.03.2022                              |

|                               |                                         |                                   |
|-------------------------------|-----------------------------------------|-----------------------------------|
| (33) Portugal                 | 11.10.2018                              | SURFACE OF AN INTERNAL CAVITY     |
| (51) B29D 7/01                | (22) 29.03.2018                         | OF A PNEUMATIC TYRE               |
| B29C 48/00                    | (54) CARRIER FOR CARRYING AN            | (73) Bridgestone Europe NV/SA     |
| B29C 48/07                    | OPHTHALMIC LENS DURING ITS              | (72) PONTONE, Roberto             |
| B29C 48/21                    | TREATMENT IN A BATH                     | STRAFFI, Paolo                    |
| B29C 48/88                    | (73) Alcon Inc.                         | (31) 202000006637                 |
| B29C 48/885                   | (72) LEIBOLD, Thomas                    | (32) 30.03.2020                   |
| B29C 48/92                    | BRAUN, Matthias                         | (33) Italy                        |
| B32B 7/027                    | STUTZ, Michael                          | (51) B29D 30/06                   |
| B32B 27/08                    | BIEL, Roger                             | B60C 23/20                        |
| B32B 27/20                    | WILHELM, Daniel                         | B60C 19/00                        |
| B32B 27/28                    | SCHMITT, Jennifer                       | B29D 30/00                        |
| B32B 27/30                    | STRUCKMEIER, Katrin Sylke               | (11) EP4297962                    |
| B32B 27/32                    | WALDERN, Michael Frederick              | (21) EP22708986.9                 |
| B32B 27/36                    | (31) 201762480677 P                     | (47) 18.12.2024                   |
| B32B 27/38                    | (32) 03.04.2017                         | (87) FR2022050259                 |
| B32B 27/42                    | (33) United States of America           | 01.09.2022                        |
| B29K 33/00                    | (51) B29D 11/00                         | (22) 14.02.2022                   |
| B29K 69/00                    | B29C 35/02                              | (54) TIRE INSTRUMENTATION METHOD  |
| (11) EP3616878                | B29C 35/08                              | FOR MEASURING THE INTERNAL        |
| (21) EP18790048.5             | (11) EP4433286                          | TEMPERATURE DURING ROLLING        |
| (47) 18.12.2024               | (21) EP23801501.0                       | (73) COMPAGNIE GENERALE DES       |
| (87) JP2018016931             | (47) 18.12.2024                         | ETABLISSEMENTS MICHELIN           |
| 01.11.2018                    | (87) GB2023052763                       | (72) BESNARD, Nicolas             |
| (22) 26.04.2018               | 02.05.2024                              | BLONDELET, Michel                 |
| (54) EXTRUDED RESIN PLATE AND | (22) 23.10.2023                         | RICHEZ, Sylvie                    |
| MANUFACTURING METHOD THEREOF  | (54) METHODS OF MANUFACTURING           | (31) 2101822                      |
| (73) Kuraray Co., Ltd.        | AN OPTHALMIC LENS INCLUDING             | (32) 25.02.2021                   |
| (72) FUNAZAKI, Kazuo          | ASYMMETRIC GRADIENT INDEX               | (33) France                       |
| (31) 2017089450               | OPTICAL ELEMENTS                        | (51) B29D 35/00                   |
| (32) 28.04.2017               | (73) CooperVision International Limited | B29D 35/12                        |
| (33) Japan                    | (72) SAHA, Sourav                       | B29D 35/14                        |
| (51) B29D 11/00               | BRADLEY, Arthur                         | (11) EP3938195                    |
| (11) EP3237186                | CHAMBERLAIN, Paul                       | (21) EP20714115.1                 |
| (21) EP14861149.4             | (31) 202263420173 P                     | (47) 18.12.2024                   |
| (47) 18.12.2024               | (32) 28.10.2022                         | (87) DK2020050064                 |
| (87) IB2014003130             | (33) United States of America           | 17.09.2020                        |
| 30.06.2016                    | (51) B29D 30/06                         | (22) 12.03.2020                   |
| (22) 23.12.2014               | B29C 33/38                              | (54) A MOULDING SYSTEM FOR DIRECT |
| (54) OPTHALMIC LENS TREATMENT | B29C 33/40                              | INJECTION MANUFACTURING OF        |
| SYSTEM AND METHOD THEREOF     | (11) EP4119335                          | FOOTWEAR                          |
| (73) Essilor International    | (21) EP22184500.1                       | (73) Ecco Sko A/S                 |
| (72) HALE, Mark               | (47) 18.12.2024                         | (72) HANSEN, Jakob Møller         |
| MILDEBRATH, Mark              | (22) 12.07.2022                         | MORTENSEN, Jens Sonne             |
| GELB, Brad                    | (54) PROCESS FOR MANUFACTURING          | (31) PA201970821                  |
| (51) B29D 11/00               | A TREAD MOLDING ELEMENT AND             | PA201970471                       |
| (11) EP4240578                | METHOD OF MANUFACTURING A               | PA201970470                       |
| (21) EP21807277.5             | TIRE OR A SECTION OF A TIRE             | 19192265                          |
| (47) 18.12.2024               | (73) The Goodyear Tire & Rubber Company | 19175667                          |
| (87) IB2021060189             | (72) BOROWCZAK, Marc                    | 19162519                          |
| 12.05.2022                    | GARN, Benjamin Isaiah                   | (32) 20.12.2019                   |
| (22) 03.11.2021               | (31) 202217804131                       | 18.07.2019                        |
| (54) METHOD FOR MAKING        | 202163221562 P                          | 18.07.2019                        |
| PHOTOCHROMIC CONTACT LENSES   | (32) 26.05.2022                         | 19.08.2019                        |
| (73) Alcon Inc.               | 14.07.2021                              | 21.05.2019                        |
| (72) PLAVNIK, Michelle        | (33) United States of America           | 13.03.2019                        |
| KUMI, Augustine Twum          | United States of America                | (33) Denmark                      |
| ZHANG, Steve Yun              | (51) B29D 30/06                         | Denmark                           |
| GE, Junhao                    | B29D 30/00                              | Denmark                           |
| CHANG, Yuan                   | (11) EP4126520                          | European Patent Office (EPO)      |
| (31) 202063109537 P           | (21) EP21715576.1                       | European Patent Office (EPO)      |
| (32) 04.11.2020               | (47) 18.12.2024                         | European Patent Office (EPO)      |
| (33) United States of America | (87) EP2021058027                       | (51) B29D 99/00                   |
| (51) B29D 11/00               | 07.10.2021                              | B29C 70/56                        |
| (11) EP3606736                | (22) 26.03.2021                         | B29C 70/52                        |
| (21) EP18718636.6             | (54) METHOD AND SYSTEM FOR              | B29C 70/86                        |
| (47) 18.12.2024               | APPLYING A SEALING AGENT TO THE         | B29C 31/00                        |
| (87) IB2018052209             |                                         | (11) EP4238751                    |

|                                                                                                                                     |                                                                           |                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------|
| (21) EP22159824.6                                                                                                                   | B31B 50/52                                                                | (21) EP21702307.6                                                            |
| (47) 18.12.2024                                                                                                                     | B31B 110/10                                                               | (47) 18.12.2024                                                              |
| (22) 02.03.2022                                                                                                                     | B31B 110/30                                                               | (87) IB2021050165                                                            |
| (54) MOLD ASSEMBLY FOR INFUSING A SPAR CAP AND RELATED METHODS                                                                      | B31B 120/00                                                               | 15.07.2021                                                                   |
| (73) LM Wind Power A/S                                                                                                              | B31B 120/10                                                               | (22) 11.01.2021                                                              |
| (72) RAZEGHI, Rama                                                                                                                  | (11) EP3782804                                                            | (54) PANEL, IN PARTICULAR A FLOOR                                            |
| (51) B30B 9/30                                                                                                                      | (21) EP20275129.3                                                         | PANEL, CEILING PANEL OR WALL                                                 |
| B65B 9/02                                                                                                                           | (47) 18.12.2024                                                           | PANEL, AND USE OF AN ADDITIONAL                                              |
| B65B 59/02                                                                                                                          | (22) 04.08.2020                                                           | LAYER IN A LAMINATED MULTI-LAYER                                             |
| B65B 59/00                                                                                                                          | (54) PAPER CONTAINER TOP FLANGE                                           | STRUCTURE OF A PANEL                                                         |
| B65B 57/12                                                                                                                          | (73) Proseal UK Limited                                                   | (73) NORTHANN BUILDING SOLUTIONS                                             |
| B65B 27/12                                                                                                                          | (72) Hargreaves, Robert Julian                                            | LLC                                                                          |
| B65B 13/28                                                                                                                          | (31) 201916544526                                                         | (72) Li, Lin                                                                 |
| B65B 13/20                                                                                                                          | (32) 19.08.2019                                                           | (31) 2024632                                                                 |
| B65B 13/04                                                                                                                          | (33) United States of America                                             | (32) 09.01.2020                                                              |
| B65B 13/02                                                                                                                          | (51) B31B 50/04                                                           | (33) Netherlands                                                             |
| B30B 15/00                                                                                                                          | B31B 50/44                                                                | (51) B32B 3/08                                                               |
| (11) EP4331828                                                                                                                      | B31B 50/62                                                                | B32B 3/30                                                                    |
| (21) EP23165735.4                                                                                                                   | B31B 105/00                                                               | B32B 7/12                                                                    |
| (47) 18.12.2024                                                                                                                     | B31B 110/10                                                               | B32B 15/08                                                                   |
| (22) 30.03.2023                                                                                                                     | B31B 110/35                                                               | B32B 17/12                                                                   |
| (54) CROSS-BUCKED CHANNEL BALING PRESS                                                                                              | B31B 120/50                                                               | B32B 27/08                                                                   |
| (73) Unotech GmbH                                                                                                                   | B31B 120/00                                                               | B32B 27/30                                                                   |
| (72) Telscher, Thomas                                                                                                               | (11) EP4261029                                                            | B32B 27/36                                                                   |
| (31) 102022108056                                                                                                                   | (21) EP22168670.2                                                         | B32B 37/12                                                                   |
| (32) 04.04.2022                                                                                                                     | (47) 18.12.2024                                                           | B32B 38/00                                                                   |
| (33) Germany                                                                                                                        | (22) 15.04.2022                                                           | B32B 38/06                                                                   |
| (51) B30B 11/24                                                                                                                     | (54) MACHINE FOR MANUFACTURING PAPERBOARD TRAYS                           | B42D 25/41                                                                   |
| B29C 48/41                                                                                                                          | (73) Cama1 S.p.A.                                                         | B42D 25/425                                                                  |
| B29C 48/595                                                                                                                         | (72) BELLANTE, Daniele                                                    | B42D 25/455                                                                  |
| (11) EP4240583                                                                                                                      | (51) B31B 70/81                                                           | B42D 25/46                                                                   |
| (21) EP21815266.8                                                                                                                   | (11) EP3911505                                                            | B42D 25/435                                                                  |
| (47) 18.12.2024                                                                                                                     | (21) EP20704664.0                                                         | B42D 25/373                                                                  |
| (87) IB2021060253                                                                                                                   | (47) 18.12.2024                                                           | B29C 59/02                                                                   |
| 12.05.2022                                                                                                                          | (87) US2020013132                                                         | B32B 38/14                                                                   |
| (22) 05.11.2021                                                                                                                     | 23.07.2020                                                                | B29L 17/00                                                                   |
| (54) SCREW AND TWIN-SCREW ASSEMBLY FOR USE IN ELASTOMER MIXTURE EXTRUDERS AND ASSOCIATED METHOD FOR EXTRUSION OF ELASTOMER MIXTURES | (22) 10.01.2020                                                           | B29K 627/00                                                                  |
| (73) POMINI Rubber & Plastics S.r.l.                                                                                                | (54) APPARATUS AND METHOD FOR SECURING A ZIPPER CLOSURE TO POLYMERIC FILM | B29K 627/06                                                                  |
| (72) REGALIA, Roberto                                                                                                               | (73) Reynolds Presto Products Inc.                                        | B29K 667/00                                                                  |
| (31) 202000026669                                                                                                                   | (72) WELLS, Aaron                                                         | (11) EP3265324                                                               |
| (32) 09.11.2020                                                                                                                     | SOLLER, Craig                                                             | (21) EP15884147.8                                                            |
| (33) Italy                                                                                                                          | CHAPEK, Carlos                                                            | (47) 18.12.2024                                                              |
| (51) B30B 15/16                                                                                                                     | THOMPSON, Zachary                                                         | (87) US2015019666                                                            |
| F15B 11/024                                                                                                                         | HECKMAN, Gregory                                                          | 09.09.2016                                                                   |
| F15B 15/18                                                                                                                          | (31) 201916252070                                                         | (22) 10.03.2015                                                              |
| (11) EP2722165                                                                                                                      | (32) 18.01.2019                                                           | (54) CARDS WITH SPECIAL TEXTURE AND COLOR AND A METHOD OF FORMING SAID CARDS |
| (21) EP13005039.6                                                                                                                   | (33) United States of America                                             | (73) Composecure LLC                                                         |
| (47) 18.12.2024                                                                                                                     | (51) B32B 3/06                                                            | (72) DASILVA, Luis                                                           |
| (22) 22.10.2013                                                                                                                     | C08G 18/40                                                                | LOWE, Adam                                                                   |
| (54) HYDRAULIC CIRCUIT FOR A HYDRAULIC AXLE AND A HYDRAULIC AXLE                                                                    | C08G 18/42                                                                | HERSLOW, John                                                                |
| (73) Robert Bosch GmbH                                                                                                              | C08G 18/48                                                                | (31) 201514639970                                                            |
| (72) Hendrix, Gottfried                                                                                                             | C08G 18/76                                                                | (32) 05.03.2015                                                              |
| Schmidt, Stefan                                                                                                                     | C08K 3/013                                                                | (33) United States of America                                                |
| (31) 102012020581                                                                                                                   | B32B 27/40                                                                | (51) B32B 3/26                                                               |
| (32) 22.10.2012                                                                                                                     | E04F 13/077                                                               | B29C 44/14                                                                   |
| (33) Germany                                                                                                                        | E04F 15/00                                                                | B60N 2/58                                                                    |
| (51) B31B 50/00                                                                                                                     | B32B 3/30                                                                 | B32B 27/30                                                                   |
| B65B 7/16                                                                                                                           | B32B 7/12                                                                 | B32B 27/08                                                                   |
| B65B 47/06                                                                                                                          | C08K 3/22                                                                 | B32B 9/02                                                                    |
|                                                                                                                                     | C08K 7/02                                                                 | B32B 7/12                                                                    |
|                                                                                                                                     | E04F 13/08                                                                | B32B 5/18                                                                    |
|                                                                                                                                     | E04F 13/18                                                                | B32B 5/14                                                                    |
|                                                                                                                                     | E04F 15/02                                                                | B32B 5/02                                                                    |
|                                                                                                                                     | E04F 15/10                                                                | B32B 3/28                                                                    |
|                                                                                                                                     | (11) EP4087887                                                            | B60N 2/60                                                                    |
|                                                                                                                                     |                                                                           | B29C 51/10                                                                   |

|                                   |                                        |                                  |
|-----------------------------------|----------------------------------------|----------------------------------|
| B29C 51/26                        | (54) COMPOSITE WHEEL CONSTRUCTION      | (73) Aicello Corporation         |
| B29C 51/36                        | APPARATUS AND METHOD                   | (72) IWAKI, Banri                |
| (11) EP4178795                    | (73) Lacks Enterprises, Inc.           | (31) 2019036311                  |
| (21) EP21708534.9                 | (72) MEYER, Frederick, K.              | (32) 28.02.2019                  |
| (47) 18.12.2024                   | SNYDER, Colin                          | (33) Japan                       |
| (87) US2021016784                 | RAWLEY, Stanhope                       | (51) B33Y 80/00                  |
| 14.04.2022                        | (31) 202016781390                      | A63B 39/00                       |
| (22) 05.02.2021                   | 201962801507 P                         | A63B 102/02                      |
| (54) SEAT TRIM COVER WITH MOLDED  | (32) 04.02.2020                        | A63B 37/00                       |
| FOAM BACKING                      | 05.02.2019                             | A63B 43/06                       |
| (73) Magna Seating Inc.           | (33) United States of America          | A63B 45/00                       |
| (72) CHAUVIN, Rene                | United States of America               | A63B 67/14                       |
| KOZLOWSKI, Eric                   | (51) B32B 27/08                        | A63B 43/00                       |
| PRASATEK, Craig                   | B32B 27/28                             | (11) EP3533501                   |
| VIVIAN, Andrew, M.                | B32B 27/32                             | (21) EP19168166.7                |
| WYATT, Daniel                     | B32B 27/36                             | (47) 18.12.2024                  |
| (31) 202017062762                 | C08J 5/18                              | (22) 27.05.2016                  |
| (32) 05.10.2020                   | (11) EP3837111                         | (54) NON-INFLATABLE SPORTS BALLS |
| (33) United States of America     | (21) EP19753340.9                      | (73) Adidas AG                   |
| (51) B32B 5/02                    | (47) 18.12.2024                        | (72) PRICE, Daniel Stephen       |
| B32B 5/18                         | (87) EP2019071598                      | HANSON, Henry Niles              |
| B32B 5/24                         | 20.02.2020                             | NÜRNBERG, Hans-Peter             |
| C08J 9/36                         | (22) 12.08.2019                        | (31) 102015209811                |
| B32B 7/022                        | (54) FILM COMPOSITION HAVING           | (32) 28.05.2015                  |
| B32B 7/10                         | ENHANCED OXYGEN BARRIER                | (33) Germany                     |
| B32B 7/12                         | PROPERTY AND LOW MOISTURE              | (51) B41F 5/24                   |
| B32B 7/14                         | SENSITIVITY                            | B41F 27/00                       |
| B32B 9/00                         | (73) SABIC Global Technologies B.V.    | B41F 27/10                       |
| B32B 9/04                         | (72) MOIDEEN, Mohamed, Ashraf          | (11) EP4360884                   |
| B32B 15/04                        | GANAPATHY BHOTLA, Venkata,             | (21) EP23202663.3                |
| B32B 19/04                        | Ramanarayanan                          | (47) 18.12.2024                  |
| B32B 27/06                        | SOLIMAN, Maria                         | (22) 10.10.2023                  |
| B32B 27/32                        | DHANABALAN, Anantharaman               | (54) ARRANGEMENT FOR A PRINTING  |
| C08J 9/28                         | (31) 201862719382 P                    | MACHINE AND METHOD FOR           |
| (11) EP3956375                    | (32) 17.08.2018                        | PRODUCING SAME                   |
| (21) EP20723286.9                 | (33) United States of America          | (73) Inometa GmbH                |
| (47) 18.12.2024                   | (51) B32B 27/08                        | (72) Gaidetzka, M. Sc. Michael   |
| (87) EP2020060129                 | B32B 27/32                             | Wünsche, Dr. Marc                |
| 22.10.2020                        | C08J 5/18                              | (31) 102022126559                |
| (22) 09.04.2020                   | (11) EP4244060                         | (32) 12.10.2022                  |
| (54) A MOLDING BASED ON A         | (21) EP21811282.9                      | (33) Germany                     |
| MONOLITHIC ORGANIC AEROGEL        | (47) 18.12.2024                        | (51) B41J 2/01                   |
| (73) aerogel-it GmbH              | (87) EP2021081299                      | B41J 11/00                       |
| (72) WEINRICH, Dirk               | 19.05.2022                             | C09D 11/106                      |
| MOVAHHED, Sohajl                  | (22) 10.11.2021                        | B41M 7/00                        |
| FRICKE, Marc                      | (54) MULTILAYER MONO-MATERIAL          | C09D 11/107                      |
| NOBIS, Marcel                     | POLYETHYLENE (PE) ASSEMBLY AND         | (11) EP4159443                   |
| LOELSBURG, Wibke                  | ITS USE IN FOOD PACKAGING              | (21) EP21833214.6                |
| (31) 20163623                     | (73) Di Mauro Officine Grafiche S.p.A. | (47) 18.12.2024                  |
| 19169258                          | (72) D'URSO, Edoardo                   | (87) JP2021023580                |
| (32) 17.03.2020                   | D'ALTERIO, Gennaro                     | 06.01.2022                       |
| 15.04.2019                        | (31) 20206820                          | (22) 22.06.2021                  |
| (33) European Patent Office (EPO) | (32) 10.11.2020                        | (54) PRINTING DEVICE             |
| European Patent Office (EPO)      | (33) European Patent Office (EPO)      | (73) Kyocera Corporation         |
| (51) B32B 5/14                    | (51) B32B 27/32                        | (72) NISHIMOTO, Akihiko          |
| B29D 99/00                        | B65D 65/40                             | FUKUOKA, Shuichi                 |
| B29C 70/32                        | B32B 27/14                             | ISHIHARA, Atsushi                |
| B29C 70/46                        | C08J 5/18                              | TAKESHITA, Chihiro               |
| B32B 5/26                         | C08L 23/04                             | SAKAI, Hisamitsu                 |
| B60B 3/00                         | (11) EP3932668                         | MIYAHARA, Takashi                |
| B60B 5/02                         | (21) EP20763552.5                      | OOKODA, Hitoshi                  |
| (11) EP3921147                    | (47) 18.12.2024                        | (31) 2020112580                  |
| (21) EP20709423.6                 | (87) JP2020007963                      | (32) 30.06.2020                  |
| (47) 18.12.2024                   | 03.09.2020                             | (33) Japan                       |
| (87) US2020016768                 | (22) 27.02.2020                        | (51) B41J 2/14                   |
| 13.08.2020                        | (54) PACKAGING FILM, FILM BAG, AND     | (11) EP3827992                   |
| (22) 05.02.2020                   | METHOD FOR MANUFACTURING               | (21) EP20210387.5                |
|                                   | SAME                                   | (47) 18.12.2024                  |

|                                                                              |                                                                        |                                                                                |
|------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| (22) 27.11.2020                                                              | (72) HAMADA, Kyohei                                                    | B41J 13/00                                                                     |
| (54) HEAD CHIP, LIQUID JET HEAD, AND LIQUID JET RECORDING DEVICE             | (31) 2022068211                                                        | G03G 15/00                                                                     |
| (73) SII Printek Inc                                                         | (32) 18.04.2022                                                        | B41J 3/54                                                                      |
| (72) HIRATA, Masakazu                                                        | (33) Japan                                                             | B41J 15/04                                                                     |
| Al, Tomoki                                                                   | (51) B41J 3/407                                                        | C09D 11/322                                                                    |
| YAMAMURA, Yuki                                                               | G06F 3/12                                                              | C09D 11/38                                                                     |
| SUZUKI, Kenji                                                                | B41J 11/00                                                             | C09D 11/40                                                                     |
| (31) 2019215364                                                              | B26D 5/00                                                              | (11) EP4117929                                                                 |
| (32) 28.11.2019                                                              | B26F 1/38                                                              | (21) EP21715730.4                                                              |
| (33) Japan                                                                   | (11) EP3856529                                                         | (47) 18.12.2024                                                                |
| (51) B41J 2/14                                                               | (21) EP19865153.1                                                      | (87) US2021021869                                                              |
| B41J 2/045                                                                   | (47) 18.12.2024                                                        | 16.09.2021                                                                     |
| (11) EP3815907                                                               | (87) US2019052937                                                      | (22) 11.03.2021                                                                |
| (21) EP20205231.2                                                            | 02.04.2020                                                             | (54) SYSTEMS AND METHODS FOR PRINTING A FLEXIBLE WEB AND PRINTING COMPOSITIONS |
| (47) 18.12.2024                                                              | (22) 25.09.2019                                                        | (73) Cryovac, LLC                                                              |
| (22) 02.11.2020                                                              | (54) MANUFACTURING GARMENTS AND TEXTILES WITH PRINTED PATTERNS THEREON | (72) LITMAN, Stanley                                                           |
| (54) LIQUID JET HEAD AND LIQUID JET RECORDING DEVICE                         | (73) Fiery, LLC                                                        | KANFOUSH, Daniel Edward                                                        |
| (73) SII Printek Inc.                                                        | (72) DZIESIETNIK, Ghilad                                               | RIMES, Brett Christopher                                                       |
| (72) SHIMIZU, Takayuki                                                       | (31) 201916392514                                                      | CYMAN, Theodore F.                                                             |
| (31) 2019200092                                                              | 201862736385 P                                                         | MURZYNOWSKI, Alan Ronald                                                       |
| (32) 01.11.2019                                                              | (32) 23.04.2019                                                        | HEEB, Myron Chester                                                            |
| (33) Japan                                                                   | 25.09.2018                                                             | HUANG, Tom                                                                     |
| (51) B41J 2/14                                                               | (33) United States of America                                          | MOSCATO, Anthony Vincent                                                       |
| B41J 2/055                                                                   | United States of America                                               | HOOK, Kevin John                                                               |
| (11) EP4180233                                                               | (51) B41J 15/04                                                        | PILON, Lawrence Albe                                                           |
| (21) EP22206941.1                                                            | (11) EP4242006                                                         | CONIGLIO, Paul                                                                 |
| (47) 18.12.2024                                                              | (21) EP23160781.3                                                      | ROCCO, Frank J.                                                                |
| (22) 11.11.2022                                                              | (47) 18.12.2024                                                        | EDWARDS, Morgan Ashley                                                         |
| (54) LIQUID EJECTING HEAD AND LIQUID EJECTING APPARATUS                      | (22) 08.03.2023                                                        | (31) 202062988731 P                                                            |
| (73) Seiko Epson Corporation                                                 | (54) CARTRIDGE                                                         | 202062988723 P                                                                 |
| (72) SHIOZAWA, Yu                                                            | (73) Seiko Epson Corporation                                           | (32) 12.03.2020                                                                |
| TAKAAI, Hitoshi                                                              | (72) TARUYA, Keisuke                                                   | 12.03.2020                                                                     |
| TAKABE, Motoki                                                               | YASUKI, Hirosuke                                                       | (33) United States of America                                                  |
| (31) 2021184537                                                              | SASAKI, Taishi                                                         | United States of America                                                       |
| (32) 12.11.2021                                                              | ISHIMOTO, Akio                                                         | (51) B41J 29/393                                                               |
| (33) Japan                                                                   | (31) 2022193791                                                        | B41J 2/315                                                                     |
| (51) B41J 2/175                                                              | 2022126525                                                             | (11) EP4299330                                                                 |
| B41J 29/17                                                                   | 2022036628                                                             | (21) EP23182202.4                                                              |
| B41J 2/17                                                                    | (32) 02.12.2022                                                        | (47) 18.12.2024                                                                |
| B41J 29/377                                                                  | 08.08.2022                                                             | (22) 28.06.2023                                                                |
| (11) EP4059725                                                               | 09.03.2022                                                             | (54) PRINTING APPARATUS AND METHOD OF MEASUREMENT                              |
| (21) EP22162621.1                                                            | (33) Japan                                                             | (73) Dover Europe Sàrl                                                         |
| (47) 18.12.2024                                                              | Japan                                                                  | (72) CHAMBERS, John                                                            |
| (22) 17.03.2022                                                              | (51) B41J 25/304                                                       | (31) 202209452                                                                 |
| (54) COAGULATION METHOD, COAGULATION DEVICE, AND EJECTING DEVICE             | B41J 3/407                                                             | (32) 28.06.2022                                                                |
| (73) Seiko Epson Corporation                                                 | (11) EP3984760                                                         | (33) United Kingdom                                                            |
| (72) HORIKAWA, Yoshihisa                                                     | (21) EP21202179.4                                                      | (51) B41M 1/34                                                                 |
| TAKISHIMA, Keigo                                                             | (47) 18.12.2024                                                        | C09D 11/101                                                                    |
| (31) 2021045651                                                              | (22) 12.10.2021                                                        | G06K 1/12                                                                      |
| (32) 19.03.2021                                                              | (54) LIQUID DISCHARGE APPARATUS AND LIQUID DISCHARGE METHOD            | C03C 15/00                                                                     |
| (33) Japan                                                                   | (73) Ricoh Company, Ltd.                                               | C03C 23/00                                                                     |
| (51) B41J 2/205                                                              | (72) HONDA, Ryo                                                        | B41M 3/14                                                                      |
| B41J 2/21                                                                    | KUBO, Isamu                                                            | (11) EP2401156                                                                 |
| B41J 19/14                                                                   | TACHIBANA, Eiji                                                        | (21) EP10707574.9                                                              |
| G06K 15/10                                                                   | (31) 2021148814                                                        | (47) 18.12.2024                                                                |
| (11) EP4265423                                                               | 2020173521                                                             | (87) FR2010050099                                                              |
| (21) EP23168185.9                                                            | (32) 13.09.2021                                                        | 29.07.2010                                                                     |
| (47) 18.12.2024                                                              | 14.10.2020                                                             | (22) 22.01.2010                                                                |
| (22) 17.04.2023                                                              | (33) Japan                                                             | (54) METHOD AND DEVICE FOR MARKING OBJECTS                                     |
| (54) LIQUID DISCHARGE APPARATUS, LIQUID DISCHARGE METHOD, AND CARRIER MEDIUM | Japan                                                                  | (73) ATHEOR                                                                    |
| (73) Ricoh Company, Ltd.                                                     | (51) B41J 25/308                                                       | (72) Borrás, Jean-Denis                                                        |
|                                                                              | B41J 11/00                                                             | (31) 0950417                                                                   |
|                                                                              | B41J 2/515                                                             | (32) 23.01.2009                                                                |
|                                                                              | B41J 3/60                                                              | (33) France                                                                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) B41M 5/26<br>C03C 17/32<br>C03C 17/34<br>C03C 17/36<br>C03C 17/38<br>C03C 23/00<br>C23C 14/28<br>B41M 5/24<br>(11) EP4242180<br>(21) EP23187829.9<br>(47) 18.12.2024<br>(22) 05.04.2019<br>(54) METHOD FOR MARKING GLASS<br>PANELS, PREFERABLY SINGLE-PANE<br>SAFETY GLASS PANELS<br>(73) HEGLA boraident GmbH & Co. KG<br>(72) Rainer, Thomas<br>(31) 102018207181<br>(32) 08.05.2018<br>(33) Germany                                                                                                                          | (54) DECORATIVE SHEET, USE OF A<br>DECORATIVE SHEET, AND METHOD<br>FOR PRODUCTION OF A DECORATIVE<br>RESIN MOLDED ARTICLE<br>(73) Dai Nippon Printing Co., Ltd.<br>(72) KAWANISHI, Hiroki<br>NODA, Akihisa<br>(31) 2014200482<br>(32) 30.09.2014<br>(33) Japan                                                                                                                              | SPIES, Jürgen<br>JAKUBITH, Dr. Sven<br>(31) 102011005302<br>(32) 09.03.2011<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                              |
| (51) B42C 19/02<br>B42C 19/08<br>B42D 13/00<br>B42D 25/23<br>B42D 25/24<br>B42D 25/485<br>B42D 25/475<br>B42D 25/46<br>B42D 25/455<br>B42D 25/41<br>B41F 19/00<br>(11) EP3500435<br>(21) EP17758100.6<br>(47) 18.12.2024<br>(87) EP2017070717<br>22.02.2018<br>(22) 16.08.2017<br>(54) SYSTEM AND METHOD FOR<br>PRODUCING INDIVIDUAL VALUE<br>AND SECURITY DOCUMENTS FROM<br>STARTING MATERIAL PIECES<br>(73) Bundesdruckerei GmbH<br>(72) SCHIPPAN, Frank<br>LEOPOLD, André<br>(31) 102016215516<br>(32) 18.08.2016<br>(33) Germany | (51) B60C 9/20<br>(11) EP4011645<br>(21) EP21211342.7<br>(47) 18.12.2024<br>(22) 30.11.2021<br>(54) TRUCK TIRE<br>(73) The Goodyear Tire & Rubber Company<br>(72) WINKIN, Didier<br>PASSANTE SPACCAPIETRA, Ettore<br>MANOGARAN, Arun Prasath<br>MULLER, Philippe Joseph Auguste<br>(31) 202017120346<br>(32) 14.12.2020<br>(33) United States of America                                    | (51) B60C 23/00<br>F16K 15/06<br>F16K 15/14<br>F16K 15/20<br>F16K 17/30<br>F16K 17/34<br>F16K 47/00<br>(11) EP4196357<br>(21) EP21737881.9<br>(47) 18.12.2024<br>(87) US2021036908<br>17.02.2022<br>(22) 11.06.2021<br>(54) WHEEL VALVE ASSEMBLY FOR TIRE<br>INFLATION/DEFLATION SYSTEM<br>(73) Parker-Hannifin Corporation<br>(72) REYNOLDS, Brian A.<br>AHMED, Shahed M.<br>MCCURDY, William B., Jr.<br>O'CONNELL, Patrick D.<br>QI, Yufeng<br>(31) 202063064539 P<br>(32) 12.08.2020<br>(33) United States of America |
| (51) B42D 25/328<br>(11) EP3863863<br>(21) EP19789640.0<br>(47) 18.12.2024<br>(87) EP2019077811<br>16.04.2020<br>(22) 14.10.2019<br>(54) DIFFRACTIVE SECURITY ELEMENT<br>(73) Bundesdruckerei GmbH<br>(72) KULIKOVSKA, Olga<br>(31) 102018217560<br>(32) 12.10.2018<br>(33) Germany                                                                                                                                                                                                                                                  | (51) B60C 11/03<br>B60C 11/13<br>B60C 11/12<br>(11) EP4201708<br>(21) EP22196953.8<br>(47) 18.12.2024<br>(22) 21.09.2022<br>(54) TIRE<br>(73) Sumitomo Rubber Industries, Ltd.<br>(72) ITO, Sho<br>NISHIWAKI, Takashi<br>(31) 2021212657<br>(32) 27.12.2021<br>(33) Japan                                                                                                                   | (51) B60C 23/06<br>B60W 40/13<br>G01G 19/08<br>B60C 23/04<br>B60K 28/08<br>G01C 21/34<br>B60C 19/00<br>B60W 30/184<br>(11) EP4230444<br>(21) EP22157156.5<br>(47) 18.12.2024<br>(22) 17.02.2022<br>(54) A METHOD FOR DETERMINING<br>A RECOMMENDED LOAD FOR A<br>VEHICLE TO BE OPERATED ALONG A<br>PREDEFINED ROUTE<br>(73) VOLVO TRUCK CORPORATION<br>(72) IUSTIN, Roman                                                                                                                                                 |
| (51) B42D 25/328<br>(11) EP3863863<br>(21) EP19789640.0<br>(47) 18.12.2024<br>(87) EP2019077811<br>16.04.2020<br>(22) 14.10.2019<br>(54) DIFFRACTIVE SECURITY ELEMENT<br>(73) Bundesdruckerei GmbH<br>(72) KULIKOVSKA, Olga<br>(31) 102018217560<br>(32) 12.10.2018<br>(33) Germany                                                                                                                                                                                                                                                  | (51) B60C 11/24<br>(11) EP4190596<br>(21) EP22209726.3<br>(47) 18.12.2024<br>(22) 25.11.2022<br>(54) TIRE IRREGULAR WEAR DETECTION<br>SYSTEM AND METHOD<br>(73) The Goodyear Tire & Rubber Company<br>(72) SINGH, Kanwar Bharat<br>DERLUYN, Pieter-Jan<br>(31) 202218053786<br>202163286131 P<br>(32) 09.11.2022<br>06.12.2021<br>(33) United States of America<br>United States of America | (51) B60C 27/02<br>B60C 27/04<br>(11) EP4048532<br>(21) EP20879766.2<br>(47) 18.12.2024<br>(87) NO2020050250<br>29.04.2021<br>(22) 14.10.2020<br>(54) ANTI-SKID DEVICE<br>(73) Affin AS<br>(72) ABRY, Christian<br>ABRY, Emil<br>FURU, Harald<br>KAVANAGH, Christopher John<br>(31) 20191262<br>(32) 22.10.2019<br>(33) Norway                                                                                                                                                                                           |
| (51) B44C 1/17<br>B32B 27/00<br>(11) EP3202589<br>(21) EP15846238.2<br>(47) 18.12.2024<br>(87) JP2015077757<br>07.04.2016<br>(22) 30.09.2015                                                                                                                                                                                                                                                                                                                                                                                         | (51) B60C 11/24<br>F16D 66/02<br>H01R 39/58<br>(11) EP4046828<br>(21) EP22162605.4<br>(47) 18.12.2024<br>(22) 10.02.2012<br>(54) WEAR DETECTION SYSTEM AND<br>METHOD<br>(73) Schunk Transit Systems GmbH<br>(72) STAUBACH, Timo<br>FLEISCHHAUER, Guntram<br>PFEFFER, Daniel<br>NETTESHEIM, Dr. Stefan                                                                                       | (51) B60H 1/00<br>B60K 1/00<br>B60L 58/26<br>B60H 1/14                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



|                                         |                                       |                                      |
|-----------------------------------------|---------------------------------------|--------------------------------------|
| B60K 11/02                              | (33) United Kingdom                   | B60K 6/48                            |
| B60L 58/24                              | (51) B60J 10/76                       | (11) EP3974227                       |
| B60H 1/32                               | B60J 10/79                            | (21) EP21194435.0                    |
| (11) EP3984794                          | B60J 10/78                            | (47) 18.12.2024                      |
| (21) EP20866571.1                       | (11) EP4357176                        | (22) 01.09.2021                      |
| (47) 18.12.2024                         | (21) EP23202991.8                     | (54) CONTROL DEVICE FOR HYBRID       |
| (87) CN2020116032                       | (47) 18.12.2024                       | VEHICLE                              |
| 25.03.2021                              | (22) 11.10.2023                       | (73) Suzuki Motor Corporation        |
| (22) 18.09.2020                         | (54) ENCAPSULATED FIXED WINDOW        | (72) ITO, Yoshiaki                   |
| (54) THERMAL MANAGEMENT SYSTEM          | MODULE FOR A MOTOR VEHICLE            | (31) 2020158751                      |
| (73) Hangzhou Sanhua Research Institute | (73) Hutchinson Sealing Systems, Inc. | (32) 23.09.2020                      |
| Co., Ltd.                               | (72) GUELLEC, André                   | (33) Japan                           |
| (72) TAN, Yongxiang                     | (31) 202217968726                     | (51) B60K 11/04                      |
| (31) 201911110168                       | (32) 18.10.2022                       | B60K 6/40                            |
| 201911110153                            | (33) United States of America         | F01P 5/02                            |
| 201910886904                            | (51) B60K 1/02                        | F01P 3/18                            |
| (32) 14.11.2019                         | B60K 17/08                            | H01M 10/625                          |
| 14.11.2019                              | B60K 17/02                            | H01M 10/663                          |
| 19.09.2019                              | F16H 3/093                            | H01M 10/6563                         |
| (33) China                              | (11) EP4208360                        | H01M 10/6568                         |
| China                                   | (21) EP21762667.0                     | H01M 10/6569                         |
| China                                   | (47) 18.12.2024                       | H01M 10/667                          |
| (51) B60H 1/22                          | (87) EP2021072515                     | H01M 10/66                           |
| H05B 3/06                               | 10.03.2022                            | H01M 10/617                          |
| F24H 1/00                               | (22) 12.08.2021                       | H01M 10/613                          |
| F24H 1/12                               | (54) PURELY ELECTRIC DRIVE SYSTEM     | B60K 6/22                            |
| F24H 9/18                               | COMPRISING TWO MOTORS                 | (11) EP3350004                       |
| F24H 3/08                               | (73) Daimler Truck AG                 | (21) EP16846953.4                    |
| H05B 3/14                               | (72) STEFFENS, Frank                  | (47) 18.12.2024                      |
| F24H 3/04                               | LUCKMANN, Jens                        | (87) SE2016050815                    |
| F24H 3/00                               | STRÖLIN, Marc                         | 23.03.2017                           |
| H05B 3/24                               | (31) 102020005394                     | (22) 31.08.2016                      |
| (11) EP2867041                          | (32) 03.09.2020                       | (54) A COOLING ARRANGEMENT FOR AN    |
| (21) EP13808718.4                       | (33) Germany                          | ELECTRIC POWER UNIT IN A VEHICLE     |
| (47) 18.12.2024                         | (51) B60K 1/04                        | (73) Scania CV AB                    |
| (87) CN2013078184                       | B60L 50/60                            | (72) HALL, Ola                       |
| 03.01.2014                              | (11) EP3981631                        | KARDOS, Zoltan                       |
| (22) 27.06.2013                         | (21) EP20201326.4                     | MUSTONEN, Markus                     |
| (54) PTC ELECTRIC HEATING ASSEMBLY,     | (47) 18.12.2024                       | (31) 1551177                         |
| ELECTRIC HEATING DEVICE AND             | (22) 12.10.2020                       | (32) 15.09.2015                      |
| ELECTRIC VEHICLE                        | (54) A BATTERY ASSEMBLY               | (33) Sweden                          |
| (73) BYD Company Limited                | (73) VOLVO TRUCK CORPORATION          | (51) B60K 25/08                      |
| (72) REN, Maolin                        | (72) KARLSSON, Viktor                 | B60K 17/02                           |
| LIN, Xinping                            | HENDRIKS, Jan                         | B60K 17/26                           |
| WU, Mengxiang                           | (51) B60K 1/04                        | B60H 1/00                            |
| WANG, Shumin                            | B62D 25/08                            | B60H 1/32                            |
| QIU, Hongmei                            | B62D 21/15                            | (11) EP4147898                       |
| DENG, Tianyou                           | B62D 25/20                            | (21) EP21196011.7                    |
| LI, Xiaofang                            | (11) EP4292850                        | (47) 18.12.2024                      |
| (31) 201210215331                       | (21) EP23172308.1                     | (22) 10.09.2021                      |
| (32) 27.06.2012                         | (47) 18.12.2024                       | (54) TRANSPORT POWER GENERATOR       |
| (33) China                              | (22) 09.05.2023                       | SYSTEM                               |
| (51) B60H 3/00                          | (54) VEHICLE                          | (73) Carrier Corporation             |
| B60H 3/06                               | (73) Suzuki Motor Corporation         | (72) VAN WIJK, Ruud                  |
| B60H 1/00                               | TOYOTA JIDOSHA KABUSHIKI KAISHA       | (51) B60K 35/00                      |
| (11) EP4313644                          | (72) NAGASAKI, Yuta                   | B60K 35/10                           |
| (21) EP22719298.6                       | (31) 2022096044                       | B60K 35/29                           |
| (47) 18.12.2024                         | (32) 14.06.2022                       | (11) EP4272988                       |
| (87) EP2022058700                       | (33) Japan                            | (21) EP23169333.4                    |
| 06.10.2022                              | (51) B60K 6/387                       | (47) 18.12.2024                      |
| (22) 31.03.2022                         | B60K 6/442                            | (22) 21.04.2023                      |
| (54) CONTROLLING A HVAC SYSTEM OF A     | B60W 10/08                            | (54) OPERATION CONTROL DEVICE,       |
| VEHICLE                                 | B60W 10/11                            | OPERATION DEVICE, STEERING           |
| (73) Jaguar Land Rover Limited          | B60W 20/15                            | DEVICE, VEHICLE, OPERATION           |
| (72) NASSAR, Waad                       | B60W 20/10                            | CONTROL METHOD, AND STORAGE          |
| DEJANU, Irina                           | B60W 50/14                            | MEDIUM                               |
| (31) 202104574                          | B60W 20/30                            | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA |
| (32) 31.03.2021                         |                                       | (72) YAMADA, Tomio                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KOZONO, Yuki<br>NAKAJIMA, Shu<br>(31) 2022075187<br>(32) 28.04.2022<br>(33) Japan                                                                                                                                                                                                                                                                                                                                                                                                  | LIU, Han<br>WU, Di<br>(31) 201911022151<br>(32) 25.10.2019<br>(33) China                                                                                                                                                                                                                                                                                                                                                                                                                                              | (22) 24.03.2021<br>(54) BATTERY PERFORMANCE<br>MANAGEMENT SYSTEM AND<br>METHOD<br>(73) LG Energy Solution, Ltd.                                                                                                                                                                                                                                                                                                                                                           |
| (51) B60K 35/10<br>B60K 35/22<br>B60K 35/28<br>B60H 1/34<br>B60H 1/00<br>G06F 3/04845<br>(11) EP4101677<br>(21) EP22176965.6<br>(47) 18.12.2024<br>(22) 02.06.2022<br>(54) SYSTEM, METHOD AND COMPUTER<br>PROGRAM FOR CONTROLLING AN<br>AIR OUTLET DEVICE<br>(73) Seat, S.A.<br>(72) COROMINAS MARCÉ, Joel<br>SEGURA MARTÍ, Marc<br>(31) 202130524<br>(32) 08.06.2021<br>(33) Spain                                                                                                | (51) B60L 15/20<br>B60T 7/12<br>A61G 5/04<br>(11) EP4011682<br>(21) EP20849267.8<br>(47) 18.12.2024<br>(87) JP2020028822<br>11.02.2021<br>(22) 28.07.2020<br>(54) ELECTRIC TROLLEY<br>(73) Panasonic Intellectual Property<br>Management Co., Ltd.<br>(72) UEMATSU Hiroyuki<br>OZEKI Hidekatsu<br>(31) 2019143747<br>(32) 05.08.2019<br>(33) Japan                                                                                                                                                                    | (72) KIM, Dong-Myung<br>AHN, Hyoung Jun<br>KIM, Hyung-Sik<br>(31) 20210037625<br>20200035892<br>(32) 23.03.2021<br>24.03.2020<br>(33) Korea (Republic)<br>Korea (Republic)                                                                                                                                                                                                                                                                                                |
| (51) B60K 35/23<br>B60K 35/28<br>B60K 35/29<br>G08G 1/16<br>(11) EP3922501<br>(21) EP21172096.6<br>(47) 18.12.2024<br>(22) 04.05.2021<br>(54) CONTROL OF A DISPLAY OF AN<br>AUGMENTED REALITY HEAD-UP<br>DISPLAY DEVICE FOR A METHOD OF<br>TRANSPORT<br>(73) VOLKSWAGEN AG<br>(72) Tabaibi, Yannis<br>Kunze, Alexander<br>(31) 102020207314<br>(32) 11.06.2020<br>(33) Germany                                                                                                     | (51) B60L 53/12<br>B60L 58/12<br>B60L 58/19<br>B60L 8/00<br>B60K 16/00<br>B60K 7/00<br>B60L 58/22<br>H01M 10/42<br>H02J 50/10<br>H01M 10/44<br>H02J 7/00<br>(11) EP3960533<br>(21) EP20860325.8<br>(47) 18.12.2024<br>(87) KR2020011881<br>11.03.2021<br>(22) 03.09.2020<br>(54) BATTERY SYSTEM AND METHOD FOR<br>CONTROLLING BATTERY SYSTEM<br>(73) LG Energy Solution, Ltd.<br>(72) KIM, Ji Eun<br>PARK, Jae Dong<br>LEE, Sang Hoon<br>CHO, Hyun Ki<br>(31) 20190111070<br>(32) 06.09.2019<br>(33) Korea (Republic) | (51) B60L 58/26<br>B60H 1/00<br>H01M 10/663<br>H01M 10/625<br>B61C 3/02<br>B61D 27/00<br>(11) EP4049888<br>(21) EP22157234.0<br>(47) 18.12.2024<br>(22) 17.02.2022<br>(54) COOLING DEVICE FOR A CAR<br>BATTERY<br>(73) Siemens Mobility GmbH<br>(72) Brendel, Thomas<br>(31) 102021201795<br>(32) 25.02.2021<br>(33) Germany                                                                                                                                              |
| (51) B60L 7/10<br>B60W 30/18<br>B60L 15/20<br>B60W 10/02<br>B60W 10/06<br>B60K 6/485<br>B60L 50/10<br>B60L 7/18<br>B60L 1/08<br>B60W 50/00<br>B60K 6/20<br>B60W 20/15<br>(11) EP4011679<br>(21) EP20879374.5<br>(47) 18.12.2024<br>(87) CN2020110695<br>29.04.2021<br>(22) 24.08.2020<br>(54) ENERGY RECOVERY CONTROL<br>METHOD AND DEVICE FOR VEHICLE<br>(73) Great Wall Motor Company Limited<br>(72) CHEN, Shujiang<br>WANG, Yinlei<br>DENG, Weifeng<br>LIU, Xiu<br>HOU, Wentao | (51) B60L 58/16<br>G06Q 10/06<br>G06Q 50/10<br>G06Q 40/08<br>G06Q 50/06<br>B60L 58/12<br>B60L 53/65<br>G06Q 50/40<br>B60L 53/60<br>G01R 31/392<br>B60L 53/66<br>B60L 53/67<br>B60L 53/68<br>B60L 53/62<br>(11) EP4064174<br>(21) EP21776702.9<br>(47) 18.12.2024<br>(87) KR2021003673<br>30.09.2021                                                                                                                                                                                                                   | (51) B60M 1/30<br>B60M 3/00<br>B60L 5/08<br>B60L 5/39<br>(11) EP3904154<br>(21) EP19909565.4<br>(47) 18.12.2024<br>(87) CN2019093245<br>16.07.2020<br>(22) 27.06.2019<br>(54) THREE-RAIL POWER SUPPLY<br>CONTROL SYSTEM FOR ELECTRIC<br>RAILWAY TRAIN<br>(73) Southwest Jiaotong University<br>(72) XIE, Shaofeng<br>LI, Shuqian<br>HUANG, Xiaohong<br>LI, Qunzhan<br>WU, Bo<br>GUO, Yuhua<br>LI, Zihan<br>GUO, Kai<br>(31) 201910019226<br>(32) 09.01.2019<br>(33) China |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (51) B60N 2/64<br>A47C 31/00<br>A47C 7/18<br>B60N 2/70<br>C09K 21/14<br>B32B 5/02<br>B32B 5/18<br>B32B 5/24<br>B32B 5/32<br>B32B 7/12<br>B32B 9/04<br>B32B 27/00                                                                                                                                                                                                                                                                                                          |

|                                        |                                       |                                   |
|----------------------------------------|---------------------------------------|-----------------------------------|
| B32B 27/06                             | (54) VEHICLE LIGHT FIXTURE AND        | (22) 08.09.2021                   |
| B32B 27/30                             | BRACKET STRUCTURE THEREOF             | (54) METHOD FOR PREVENTING NON-   |
| B32B 27/32                             | (73) Kang, Ting-Kai                   | DEPRESSION OF AIRBAGS BY SHORT    |
| B60N 2/28                              | (72) Kang, Ting-Kai                   | CIRCUITING OF OTHER AIRBAGS       |
| B32B 33/00                             | (31) 111124982                        | (73) Elmos Semiconductor SE       |
| (11) EP4105073                         | (32) 04.07.2022                       | (72) Sudhaus, André               |
| (21) EP22188718.5                      | (33) Taiwan, Chinese Taipei           | Frieman, Uwe                      |
| (47) 18.12.2024                        | (51) B60R 16/023                      | (31) 102020126014                 |
| (22) 26.07.2018                        | (11) EP3882086                        | (32) 05.10.2020                   |
| (54) FIREPROOF BUFFERING               | (21) EP21163546.1                     | (33) Germany                      |
| STRUCTURE, SUPPORTING CUSHION          | (47) 18.12.2024                       | (51) B60T 7/04                    |
| APPARATUS AND SAFETY SEAT              | (22) 18.03.2021                       | (11) EP4355622                    |
| THEREWITH                              | (54) SENSORIZED PANEL FOR DETECTION   | (21) EP22722445.8                 |
| (73) Wonderland Switzerland AG         | OF AN IMPACT ON A VEHICLE             | (47) 18.12.2024                   |
| (72) LIU, Jian Hui                     | (73) Iveco S.p.A.                     | (87) EP2022059685                 |
| KOU, Yong Chao                         | (72) AIMO BOOT, Marco                 | 22.12.2022                        |
| YAN, Feng Xiang                        | BERNARDINI, Alessandro                | (22) 12.04.2022                   |
| (31) 201810551224                      | (31) 202000005779                     | (54) HYDRAULIC BLOCK FOR BRAKE    |
| 201720939006 U                         | (32) 18.03.2020                       | ASSEMBLY OF A HYDRAULIC           |
| (32) 31.05.2018                        | (33) Italy                            | INDEPENDENT POWER BRAKE           |
| 28.07.2017                             | (51) B60R 16/027                      | SYSTEM                            |
| (33) China                             | (11) EP4281330                        | (73) Robert Bosch GmbH            |
| China                                  | (21) EP22700623.6                     | (72) KASERER, Stefan              |
| (51) B60N 3/02                         | (47) 18.12.2024                       | MAYR, Matthias                    |
| B62D 49/00                             | (87) EP2022050632                     | WEH, Andreas                      |
| B62D 25/16                             | 28.07.2022                            | (31) 102021206074                 |
| A01C 11/02                             | (22) 13.01.2022                       | (32) 15.06.2021                   |
| (11) EP3766764                         | (54) STEERING COLUMN MODULE FOR       | (33) Germany                      |
| (21) EP19767536.6                      | ATTACHMENT TO A STEERING              | (51) B60T 7/04                    |
| (47) 18.12.2024                        | COLUMN OF A MOTOR VEHICLE,            | B60T 7/16                         |
| (87) JP2019007727                      | AND METHOD FOR CHECKING A             | B60T 8/32                         |
| 19.09.2019                             | STEERING COLUMN MODULE                | B60T 8/34                         |
| (22) 28.02.2019                        | (73) Valeo Schalter und Sensoren GmbH | B60T 8/36                         |
| (54) WORK VEHICLE                      | (72) THOM, Jens                       | B60T 8/40                         |
| (73) Yanmar Power Technology Co., Ltd. | MAHLER, Reinhard                      | B60T 13/12                        |
| (72) KOMIYA, Toshitaka                 | (31) 102021101183                     | B60T 13/14                        |
| FUSHIMI, Shimpachi                     | (32) 21.01.2021                       | B60T 13/66                        |
| IIDA, Tetsuya                          | (33) Germany                          | B60T 13/74                        |
| (31) 2018215386                        | (51) B60R 19/12                       | B60T 15/04                        |
| 2018046589                             | (11) EP4159547                        | B60T 11/20                        |
| (32) 16.11.2018                        | (21) EP22196532.0                     | B60T 11/21                        |
| 14.03.2018                             | (47) 18.12.2024                       | B60T 11/22                        |
| (33) Japan                             | (22) 20.09.2022                       | B62D 11/00                        |
| Japan                                  | (54) FRONT STRUCTURE OF VEHICLE       | B62D 11/02                        |
| (51) B60P 1/48                         | (73) MAZDA MOTOR CORPORATION          | B62D 11/06                        |
| B60P 1/64                              | (72) TASHIRO, Kuniyoshi               | B62D 11/08                        |
| (11) EP4282707                         | FURUTANI, Masayuki                    | (11) EP4172010                    |
| (21) EP22215297.7                      | (31) 2021162535                       | (21) EP21726689.9                 |
| (47) 18.12.2024                        | (32) 01.10.2021                       | (47) 18.12.2024                   |
| (22) 21.12.2022                        | (33) Japan                            | (87) EP2021063982                 |
| (54) WORKING EQUIPMENT WITH A LIFT     | (51) B60R 21/0136                     | 02.12.2021                        |
| FRAME ASSEMBLY WITH ALIGNMENT          | G08B 25/01                            | (22) 26.05.2021                   |
| CAPABILITIES                           | (11) EP4206041                        | (54) IMPROVED BOOSTED BRAKE       |
| (73) Hiab AB                           | (21) EP22216868.4                     | CONTROL HYDRAULIC                 |
| (72) Mattila, Tommi                    | (47) 18.12.2024                       | ARRANGEMENT FOR WORK              |
| Vähä-Piikkiö, Ville                    | (22) 28.12.2022                       | VEHICLES                          |
| Nyström, Mikko                         | (54) VEHICLE IMPACT DETECTION         | (73) CNH Industrial Italia S.p.A. |
| Sirén, Pasi                            | SYSTEM                                | (72) CIARROCCHI, Marco, Pietro    |
| (51) B60Q 1/04                         | (73) Delev, Tsvetan                   | PASINI, Gianpaolo                 |
| B60Q 1/26                              | (72) Delev, Tsvetan                   | (31) 202000012421                 |
| F16B 9/00                              | (31) 202200011                        | (32) 26.05.2020                   |
| F16B 2/10                              | (32) 02.01.2022                       | (33) Italy                        |
| F16B 7/20                              | (33) United Kingdom                   | (51) B60T 7/04                    |
| (11) EP4303074                         | (51) B60R 21/017                      | B60T 8/36                         |
| (21) EP22187198.1                      | (11) EP4339039                        | (11) EP4330091                    |
| (47) 18.12.2024                        | (21) EP24020036.0                     | (21) EP22722469.8                 |
| (22) 27.07.2022                        | (47) 18.12.2024                       | (47) 18.12.2024                   |
|                                        |                                       | (87) EP2022059727                 |

|                                   |                                   |                                           |
|-----------------------------------|-----------------------------------|-------------------------------------------|
| 03.11.2022                        | (54) AUTONOMOUS GLADHANDS         | (22) 30.01.2020                           |
| (22) 12.04.2022                   | COUPLING SYSTEM                   | (54) VEHICLE DRIVE DEVICE                 |
| (54) HYDRAULIC BLOCK FOR BRAKE    | (73) Robotic Research Opco, LLC   | (73) AISIN CORPORATION                    |
| ASSEMBLY OF A HYDRAULIC           | (72) KNIZHNIK, Gedaliah           | (72) SUZUKI, Takahiro                     |
| INDEPENDENT POWER BRAKE           | MURPHY, Karl                      | WATANABE, Tadaaki                         |
| SYSTEM                            | ROTUNDO, Steven                   | (31) 2019014891                           |
| (73) Robert Bosch GmbH            | LACAZE, Alberto                   | (32) 30.01.2019                           |
| (72) WEH, Andreas                 | (31) 202263334667 P               | (33) Japan                                |
| KASERER, Stefan                   | (32) 26.04.2022                   |                                           |
| (31) 102021204253                 | (33) United States of America     | (51) B60W 30/09                           |
| (32) 28.04.2021                   | (51) B60T 17/18                   | B60W 30/095                               |
| (33) Germany                      | B60T 17/00                        | B60W 30/16                                |
| (51) B60T 8/17                    | B60T 17/22                        | B60W 40/04                                |
| (11) EP4342750                    | B61H 1/00                         | G08G 1/16                                 |
| (21) EP23195984.2                 | B60T 13/66                        | (11) EP3856594                            |
| (47) 18.12.2024                   | (11) EP4137375                    | (21) EP19790800.7                         |
| (22) 07.09.2023                   | (21) EP22198212.7                 | (47) 18.12.2024                           |
| (54) TRAILER BRAKE CONTROL SYSTEM | (47) 18.12.2024                   | (87) IB2019058088                         |
| AND METHOD OF CONTROLLING A       | (22) 12.07.2019                   | 02.04.2020                                |
| BRAKING SYSTEM                    | (54) BRAKE MONITORING SYSTEMS FOR | (22) 24.09.2019                           |
| (73) ZF CV Systems Europe BV      | RAILCARS                          | (54) AUTOMOTIVE DRIVER ASSISTANCE         |
| (72) YILMAZ, Mehmet               | (73) Amsted Rail Company, Inc.    | (73) C.R.F. Società Consortile per Azioni |
| (31) 202217934436                 | (72) MARTIN, Andrew, H.           | (72) MARCHETTO, Alessandro                |
| (32) 22.09.2022                   | (31) 201862697054 P               | ALTOMARE, Luciano                         |
| (33) United States of America     | (32) 12.07.2018                   | STECCANELLA, Andrea                       |
| (51) B60T 11/16                   | (33) United States of America     | DENTI, Paolo                              |
| B60T 17/22                        | (51) B60W 10/06                   | DARIN, Marco                              |
| (11) EP4124526                    | B60W 30/17                        | VISINTAINER, Filippo                      |
| (21) EP22186696.5                 | B60W 30/18                        | (31) 201800008871                         |
| (47) 18.12.2024                   | (11) EP4108533                    | (32) 24.09.2018                           |
| (22) 25.07.2022                   | (21) EP22181002.1                 | (33) Italy                                |
| (54) DIAGNOSIS SYSTEM AND METHOD  | (47) 18.12.2024                   |                                           |
| FOR A BICYCLE HYDRAULIC           | (22) 24.06.2022                   | (51) B60W 30/09                           |
| BRAKING SYSTEM OF A DISC TYPE     | (54) AUTOMATED VIRTUAL LAUNCH     | B60W 30/095                               |
| (73) Campagnolo S.r.l.            | TORQUE GENERATION                 | B60W 30/16                                |
| (72) BOVE, Filippo                | (73) Paccar Inc                   | B60W 40/04                                |
| RUBINI, Stefano                   | (72) SYLTEBO, Andy                | G08G 1/16                                 |
| MEGGIOLAN, Mario                  | NELSON, James                     | (11) EP3856595                            |
| (31) 202100020564                 | CURGUS, Vedran                    | (21) EP19790801.5                         |
| (32) 30.07.2021                   | NHILA, Amine                      | (47) 18.12.2024                           |
| (33) Italy                        | (31) 202117357677                 | (87) IB2019058090                         |
| (51) B60T 13/66                   | (32) 24.06.2021                   | 02.04.2020                                |
| B60T 8/171                        | (33) United States of America     | (22) 24.09.2019                           |
| B60T 8/172                        | (51) B60W 20/50                   | (54) AUTOMOTIVE DRIVER ASSISTANCE         |
| B60T 13/74                        | B60K 6/48                         | (73) C.R.F. Società Consortile per Azioni |
| B60T 17/22                        | B60K 6/52                         | (72) ALTOMARE, Luciano                    |
| (11) EP3898362                    | B60K 6/547                        | MARCHETTO, Alessandro                     |
| (21) EP19832619.1                 | B60W 10/06                        | VISINTAINER, Filippo                      |
| (47) 18.12.2024                   | B60W 10/08                        | DARIN, Marco                              |
| (87) EP2019085572                 | B60W 10/18                        | DENTI, Paolo                              |
| 25.06.2020                        | B60W 10/30                        | STECCANELLA, Andrea                       |
| (22) 17.12.2019                   | F16H 59/68                        | (31) 201800008875                         |
| (54) BRAKE SYSTEM                 | F16H 61/12                        | (32) 24.09.2018                           |
| (73) Schwarz, Severin             | F16H 63/50                        | (33) Italy                                |
| (72) PUTZ, Michael                | B60W 10/02                        |                                           |
| (31) 511222018                    | B60W 10/103                       | (51) B60W 30/09                           |
| (32) 17.12.2018                   | B60W 10/108                       | B60W 50/00                                |
| (33) Austria                      | B60W 30/184                       | B60W 60/00                                |
| (51) B60T 17/04                   | B60W 30/186                       | G05D 1/00                                 |
| B60D 1/62                         | B60W 30/18                        | (11) EP4129788                            |
| B62D 53/12                        | B60K 6/387                        | (21) EP21808942.3                         |
| (11) EP4294687                    | B60K 6/448                        | (47) 18.12.2024                           |
| (21) EP23724596.4                 | B60W 50/038                       | (87) CN2021094931                         |
| (47) 18.12.2024                   | (11) EP3919334                    | 25.11.2021                                |
| (87) US2023019970                 | (21) EP20749005.3                 | (22) 20.05.2021                           |
| 02.11.2023                        | (47) 18.12.2024                   | (54) AUTOMATED GUIDED VEHICLE,            |
| (22) 26.04.2023                   | (87) JP2020003451                 | AND METHOD AND SYSTEM FOR                 |
|                                   | 06.08.2020                        | CONTROLLING AUTOMATED GUIDED              |
|                                   |                                   | VEHICLE                                   |
|                                   |                                   | (73) Beijing Jingdong Qianshi Technology  |
|                                   |                                   | Co., Ltd.                                 |

|                                                    |                                            |                                                                           |
|----------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------|
| (72) WANG, Zhen<br>SHANG, Chunpeng<br>XIN, Xueqian | G08G 1/01<br>G01S 13/931<br>(11) EP3587209 | (47) 18.12.2024<br>(22) 08.06.2022<br>(54) PLATFORM GAP FILLER DEVICE FOR |
| (31) 202010436900                                  | (21) EP18757783.8                          | A RAILWAY VEHICLE AND RAILWAY                                             |
| (32) 21.05.2020                                    | (47) 18.12.2024                            | VEHICLE COMPRISING SAID DEVICE                                            |
| (33) China                                         | (87) JP2018003742                          | (73) Construcciones Y Auxiliar de                                         |
| (51) B60W 30/095                                   | 30.08.2018                                 | Ferrocarriles, S.A.                                                       |
| B60W 40/105                                        | (22) 05.02.2018                            | (72) LINARES SALINAS, Carlos                                              |
| B60W 40/107                                        | (54) VEHICLE                               | VILLA FERRER, Joaquín                                                     |
| B60W 40/109                                        | (73) Hitachi Astemo, Ltd.                  | CHAVARRI ALECHA, Javier                                                   |
| B60W 60/00                                         | (72) MITSUHASHI, Masahito                  | (51) B61D 27/00                                                           |
| B60W 30/18                                         | KAWASHIMA, Takayuki                        | B60H 1/24                                                                 |
| B60W 50/00                                         | FUKASAWA, Yoshitaka                        | B60H 1/00                                                                 |
| (11) EP4063214                                     | (31) 2017029744                            | (11) EP3950459                                                            |
| (21) EP21830010.1                                  | (32) 21.02.2017                            | (21) EP19861284.8                                                         |
| (47) 18.12.2024                                    | (33) Japan                                 | (47) 18.12.2024                                                           |
| (87) CN2021101525                                  | (51) B60W 60/00                            | (87) JP2019013117                                                         |
| 30.12.2021                                         | B60W 40/04                                 | 01.10.2020                                                                |
| (22) 22.06.2021                                    | G06N 20/00                                 | (22) 27.03.2019                                                           |
| (54) METHOD AND DEVICE FOR                         | G08G 1/16                                  | (54) VENTILATION DEVICE FOR RAILWAY                                       |
| COLLISION AVOIDANCE CONTROL IN                     | B60W 30/18                                 | VEHICLES                                                                  |
| AUTOMATIC LANE CHANGE, VEHICLE,                    | (11) EP4119412                             | (73) Hitachi, Ltd.                                                        |
| AND STORAGE MEDIUM                                 | (21) EP21865910.0                          | (72) KON, Misaki                                                          |
| (73) China Faw Co., Ltd.                           | (47) 18.12.2024                            | AKIMARU, Daisuke                                                          |
| (72) CUI, Maoyuan                                  | (87) CN2021116193                          | KOREISHI, Kazuto                                                          |
| SUN, Lianming                                      | 17.03.2022                                 | HAYASHI, Tomoo                                                            |
| TAO, Pei                                           | (22) 02.09.2021                            | MORITA, Kiyoshi                                                           |
| LIANG, Guiyou                                      | (54) VEHICLE-BASED DATA PROCESSING         | (51) B61G 5/10                                                            |
| (31) 202010591875                                  | METHOD, COMPUTER DEVICE, AND               | G01M 17/08                                                                |
| (32) 24.06.2020                                    | STORAGE MEDIUM                             | (11) EP4238848                                                            |
| (33) China                                         | (73) Tencent Technology (Shenzhen)         | (21) EP23159966.3                                                         |
| (51) B60W 50/00                                    | Company Limited                            | (47) 18.12.2024                                                           |
| (11) EP4029751                                     | (72) YOU, Changxi                          | (22) 03.03.2023                                                           |
| (21) EP22151128.0                                  | (31) 202010947834                          | (54) SYSTEM TO SIMULATE THE WORK                                          |
| (47) 18.12.2024                                    | (32) 10.09.2020                            | CONDITIONS OF THE CONNECTION                                              |
| (22) 12.01.2022                                    | (33) China                                 | CABLES BETWEEN TWO FOLLOWING                                              |
| (54) VEHICLE CONTROL SYSTEM,                       | (51) B61B 3/02                             | CARS OF A RAILWAY RAKE                                                    |
| VEHICLE CONTROL METHOD, AND                        | (11) EP3943356                             | (73) Teknikabel S.p.A.                                                    |
| STORAGE MEDIUM                                     | (21) EP19919868.0                          | (72) CLERICI, Diego                                                       |
| (73) Nio Technology (Anhui) Co., Ltd               | (47) 18.12.2024                            | MILANESIO, Riccardo                                                       |
| (72) TEOBALDI, Danilo                              | (87) CN2019087415                          | TOSO, Stefano                                                             |
| XIAO, Bohong                                       | 24.09.2020                                 | (31) 202200004178                                                         |
| WANG, Baotian                                      | (22) 17.05.2019                            | (32) 04.03.2022                                                           |
| YUAN, Da                                           | (54) ROPEWAY SELF-PROPELLED                | (33) Italy                                                                |
| (31) 202110035337                                  | TRANSPORTING EQUIPMENT                     | (51) B62D 6/00                                                            |
| (32) 12.01.2021                                    | (73) Guo, Yanwei                           | B62D 5/04                                                                 |
| (33) China                                         | (72) Guo, Yanwei                           | (11) EP3974289                                                            |
| (51) B60W 50/00                                    | (31) 201910200590                          | (21) EP21197995.0                                                         |
| B60W 40/09                                         | (32) 16.03.2019                            | (47) 18.12.2024                                                           |
| (11) EP4132828                                     | (33) China                                 | (22) 21.09.2021                                                           |
| (21) EP21716405.2                                  | (51) B61C 3/02                             | (54) STEERING CONTROL DEVICE                                              |
| (47) 18.12.2024                                    | B60K 6/00                                  | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA                                      |
| (87) EP2021058711                                  | B60L 50/10                                 | JTEKT CORPORATION                                                         |
| 14.10.2021                                         | B61C 7/04                                  | (72) KODERA, Takashi                                                      |
| (22) 01.04.2021                                    | E01B 29/00                                 | TAKASHIMA, Toru                                                           |
| (54) METHOD FOR RECOGNISING A                      | (11) EP4086131                             | (31) 2020159589                                                           |
| DRIVING MODE OF A VEHICLE AND                      | (21) EP21172175.8                          | (32) 24.09.2020                                                           |
| ASSOCIATED RECOGNITION DEVICE                      | (47) 18.12.2024                            | (33) Japan                                                                |
| (73) Ampere SAS                                    | (22) 04.05.2021                            | (51) B62D 15/02                                                           |
| (72) BIERINX, Nicolas                              | (54) RAIL-BOUND WORK VEHICLE WITH A        | G06Q 20/14                                                                |
| RANDON, Mathieu                                    | SERIAL HYBRID DRIVE                        | G05D 1/00                                                                 |
| (31) 2003650                                       | (73) Windhoff Bahn- und Anlagentechnik     | G06Q 20/30                                                                |
| (32) 10.04.2020                                    | GmbH                                       | (11) EP4019371                                                            |
| (33) France                                        | (72) LEUPOLD, Andre                        | (21) EP21205006.6                                                         |
| (51) B60W 50/02                                    | EMMERICH, Jaques                           | (47) 18.12.2024                                                           |
| B60W 30/16                                         | (51) B61D 23/02                            | (22) 27.10.2021                                                           |
| G08G 1/09                                          | (11) EP4289700                             | (54) VEHICLE CONTROL SYSTEM AND                                           |
| G08G 1/16                                          | (21) EP22382544.9                          | VEHICLE CONTROL METHOD                                                    |

|                                                                                                                                  |                                                |                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------|
| (73) TOYOTA JIDOSHA KABUSHIKI KAISHA                                                                                             | (51) B62J 50/22                                | (54) DISPLAY UNIT AND ELECTRIC BICYCLE                                           |
| (72) OKAMURA, Ryuji                                                                                                              | B62J 45/415                                    | (73) Biketec GmbH                                                                |
| (31) 2020213868                                                                                                                  | B62K 21/00                                     | (72) DURDEVIC, Ivica                                                             |
| (32) 23.12.2020                                                                                                                  | B60W 30/045                                    | STUDER, Lukas Beat                                                               |
| (33) Japan                                                                                                                       | B60W 30/18                                     | AFZAL, Omar                                                                      |
| (51) B62D 53/08                                                                                                                  | B60W 40/09                                     | WOELK, Timo                                                                      |
| B60W 30/04                                                                                                                       | B60W 40/114                                    | LANZ, Simon                                                                      |
| B60W 40/13                                                                                                                       | B60W 50/14                                     | WOODTLI, Robin                                                                   |
| B60W 40/10                                                                                                                       | B62H 7/00                                      | SUTER, Philipp Walter                                                            |
| (11) EP4251495                                                                                                                   | (11) EP4035981                                 | (31) 102015216186                                                                |
| (21) EP20816139.8                                                                                                                | (21) EP20879732.4                              | 102015216178                                                                     |
| (47) 18.12.2024                                                                                                                  | (47) 18.12.2024                                | 102015216188                                                                     |
| (87) EP2020083367                                                                                                                | (87) JP2020039949                              | (32) 25.08.2015                                                                  |
| 02.06.2022                                                                                                                       | 29.04.2021                                     | 25.08.2015                                                                       |
| (22) 25.11.2020                                                                                                                  | (22) 23.10.2020                                | 25.08.2015                                                                       |
| (54) A METHOD OF CONTROLLING A VEHICLE COMBINATION, CORRESPONDING CONTROL SYSTEM, COMPUTER PROGRAM, AND COMPUTER READABLE MEDIUM | (54) LEANING-VEHICLE-DATA-OUTPUT APPARATUS     | (33) Germany                                                                     |
| (73) VOLVO TRUCK CORPORATION                                                                                                     | (73) Yamaha Hatsudoki Kabushiki Kaisha         | Germany                                                                          |
| (72) LAINE, Leo                                                                                                                  | (72) MORISHIMA, Keisuke                        | Germany                                                                          |
| JONASSON, Mats                                                                                                                   | (31) PCT/JP2019/041922                         | (51) B62M 6/90                                                                   |
| (51) B62D 61/12                                                                                                                  | (32) 25.10.2019                                | B62M 6/65                                                                        |
| B60G 3/12                                                                                                                        | (33) World Intellectual Property Office (WIPO) | B62J 43/13                                                                       |
| B60K 7/00                                                                                                                        | (51) B62K 7/04                                 | B62J 43/28                                                                       |
| B62D 5/12                                                                                                                        | B60P 9/00                                      | B62K 3/04                                                                        |
| B60G 17/0165                                                                                                                     | B62B 7/00                                      | B62K 19/30                                                                       |
| (11) EP3733488                                                                                                                   | B62B 7/12                                      | B62K 19/34                                                                       |
| (21) EP18895993.6                                                                                                                | (11) EP3971071                                 | (11) EP3945011                                                                   |
| (47) 18.12.2024                                                                                                                  | (21) EP20196800.5                              | (21) EP21186001.0                                                                |
| (87) JP2018047285                                                                                                                | (47) 18.12.2024                                | (47) 18.12.2024                                                                  |
| 04.07.2019                                                                                                                       | (22) 18.09.2020                                | (22) 16.07.2021                                                                  |
| (22) 21.12.2018                                                                                                                  | (54) BIKE TRAILER                              | (54) BICYCLE WITH REMOVABLE BATTERY                                              |
| (54) WORK VEHICLE                                                                                                                | (73) Thule Sweden AB                           | (73) Fantic Motor S.p.A.                                                         |
| (73) Kubota Corporation                                                                                                          | (72) MENDES, Karl                              | (72) ROMAN, Mariano                                                              |
| (72) HIRAOKA Minoru                                                                                                              | BRITTON, Daniel                                | FIDELFATTI, Enrico                                                               |
| ISHIKAWA Junichi                                                                                                                 | ARVIDSSON, Andreas                             | (31) 202000018547                                                                |
| (31) 2017248209                                                                                                                  | FAVERO, Garrett                                | (32) 30.07.2020                                                                  |
| 2017248207                                                                                                                       | ANDERSSON, Stefan                              | (33) Italy                                                                       |
| (32) 25.12.2017                                                                                                                  | (51) B62K 21/26                                | (51) B62M 9/122                                                                  |
| 25.12.2017                                                                                                                       | B25D 17/04                                     | B62M 9/125                                                                       |
| (33) Japan                                                                                                                       | B25F 5/00                                      | B62M 9/126                                                                       |
| Japan                                                                                                                            | F16F 15/08                                     | (11) EP3964437                                                                   |
| (51) B62J 27/00                                                                                                                  | (11) EP4301653                                 | (21) EP21020415.2                                                                |
| G05D 1/00                                                                                                                        | (21) EP22711092.1                              | (47) 18.12.2024                                                                  |
| B60W 10/20                                                                                                                       | (47) 18.12.2024                                | (22) 16.08.2021                                                                  |
| B62K 21/00                                                                                                                       | (87) IB2022051673                              | (54) ELECTROMECHANICAL REAR DERAILLEUR FOR COAXIAL ASSEMBLY WITH BLOCKING DEVICE |
| B62J 45/415                                                                                                                      | 09.09.2022                                     | (73) SRAM Deutschland GmbH                                                       |
| B62J 45/412                                                                                                                      | (22) 25.02.2022                                | (72) Braedt, Henrik                                                              |
| B62J 45/411                                                                                                                      | (54) ANTI-VIBRATION HANDLE GRIP                | Redecker, Heiko                                                                  |
| B62D 6/00                                                                                                                        | (73) Pirrotta, Antonina                        | (31) 102021003745                                                                |
| B60W 30/04                                                                                                                       | Evola, Andrea                                  | 102020005402                                                                     |
| (11) EP4032793                                                                                                                   | (72) Pirrotta, Antonina                        | (32) 21.07.2021                                                                  |
| (21) EP22160686.6                                                                                                                | (31) 202100004691                              | 03.09.2020                                                                       |
| (47) 18.12.2024                                                                                                                  | (32) 01.03.2021                                | (33) Germany                                                                     |
| (22) 15.03.2020                                                                                                                  | (33) Italy                                     | Germany                                                                          |
| (54) A VEHICLE STABILISING SYSTEM AND METHOD OF OPERATION THEREOF                                                                | (51) B62M 6/45                                 | (51) B62M 9/122                                                                  |
| (73) TVS Motor Company Limited                                                                                                   | B62M 6/50                                      | B62M 9/126                                                                       |
| (72) Karnam Venkata Manga, Raju                                                                                                  | B62M 6/55                                      | B62M 9/1242                                                                      |
| Sharad, Singhania                                                                                                                | B62K 19/30                                     | B62M 9/124                                                                       |
| (31) 202042010983                                                                                                                | B62K 23/02                                     | (11) EP4086153                                                                   |
| 201941010133                                                                                                                     | B62K 23/06                                     | (21) EP22172003.0                                                                |
| (32) 13.03.2020                                                                                                                  | (11) EP3337722                                 | (47) 18.12.2024                                                                  |
| 15.03.2019                                                                                                                       | (21) EP16760020.4                              | (22) 06.05.2022                                                                  |
| (33) India                                                                                                                       | (47) 18.12.2024                                | (54) BICYCLE DERAILLEUR                                                          |
| India                                                                                                                            | (87) EP2016070082                              | (73) SRAM, LLC                                                                   |
|                                                                                                                                  | 02.03.2017                                     | (72) Hahn, Sage                                                                  |
|                                                                                                                                  | (22) 25.08.2016                                | Shipman, Christopher                                                             |

|                                   |                                  |                                              |
|-----------------------------------|----------------------------------|----------------------------------------------|
| (31) 202117314949                 | GLAZING UNIT OR TO A GRIPPING    | (54) FLYING OBJECT, FLYING OBJECT            |
| (32) 07.05.2021                   | FRAME THEREOF                    | SYSTEM, AND METHOD FOR                       |
| (33) United States of America     | (73) Saint-Gobain Glass France   | PAINTING OBJECT TO BE PAINTED                |
| (51) B63B 7/08                    | (72) MAYEUX, Jean-Benoît         | (73) Hitachi, Ltd.                           |
| B63B 34/22                        | FREMY, Flavien                   | (72) UHARA Osamu                             |
| B63B 73/46                        | (31) 1911415                     | KATSUMURA Nobuhito                           |
| (11) EP4324733                    | (32) 14.10.2019                  | (31) 2019100062                              |
| (21) EP22207706.7                 | (33) France                      | (32) 29.05.2019                              |
| (47) 18.12.2024                   | (51) B64C 1/26                   | (33) Japan                                   |
| (22) 16.11.2022                   | (11) EP4053014                   | (51) B64C 25/26                              |
| (54) INFLATABLE KAYAK             | (21) EP22151264.3                | (11) EP3945019                               |
| (73) Woosung I.B Co., Ltd         | (47) 18.12.2024                  | (21) EP21187201.5                            |
| (72) LEE, Hee Jae                 | (22) 13.01.2022                  | (47) 18.12.2024                              |
| LIM, Lee Young                    | (54) ASSEMBLY AND METHOD         | (22) 22.07.2021                              |
| (31) 20220103299                  | CONNECTING AN AIRCRAFT WING      | (54) MECHANICALLY OPERATED LANDING           |
| (32) 18.08.2022                   | AFT SPAR ROOT TO AN AIRCRAFT     | GEAR UPLOCK SYSTEMS AND                      |
| (33) Korea (Republic)             | BODY FUSELAGE                    | METHODS                                      |
| (51) B63B 21/50                   | (73) The Boeing Company          | (73) Goodrich Corporation                    |
| G01L 5/10                         | (72) Alvarez-Quinones, Norma L.  | (72) VASUDEVA, Vishwanath                    |
| B63B 79/10                        | Fear, Ryan A.                    | MARAPPAN, Bharath                            |
| B63B 79/20                        | Wiseman, Jesse R.                | CEPIC, Adnan                                 |
| B63B 79/30                        | Watson, Orion P.                 | KULKARNI, Sagar                              |
| (11) EP3947134                    | Salisbury, Emmett A.             | (31) 202041032124                            |
| (21) EP20701653.6                 | Teoh, Soo H.                     | 202017132113                                 |
| (47) 18.12.2024                   | Fletcher, Daniel H.              | (32) 27.07.2020                              |
| (87) EP2020052338                 | Shadell, Mark E.                 | 23.12.2020                                   |
| 08.10.2020                        | Rush, Michael R.                 | (33) India                                   |
| (22) 30.01.2020                   | Beneke, Brent E.                 | United States of America                     |
| (54) A METHOD FOR INSPECTION      | Estell, Patricia W.              | (51) B64C 25/50                              |
| OF CATENARY ANCHOR LINES          | Leibov, David H.                 | B64C 25/34                                   |
| CONNECTED TO A FLOATING OBJECT    | McLaughlin, Mark R.              | (11) EP4294721                               |
| (73) Single Buoy Moorings Inc     | (31) 202163157327 P              | (21) EP22709787.0                            |
| (72) ANTOINE, Jeannin             | (32) 05.03.2021                  | (47) 18.12.2024                              |
| VIEIRA CAMARA DE CASTRO, Rodrigo  | (33) United States of America    | (87) GB2022050567                            |
| TORRE, Giorgio                    | (51) B64C 11/28                  | 29.09.2022                                   |
| (31) 19167343                     | B64C 29/00                       | (22) 03.03.2022                              |
| (32) 04.04.2019                   | B64C 39/02                       | (54) AIRCRAFT LANDING GEAR TORQUE            |
| (33) European Patent Office (EPO) | (11) EP4143084                   | LINK ASSEMBLY                                |
| (51) B63H 23/12                   | (21) EP21723145.5                | (73) Safran Landing Systems UK Limited       |
| B63H 23/30                        | (47) 18.12.2024                  | (72) CHAUHAN, Manish                         |
| B63H 23/18                        | (87) EP2021060905                | (31) 202104123                               |
| (11) EP3938277                    | 04.11.2021                       | (32) 24.03.2021                              |
| (21) EP20712240.9                 | (22) 27.04.2021                  | (33) United Kingdom                          |
| (47) 18.12.2024                   | (54) A PROPELLER FOR AN AIRCRAFT | (51) B64C 27/00                              |
| (87) EP2020056377                 | (73) Katla Aero AB               | B64C 27/04                                   |
| 17.09.2020                        | (72) WIBERG, Gustav              | B64D 17/72                                   |
| (22) 10.03.2020                   | (31) 2050476                     | B64C 27/12                                   |
| (54) A SHAFT LINKAGE FOR LINKING  | (32) 27.04.2020                  | B64C 27/32                                   |
| AND DRIVING AT LEAST TWO          | (33) Sweden                      | B64D 17/80                                   |
| DRIVETRAINS OF A VESSEL           | (51) B64C 13/20                  | (11) EP4257486                               |
| (73) Svitzer A/S                  | B64C 17/08                       | (21) EP23164964.1                            |
| (72) BANGSLUND, Thomas            | B64C 39/02                       | (47) 18.12.2024                              |
| GRUNDTVIG, Esben                  | B64D 1/18                        | (22) 29.03.2023                              |
| (31) PA201900302                  | B64F 3/00                        | (54) ROTARY WING AIRCRAFT                    |
| (32) 11.03.2019                   | B05B 17/00                       | (73) Societa' per Azioni Curti - Costruzioni |
| (33) Denmark                      | B05B 12/14                       | Meccaniche                                   |
| (51) B64C 1/14                    | B64U 101/00                      | (72) VERSARI, Stefano                        |
| E06B 3/00                         | B64U 10/13                       | (31) 202200006902                            |
| (11) EP4045396                    | B64U 101/28                      | (32) 07.04.2022                              |
| (21) EP20790263.6                 | B64U 101/45                      | (33) Italy                                   |
| (47) 18.12.2024                   | B05B 7/24                        | (51) B64D 9/00                               |
| (87) EP2020078588                 | (11) EP3978362                   | (11) EP4140883                               |
| 22.04.2021                        | (21) EP20812793.6                | (21) EP22185709.7                            |
| (22) 12.10.2020                   | (47) 18.12.2024                  | (47) 18.12.2024                              |
| (54) GLAZING UNIT MOUNTED ON A    | (87) JP2020018611                | (22) 19.07.2022                              |
| STRUCTURE BY FASTENING POINTS,    | 03.12.2020                       | (54) LATCH STATE DETECTION SYSTEMS,          |
| AT LEAST ONE OF WHICH IS PLAY-    | (22) 08.05.2020                  | METHODS AND DEVICES                          |
| FREE WITH RESPECT TO THE          |                                  | (73) Goodrich Corporation                    |

|                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) HARMS, Scott<br>ROBERTS, Aaron<br>SCHEER, Dustin P.                                                                                                                                                                                                                                         | (21) EP20191227.6<br>(47) 18.12.2024<br>(22) 14.08.2020                                                                                                                                             | (31) 2202814<br>(32) 29.03.2022<br>(33) France                                                                                                                                                                                                                                                                                           |
| (31) 202117443582<br>(32) 27.07.2021<br>(33) United States of America                                                                                                                                                                                                                            | (54) THIN AND LIGHT CRACK STOPPER<br>WITH DOUBLE EXTRUSION PLIES<br>(73) Goodrich Corporation                                                                                                       | (51) B64D 29/06<br>B64D 29/08<br>B64C 7/02                                                                                                                                                                                                                                                                                               |
| (51) B64D 11/04<br>H04L 67/52<br>H04W 4/02                                                                                                                                                                                                                                                       | (72) HU, Jin<br>CHING, Nathaniel<br>SLANE, Casey                                                                                                                                                    | (11) EP3601055<br>(21) EP18722107.2<br>(47) 18.12.2024<br>(87) FR2018050788<br>04.10.2018                                                                                                                                                                                                                                                |
| (11) EP3878746<br>(21) EP21162160.2<br>(47) 18.12.2024<br>(22) 11.03.2021                                                                                                                                                                                                                        | (31) 201916664162<br>(32) 25.10.2019<br>(33) United States of America                                                                                                                               | (22) 29.03.2018<br>(54) AIRCRAFT PROPULSION UNIT,<br>CONNECTED TO THE FUSELAGE OF<br>SAID AIRCRAFT                                                                                                                                                                                                                                       |
| (54) GALLEY INSERT CONFIGURATION BY<br>TAG<br>(73) Koninklijke Fabriek Inventum B.V.                                                                                                                                                                                                             | (51) B64D 15/12<br>(11) EP3892543<br>(21) EP21166465.1<br>(47) 18.12.2024<br>(22) 31.03.2021                                                                                                        | (73) Safran Nacelles<br>(72) GUILLOIS, Denis<br>(31) 1752701<br>(32) 30.03.2017<br>(33) France                                                                                                                                                                                                                                           |
| (72) HUIJSING, Hans<br>(31) 202016818212<br>(32) 13.03.2020<br>(33) United States of America                                                                                                                                                                                                     | (54) INTEGRATED BUSBAR HEATER FOR<br>ICE PROTECTION SYSTEMS<br>(73) Goodrich Corporation                                                                                                            | (51) B64D 31/06<br>B64U 10/14<br>G05D 1/00<br>G06V 20/13<br>G06V 20/64<br>B64U 101/30                                                                                                                                                                                                                                                    |
| (51) B64D 11/06<br>B64D 11/00<br>B60N 2/00                                                                                                                                                                                                                                                       | (72) CARPINO II, Richard J.<br>(31) 202117200792<br>202063006422 P<br>(32) 13.03.2021<br>07.04.2020                                                                                                 | (11) EP4093671<br>(21) EP21796993.0<br>(47) 18.12.2024<br>(87) US2021017795<br>04.11.2021                                                                                                                                                                                                                                                |
| (11) EP3853127<br>(21) EP19769813.7<br>(47) 18.12.2024<br>(87) EP2019075366<br>26.03.2020                                                                                                                                                                                                        | (33) United States of America<br>United States of America<br>(51) B64D 25/10<br>(11) EP4140894<br>(21) EP22187321.9<br>(47) 18.12.2024<br>(22) 27.07.2022                                           | (22) 12.02.2021<br>(54) PERFORMING 3D RECONSTRUCTION<br>VIA AN UNMANNED AERIAL VEHICLE<br>(73) Skydio, Inc.<br>(72) RICHMAN, Brian<br>BRY, Adam<br>KENNEDY, Ryan David<br>DELEPINE, Quentin Allen Wah Yen<br>HENRY, Peter<br>DONAHOE, Matthew<br>BACHRACH, Abraham<br>ZHU, Jack<br>MONDAL, Himel<br>MARTIROSYAN, Hayk<br>ZHENG, Harrison |
| (54) SEAT SYSTEM FOR A PASSENGER<br>AIRCRAFT AND METHOD<br>(73) Aircraft Cabin Modification GmbH<br>(72) NOSHARI, Arash<br>(31) 18196096<br>(32) 21.09.2018<br>(33) European Patent Office (EPO)                                                                                                 | (54) RETENTION SYSTEMS AND<br>METHODS FOR EJECTION SEATS<br>(73) AMI Industries, Inc.<br>(72) SHAW, Glen<br>WIMMER, Dustin<br>(31) 202117462420<br>(32) 31.08.2021<br>(33) United States of America | (31) 202063050860 P<br>202062976231 P<br>(32) 12.07.2020<br>13.02.2020<br>(33) United States of America<br>United States of America                                                                                                                                                                                                      |
| (51) B64D 13/02<br>B64D 13/06<br>(11) EP3878748<br>(21) EP20382180.6<br>(47) 18.12.2024<br>(22) 12.03.2020                                                                                                                                                                                       | (51) B64D 27/24<br>B64D 31/00<br>F02C 9/28<br>B64D 27/02<br>(11) EP3909856<br>(21) EP21174143.4<br>(47) 18.12.2024<br>(22) 17.05.2021                                                               | (32) 12.07.2020<br>13.02.2020<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                               |
| (54) VEHICLE CABIN AIR SUPPLY DEVICE<br>AND OPERATING METHOD OF SUCH<br>DEVICE<br>(73) Airbus Operations, S.L.<br>(72) MARTINEZ SANCHO, Alberto                                                                                                                                                  | (54) CONTROL SYSTEMS FOR HYBRID<br>ELECTRIC POWER PLANTS<br>(73) PRATT & WHITNEY CANADA CORP.<br>(72) IMEL, Paul C.<br>GUERCHKOVITCH, Leonid<br>MARK, Michael                                       | (51) B64D 31/09<br>(11) EP4320043<br>(21) EP22917639.1<br>(47) 18.12.2024<br>(87) US2022047605<br>03.08.2023<br>(22) 24.10.2022<br>(54) RETROFIT AIRCRAFT<br>AUTOTHROTTLE CONTROL<br>FOR AIRCRAFT WITH ENGINE<br>CONTROLLERS                                                                                                             |
| (51) B64D 13/06<br>(11) EP4306415<br>(21) EP23179000.7<br>(47) 18.12.2024<br>(22) 13.06.2023                                                                                                                                                                                                     | (31) 202016875911<br>(32) 15.05.2020<br>(33) United States of America<br>(51) B64D 27/24<br>B64D 35/00<br>B64D 27/02                                                                                | (73) Innovative Solutions & Support, Inc.<br>Askarpour, Shahram<br>Knopf, Markus<br>(72) KNOPF, Markus<br>ASKARPOUR, Shahram                                                                                                                                                                                                             |
| (54) AIR CONDITIONING DEVICE FOR AN<br>AIRCRAFT COMPRISING A LARGE<br>MIXER, METHOD FOR MOUNTING<br>SUCH A DEVICE AND AIRCRAFT<br>EQUIPPED WITH SUCH AN AIR<br>CONDITIONING DEVICE<br>(73) AIRBUS OPERATIONS (S.A.S.)<br>(72) ARMERO, Bernardo<br>(31) 2207249<br>(32) 13.07.2022<br>(33) France | (11) EP4253248<br>(21) EP23158653.8<br>(47) 18.12.2024<br>(22) 25.02.2023<br>(54) PROPELLER AIRCRAFT<br>(73) AIRBUS HELICOPTERS<br>(72) MALBURET, François<br>EGLIN, Paul                           |                                                                                                                                                                                                                                                                                                                                          |
| (51) B64D 15/00<br>B64D 15/12<br>B64D 15/16<br>(11) EP3812276                                                                                                                                                                                                                                    |                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                          |



|                                      |                                           |                                      |
|--------------------------------------|-------------------------------------------|--------------------------------------|
| HEDRICK, Geoffrey, S.M.              | (33) United States of America             | (72) LANGLET, Floriane               |
| (31) 202163294014 P                  | (51) B64D 45/00                           | CARPONCIN, Delphine                  |
| 202163271044 P                       | G01C 23/00                                | (31) 2204638                         |
| (32) 27.12.2021                      | G05D 1/00                                 | (32) 16.05.2022                      |
| 22.10.2021                           | (11) EP3453623                            | (33) France                          |
| (33) United States of America        | (21) EP18193194.0                         | (51) B64G 1/64                       |
| United States of America             | (47) 18.12.2024                           | (11) EP4310009                       |
| (51) B64D 31/18                      | (22) 07.09.2018                           | (21) EP21718631.1                    |
| B64D 35/023                          | (54) SAFE TAKEOFF SYSTEM                  | (47) 18.12.2024                      |
| B64D 33/00                           | (73) Embraer S.A.                         | (87) ES2021070199                    |
| B64D 27/10                           | (72) Martins, Reinaldo                    | 22.09.2022                           |
| B64D 31/02                           | Pitigliani, Miriam                        | (22) 18.03.2021                      |
| F02C 7/262                           | Seibert, Nelson                           | (54) DOCKING SYSTEM FOR SPACECRAFT   |
| F02C 7/275                           | Barbosa, Nelson                           | AND SPACRAFT COMPRISING THE          |
| F02K 5/00                            | Monteiro de Souza Junior, Rubens          | SAME                                 |
| B64D 27/04                           | Guedes, Patrice London                    | (73) Airbus Defence and Space, S.A.  |
| B64C 27/06                           | Ferreira de Camargo Clark Reis, Jose      | (72) BEÑARAN ECHEZARRETA, Ioritz     |
| B64D 35/08                           | Roberto                                   | ANDRÉS MATEY, Juan Miguel            |
| (11) EP4357249                       | Rodrigues Lima, Grace                     | (51) B64U 10/13                      |
| (21) EP23194149.3                    | (31) 201715698337                         | B64D 1/22                            |
| (47) 18.12.2024                      | (32) 07.09.2017                           | (11) EP3810929                       |
| (22) 30.08.2023                      | (33) United States of America             | (21) EP19728574.5                    |
| (54) METHOD AND AIRCRAFT HAVING AT   | (51) B64D 47/06                           | (47) 18.12.2024                      |
| LEAST ONE COMBUSTION ENGINE          | F21S 10/02                                | (87) DK2019050169                    |
| AND A DRIVE SYSTEM HAVING AT         | F21S 10/06                                | 02.01.2020                           |
| LEAST TWO ELECTRIC MACHINES          | (11) EP3854694                            | (22) 29.05.2019                      |
| (73) Airbus Helicopters              | (21) EP20153743.8                         | (54) IMPROVEMENTS RELATING TO WIND   |
| (72) GAZZINO, Marc                   | (47) 18.12.2024                           | TURBINE MAINTENANCE                  |
| (31) 2210750                         | (22) 24.01.2020                           | (73) VESTAS WIND SYSTEMS A/S         |
| (32) 18.10.2022                      | (54) NAVIGATION LIGHT SYSTEM FOR          | (72) BAUN, Torben Ladegaard          |
| (33) France                          | AN UNMANNED AERIAL VEHICLE,               | VOIGT, Niels Vinther                 |
| (51) B64D 37/32                      | UNMANNED AERIAL VEHICLE,                  | SCHOMACKER, Jonas Lerche             |
| (11) EP3659925                       | AND METHOD OF OPERATING A                 | (31) PA201870434                     |
| (21) EP19195303.3                    | NAVIGATION LIGHT SYSTEM OF AN             | (32) 25.06.2018                      |
| (47) 18.12.2024                      | UNMANNED AERIAL VEHICLE                   | (33) Denmark                         |
| (22) 04.09.2019                      | (73) Goodrich Lighting Systems GmbH & Co. | (51) B64U 20/94                      |
| (54) AIRCRAFT FUEL TANK INERTING     | KG                                        | B64U 20/98                           |
| (73) Airbus Operations Limited       | (72) HESSLING-VON HEIMENDAHL, Andre       | B64U 10/13                           |
| (72) JOMAIN, Pierre                  | JHA, Anil Kumar                           | B64U 30/29                           |
| (31) 201814679                       | (51) B64F 1/35                            | B64U 50/19                           |
| (32) 10.09.2018                      | (11) EP4363321                            | B64D 33/08                           |
| (33) United Kingdom                  | (21) EP23733015.4                         | B64U 50/23                           |
| (51) B64D 41/00                      | (47) 18.12.2024                           | (11) EP4137414                       |
| (11) EP4286282                       | (87) EP2023067386                         | (21) EP22188799.5                    |
| (21) EP22461562.5                    | 04.01.2024                                | (47) 18.12.2024                      |
| (47) 18.12.2024                      | (22) 27.06.2023                           | (22) 04.08.2022                      |
| (22) 02.06.2022                      | (54) POWER SUPPLY MODULE WITH             | (54) MOTOR COOLING SYSTEM            |
| (54) ACTUATOR RELEASE MECHANISM      | LOOPBACK AND DUAL OUTPUT                  | (73) Hamilton Sundstrand Corporation |
| (73) Hamilton Sundstrand Corporation | (73) Guinault SA                          | (72) PAL, Debabrata                  |
| (72) WIT, Marek                      | (72) CLERMONT, Lionel                     | (31) 202117406616                    |
| KIELCZYKOWSKI, Przemyslaw            | QARISH, Issa                              | (32) 19.08.2021                      |
| (51) B64D 45/00                      | (31) 2206363                              | (33) United States of America        |
| B64D 11/00                           | (32) 27.06.2022                           | (51) B65B 11/54                      |
| G01F 17/00                           | (33) France                               | B65C 9/36                            |
| G01S 17/87                           | (51) B64G 1/50                            | B65B 11/10                           |
| G01S 17/88                           | B64G 1/66                                 | B65B 35/20                           |
| (11) EP4029788                       | B64G 1/58                                 | B65B 41/04                           |
| (21) EP22150417.8                    | (11) EP4392330                            | B65B 57/16                           |
| (47) 18.12.2024                      | (21) EP23729803.9                         | G01G 19/52                           |
| (22) 06.01.2022                      | (47) 18.12.2024                           | (11) EP4227230                       |
| (54) SYSTEMS AND METHODS OF          | (87) FR2023050680                         | (21) EP23153239.1                    |
| DETERMINING A CAPACITY OF            | 23.11.2023                                | (47) 18.12.2024                      |
| STORAGE BINS                         | (22) 12.05.2023                           | (22) 25.01.2023                      |
| (73) The Boeing Company              | (54) THERMOREGULATED SPACE                | (54) WRAPPING APPARATUS              |
| (72) ALVAREZ, Christopher            | EQUIPMENT HAVING THERMALLY                | (73) Ishida Co., Ltd.                |
| CLOUD, Mark L                        | INSULATING MECHANICAL SUPPORT             | (72) YOSHIDA, Mitsuhiro              |
| (31) 202163138965 P                  | (73) Airbus Defence and Space SAS         | KAWANISHI, Naoto                     |
| (32) 19.01.2021                      | Centre National d'Etudes Spatiales        | TAI, Yuuki                           |

|                                                |                                         |                                          |
|------------------------------------------------|-----------------------------------------|------------------------------------------|
| (31) 2022019586                                | (51) B65D 6/16                          | (33) Germany                             |
| (32) 10.02.2022                                | B65D 6/18                               | (51) B65D 41/34                          |
| (33) Japan                                     | B65D 8/00                               | B65D 51/16                               |
| (51) B65B 19/22                                | B65D 21/02                              | B65D 55/16                               |
| B65B 43/00                                     | B65D 21/08                              | B65D 5/74                                |
| B65B 61/02                                     | (11) EP4223656                          | (11) EP4234430                           |
| B31F 1/10                                      | (21) EP23155575.6                       | (21) EP23170960.1                        |
| B31B 50/26                                     | (47) 18.12.2024                         | (47) 18.12.2024                          |
| B31B 50/25                                     | (22) 08.02.2023                         | (22) 15.09.2020                          |
| B65B 43/22                                     | (54) STRUCTURAL COMPONENT               | (54) CLOSURE ASSEMBLY FOR A              |
| B31B 50/28                                     | OF A MODULAR SYSTEM AND                 | CONTAINER AND CONTAINER HAVING           |
| (11) EP3753854                                 | ASSEMBLY FOR USE IN STORAGE OR          | A CLOSURE ASSEMBLY                       |
| (21) EP20190039.6                              | TRANSPORT SYSTEMS                       | (73) Tetra Laval Holdings & Finance S.A. |
| (47) 18.12.2024                                | (73) die:haptiker GmbH                  | (72) MARTINI, Pietro                     |
| (22) 28.08.2015                                | (72) Ostenrieder, Jörg                  | SORBARA, Angelo                          |
| (54) BLANK SUPPLY APPARATUS AND                | (31) 102022102923                       | CANI, Franco                             |
| BLANK SUPPLY METHOD USING THE                  | (32) 08.02.2022                         | VIANI, Tiziano                           |
| SAME                                           | (33) Germany                            | DE PAOLA, Rocco                          |
| (73) Japan Tobacco Inc.                        | (51) B65D 17/28                         | (31) 19200328                            |
| (72) Tambo, Hitoshi                            | (11) EP3914521                          | (32) 30.09.2019                          |
| Sumi, Daisuke                                  | (21) EP20701849.0                       | (33) European Patent Office (EPO)        |
| Suzuki, Shinya                                 | (47) 18.12.2024                         | (51) B65D 61/00                          |
| (31) PCT/JP2014/072547                         | (87) GB2020050096                       | B65D 85/20                               |
| (32) 28.08.2014                                | 30.07.2020                              | B65G 1/04                                |
| (33) World Intellectual Property Office (WIPO) | (22) 17.01.2020                         | (11) EP3997007                           |
| (51) B65B 61/02                                | (54) EASY OPEN CAN END WITH             | (21) EP20743787.2                        |
| B65B 21/24                                     | INCREASED PANEL STIFFNESS               | (47) 18.12.2024                          |
| B65B 43/18                                     | (73) Eviosys Packaging Switzerland GmbH | (87) IB2020055693                        |
| B65B 17/02                                     | (72) EDWARDS, Elliann Amy               | 14.01.2021                               |
| B65B 43/10                                     | ROSELAAR, Katherine                     | (22) 18.06.2020                          |
| (11) EP3931115                                 | RAMSEY, Christopher Paul                | (54) PACKAGING MODULES FOR               |
| (21) EP20700902.8                              | OLIVER, Blanca Pascual                  | PACKAGING OBLONG OBJECTS                 |
| (47) 18.12.2024                                | (31) 201900924                          | FOR TRANSPORT AND STORAGE                |
| (87) EP2020050926                              | (32) 23.01.2019                         | PURPOSES AND METHOD APPLYING             |
| 03.09.2020                                     | (33) United Kingdom                     | SUCH PACKAGING MODULES                   |
| (22) 15.01.2020                                | (51) B65D 25/14                         | (73) Bosal Flanders NV                   |
| (54) METHOD AND DEVICE FOR                     | B65D 77/06                              | (72) VANLEENE, Paul, Hendrik M           |
| HANDLING AND PRINTING ON                       | (11) EP4032824                          | (31) 201905445                           |
| PACKAGING BLANKS PROVIDED FOR                  | (21) EP22153960.4                       | (32) 10.07.2019                          |
| PACKAGING ARTICLES                             | (47) 18.12.2024                         | (33) Belgium                             |
| (73) Krones Aktiengesellschaft                 | (22) 15.01.2018                         | (51) B65D 75/30                          |
| (72) GUT, Tobias                               | (54) HOUSING FOR A FLEXIBLE             | B65D 75/58                               |
| KIRZINGER, Johannes                            | CONTAINER                               | (11) EP4003872                           |
| (31) 102019104870                              | (73) Single Use Support GmbH            | (21) EP20754088.1                        |
| (32) 26.02.2019                                | (72) WURM, Thomas                       | (47) 18.12.2024                          |
| (33) Germany                                   | (31) 5010017 U                          | (87) US2020042948                        |
| (51) B65D 6/14                                 | 600042017                               | 28.01.2021                               |
| C07C 265/14                                    | (32) 24.05.2017                         | (22) 22.07.2020                          |
| C08G 18/76                                     | 16.01.2017                              | (54) POUCHES FOR DISPENSING              |
| G02B 1/04                                      | (33) Austria                            | PRODUCTS AND METHOD OF                   |
| (11) EP4116208                                 | Austria                                 | DISPENSING                               |
| (21) EP21824852.4                              | (51) B65D 27/38                         | (73) Cryovac, LLC                        |
| (47) 18.12.2024                                | B65D 75/66                              | (72) LINDLER, Michael                    |
| (87) JP2021022480                              | B65D 77/32                              | COOK, Hubert J.                          |
| 23.12.2021                                     | B65D 85/10                              | DAIGLE, Scott                            |
| (22) 14.06.2021                                | (11) EP4377218                          | JONES, Ward                              |
| (54) XYLYLENE DIISOCYANATE-HOLDING             | (21) EP22760662.1                       | GUZMAN, Jorge Fernando                   |
| CONTAINER, METHOD FOR STORING                  | (47) 18.12.2024                         | (31) 201962877425 P                      |
| XYLYLENE DIISOCYANATE, AND                     | (87) EP2022071009                       | (32) 23.07.2019                          |
| METHOD FOR TRANSPORTING                        | 02.02.2023                              | (33) United States of America            |
| XYLYLENE DIISOCYANATE                          | (22) 26.07.2022                         | (51) B65D 81/38                          |
| (73) Mitsui Chemicals, Inc.                    | (54) TEAR-OPEN STRIP FOR A PACKAGE,     | A47J 41/00                               |
| (72) KAWAGUCHI, Masaru                         | METHOD FOR PRODUCING A TEAR-            | B65D 47/24                               |
| SATO, Yasuaki                                  | OPEN STRIP AND PACKAGE                  | (11) EP4146560                           |
| SHIRAI, Mai                                    | (73) Mayr-Melnhof Karton AG             | (21) EP21722877.4                        |
| (31) 2020105488                                | (72) HULLMANN, Dirk                     | (47) 18.12.2024                          |
| (32) 18.06.2020                                | (31) 102021119281                       | (87) EP2021061512                        |
| (33) Japan                                     | (32) 26.07.2021                         | 11.11.2021                               |

|                                   |                                             |                                    |
|-----------------------------------|---------------------------------------------|------------------------------------|
| (22) 03.05.2021                   | (54) A SHUTTLE FOR PROPELLING               | (54) TRANSPORT DEVICE FOR          |
| (54) DRINKING BOTTLE CLOSURE WITH | HORIZONTALLY AND VERTICALLY IN A            | TRANSPORTING AT LEAST ONE          |
| A ROTATABLE CLOSURE CAP FOR       | RACKING SYSTEM                              | PRODUCT, IN PARTICULAR FOR         |
| AN INSULATED BOTTLE OR FOR AN     | (73) MOVU                                   | FORMING SERIES AND/OR GROUPS       |
| INSULATED MUG                     | (72) VANDEMERGEL, Luc                       | OF PRODUCTS                        |
| (73) Emsa GmbH                    | (31) 20204204                               | (73) Syntegon Packaging Systems AG |
| (72) HORSTMANN, Klaus             | (32) 27.10.2020                             | (72) Wipf, Alfred                  |
| (31) 2004378                      | (33) European Patent Office (EPO)           | Kathan, Philipp                    |
| 102020111943                      | (51) B65G 1/137                             | (31) 102017204051                  |
| (32) 04.05.2020                   | G06Q 10/08                                  | (32) 13.03.2017                    |
| 04.05.2020                        | (11) EP3601113                              | (33) Germany                       |
| (33) France                       | (21) EP18719343.8                           | (51) B65G 35/06                    |
| Germany                           | (47) 18.12.2024                             | B23Q 7/14                          |
| (51) B65G 1/04                    | (87) US2018024335                           | (11) EP4129870                     |
| (11) EP4296200                    | 27.09.2018                                  | (21) EP22180881.9                  |
| (21) EP23179028.8                 | (22) 26.03.2018                             | (47) 18.12.2024                    |
| (47) 18.12.2024                   | (54) SYSTEMS AND METHODS FOR                | (22) 24.06.2022                    |
| (22) 13.06.2023                   | PROCESSING OBJECTS, INCLUDING               | (54) MODULAR SWITCHING DEVICE      |
| (54) ARTICLE STORAGE FACILITY     | AUTOMATED PROCESSING                        | FOR INTERMEDIATE STORAGE           |
| (73) Daifuku Co., Ltd.            | (73) Berkshire Grey Operating Company, Inc. | OF WORKPIECE CARRIERS FOR A        |
| (72) NAKAMURA, Takanori           | (72) AHEARN, Kevin                          | LINEAR TRANSPORT SYSTEM            |
| YOSHINAGA, Kazuharu               | VELAGAPUDI, Prasanna                        | (73) MD Elektronik GmbH            |
| (31) 2022101171                   | FORT, William Hartman                       | (72) Preusche, Maximilian          |
| (32) 23.06.2022                   | ALLEN, Thomas                               | Schuster, Udo                      |
| (33) Japan                        | MCMAHAN, William Chu-hyon                   | Heller, Maria                      |
| (51) B65G 1/04                    | DAWSON-HAGGERTY, Michael                    | (31) 102021120291                  |
| (11) EP4136041                    | KING, Jennifer Eileen                       | (32) 04.08.2021                    |
| (21) EP21717871.4                 | MARONEY, Kyle                               | (33) Germany                       |
| (47) 18.12.2024                   | SMITH, Daniel                               | (51) B65G 39/10                    |
| (87) EP2021059309                 | KOVAL, Michael Cap                          | B65G 39/02                         |
| 21.10.2021                        | AMEND, John Richard                         | B65G 17/20                         |
| (22) 09.04.2021                   | GEYER, Christopher                          | F16C 13/00                         |
| (54) CONTAINER HANDLING VEHICLE   | PRICE, Gene Temple                          | B65G 39/09                         |
| COMPRISING A CONTAINER            | ROMANO, Joseph                              | (11) EP3680198                     |
| CARRYING POSITION, ASSOCIATED     | WAGNER, Thomas                              | (21) EP18854147.8                  |
| SYSTEM AND METHODS                | COHEN, Benjamin                             | (47) 18.12.2024                    |
| (73) AUTOSTORE TECHNOLOGY AS      | MASON, Matthew T.                           | (87) KR2018010114                  |
| (72) DJUVE, HEGGEBØ, Jørgen       | HINCHEY, Victoria                           | 14.03.2019                         |
| (31) 20200672                     | KOLETSCHKA, Thomas                          | (22) 31.08.2018                    |
| 20200612                          | SRINIVASA, Siddhartha                       | (54) TROLLEY CONVEYOR ROLLER       |
| 20200467                          | (31) 201762476310 P                         | ASSEMBLY                           |
| (32) 05.06.2020                   | (32) 24.03.2017                             | (73) Cho, Jong Il                  |
| 25.05.2020                        | (33) United States of America               | (72) CHO, Jong-Won                 |
| 16.04.2020                        | (51) B65G 17/08                             | (31) 20170113740                   |
| (33) Norway                       | B65G 17/24                                  | (32) 06.09.2017                    |
| Norway                            | B65G 23/04                                  | (33) Korea (Republic)              |
| Norway                            | (11) EP3939913                              | (51) B65G 39/16                    |
| (51) B65G 1/04                    | (21) EP21184744.7                           | B65G 39/071                        |
| B65G 1/02                         | (47) 18.12.2024                             | B65G 15/64                         |
| (11) EP3992115                    | (22) 09.07.2021                             | B65G 43/00                         |
| (21) EP20204204.0                 | (54) MODULE OF MODULAR CONVEYOR             | (11) EP4284737                     |
| (47) 18.12.2024                   | BELT WITH ROLLER TRANSPORT                  | (21) EP22718144.3                  |
| (22) 27.10.2020                   | SURFACE AND MODULAR CONVEYOR                | (47) 18.12.2024                    |
| (54) A SHUTTLE FOR PROPELLING     | BELT FORMED BY A PLURALITY OF               | (87) EP2022057781                  |
| HORIZONTALLY AND VERTICALLY IN A  | SUCH MODULES                                | 13.10.2022                         |
| RACKING SYSTEM                    | (73) Regina Catene Calibrate S.p.A.         | (22) 24.03.2022                    |
| (73) MOVU                         | (72) GARBAGNATI, Carlo                      | (54) APPARATUS HAVING A GUIDE UNIT |
| (72) Vandemergel, Luc             | CATTANEO, Norberto                          | FOR GUIDING A CONVEYOR BELT        |
| (51) B65G 1/04                    | (31) 202000017068                           | (73) ScrapeTec GmbH                |
| B65G 1/02                         | (32) 14.07.2020                             | (72) PRENNER, Michael              |
| (11) EP4237349                    | (33) Italy                                  | DÜNNWALD, Wilfried                 |
| (21) EP21769421.5                 | (51) B65G 17/24                             | KOTH, Thorsten                     |
| (47) 18.12.2024                   | B65G 47/26                                  | (31) 102021108695                  |
| (87) EP2021073790                 | B65G 47/28                                  | (32) 08.04.2021                    |
| 05.05.2022                        | (11) EP3375736                              | (33) Germany                       |
| (22) 27.08.2021                   | (21) EP18159194.2                           | (51) B65G 47/08                    |
|                                   | (47) 18.12.2024                             | (11) EP3652092                     |
|                                   | (22) 28.02.2018                             | (21) EP18731424.0                  |

|                                    |                                    |                                                |
|------------------------------------|------------------------------------|------------------------------------------------|
| (47) 18.12.2024                    | (11) EP4105157                     | (54) AN ELEVATOR SYSTEM AND                    |
| (87) EP2018065586                  | (21) EP22174329.7                  | A METHOD FOR SELECTING A                       |
| 17.01.2019                         | (47) 18.12.2024                    | WIRELESS COMMUNICATION SYSTEM                  |
| (22) 13.06.2018                    | (22) 19.05.2022                    | (73) KONE Corporation                          |
| (54) METHOD AND DEVICE FOR         | (54) APPARATUS AND METHOD FOR      | (72) PURANEN, Mikko                            |
| HANDLING PIECE GOODS, ARTICLES     | DELIVERING SHEETS, AND USE OF      | (51) B66B 7/04                                 |
| AND/OR PACKS                       | CONTINUOUSLY GUIDED BRAKING        | (11) EP3301058                                 |
| (73) Kronos Aktiengesellschaft     | BELTS OF DIFFERENT WIDTHS          | (21) EP16191769.5                              |
| (72) GRIMM, Sebastian              | (73) Koenig & Bauer AG             | (47) 18.12.2024                                |
| BEER, Erhard                       | (72) Schumann, Volkmar             | (22) 30.09.2016                                |
| MEHDI, Arsalan                     | Seidel, Robert                     | (54) ROLLER GUIDE ASSEMBLY AND                 |
| SCHWALB, Felix                     | (31) 102021115669                  | ELEVATOR SYSTEM                                |
| EHBERGER, Marco                    | (32) 17.06.2021                    | (73) KONE Corporation                          |
| KOLLMUSS, Manuel                   | (33) Germany                       | (72) Lamminmäki, Timo                          |
| WESTERMEIER, Christian             | (51) B65H 33/04                    | Hawkins, Giovanni                              |
| KIRZINGER, Johannes                | B65H 31/32                         | Janhunen, Sami                                 |
| ASTNER, Michael                    | B65H 29/04                         | Siironen, Tapio                                |
| (31) 102017212157                  | B65H 31/10                         | Uskali, Jani                                   |
| (32) 14.07.2017                    | (11) EP4003890                     | (51) B66B 7/06                                 |
| (33) Germany                       | (21) EP20796509.6                  | D07B 1/06                                      |
| (51) B65G 47/82                    | (47) 18.12.2024                    | (11) EP3683179                                 |
| (11) EP4090595                     | (87) EP2020079033                  | (21) EP18853024.0                              |
| (21) EP21700023.1                  | 06.05.2021                         | (47) 18.12.2024                                |
| (47) 18.12.2024                    | (22) 15.10.2020                    | (87) JP2018026671                              |
| (87) EP2021050508                  | (54) SHEET PROCESSING MACHINE WITH | 14.03.2019                                     |
| 22.07.2021                         | AT LEAST ONE SHEET STORAGE         | (22) 17.07.2018                                |
| (22) 13.01.2021                    | DEVICE, AND METHOD FOR STORING     | (54) ELEVATOR ROPE                             |
| (54) METHOD FOR FORMING PAIRS OF   | SHEETS                             | (73) Hitachi, Ltd.                             |
| PACKS                              | (73) Koenig & Bauer AG             | (72) ABE Takashi                               |
| (73) Philip Morris Products, S.A.  | (72) RUHM, Sylvio                  | MAEDA Ryo                                      |
| (72) MINOCCARI, Stefano            | (31) 102019128977                  | NAKAYAMA Masato                                |
| DRAGHETTI, Fiorenzo                | (32) 28.10.2019                    | (31) 2017173775                                |
| (31) 20151866                      | (33) Germany                       | (32) 11.09.2017                                |
| (32) 15.01.2020                    | (51) B65H 54/34                    | (33) Japan                                     |
| (33) European Patent Office (EPO)  | B65H 65/00                         | (51) B66B 7/06                                 |
| (51) B65G 59/10                    | (11) EP4242152                     | D07B 1/22                                      |
| B65G 59/06                         | (21) EP23155512.9                  | D07B 5/04                                      |
| (11) EP4240679                     | (47) 18.12.2024                    | D03D 1/00                                      |
| (21) EP21806222.2                  | (22) 08.02.2023                    | D03D 15/58                                     |
| (47) 18.12.2024                    | (54) YARN THREADING APPARATUS,     | (11) EP2619121                                 |
| (87) EP2021080656                  | FALSE-TWIST TEXTURING MACHINE,     | (21) EP11827106.3                              |
| 12.05.2022                         | AND YARN THREADING METHOD          | (47) 18.12.2024                                |
| (22) 04.11.2021                    | (73) TMT Machinery, Inc.           | (87) US2011021602                              |
| (54) DESTACKER UNIT AND SYSTEM FOR | (72) SASAGAWA, Takefumi            | 29.03.2012                                     |
| DESTACKING OF OBJECTS              | CHIKADA, Hidekazu                  | (22) 19.01.2011                                |
| (73) JS STÅL APS                   | (31) 2022036243                    | (54) Tension member for an elevator having     |
| (72) STRENGSHOLT, Thomas           | (32) 09.03.2022                    | at least one traction surface comprising       |
| HANSEN, René                       | (33) Japan                         | exposed weave fibers                           |
| (31) PA202070730                   | (51) B66B 1/34                     | (73) Otis Elevator Company                     |
| (32) 04.11.2020                    | (11) EP3733581                     | (72) JAYACHANDRAN, Vijay                       |
| (33) Denmark                       | (21) EP20172607.2                  | WESSON, John P.                                |
| (51) B65H 15/00                    | (47) 18.12.2024                    | RUSH, Daniel                                   |
| B65H 5/10                          | (22) 01.05.2020                    | DEVALVE, Timothy D.                            |
| (11) EP4023579                     | (54) ALGORITHM TO DETECT ELEVATOR  | KRISHNAN, Gopal R.                             |
| (21) EP20217579.0                  | DIRECTION OF MOTION                | (31) PCT/US2010/049433                         |
| (47) 18.12.2024                    | (73) Otis Elevator Company         | (32) 20.09.2010                                |
| (22) 29.12.2020                    | (72) PAHLKE, Derk Oscar            | (33) World Intellectual Property Office (WIPO) |
| (54) DEVICE AND METHOD FOR         | (31) 201916400448                  | (51) B66B 9/04                                 |
| TRANSFERRING A FLAT PIECE,         | (32) 01.05.2019                    | B66B 11/04                                     |
| IN PARTICULAR A PLASTIC CARD,      | (33) United States of America      | F16K 7/00                                      |
| FROM AN INITIAL POSITION TO A      | (51) B66B 1/34                     | (11) EP4157775                                 |
| DESTINATION POSITION               | (11) EP4347464                     | (21) EP20938620.0                              |
| (73) IAI industrial systems B.V.   | (21) EP21730848.5                  | (47) 18.12.2024                                |
| (72) Verheijen, Johannes           | (47) 18.12.2024                    | (87) IB2020058408                              |
| Driessen, Willy                    | (87) EP2021064629                  | 09.12.2021                                     |
| Budel, Hendrik-Jan                 | 08.12.2022                         | (22) 10.09.2020                                |
| (51) B65H 29/68                    | (22) 01.06.2021                    |                                                |
| B65H 29/04                         |                                    |                                                |

|                                                                                                            |                                                                   |                                                                                                                              |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| (54) A PNEUMATIC FLOW CONTROLLING<br>DEVICE FOR A PNEUMATIC VACUUM<br>ELEVATOR AND A METHOD THEREOF        | (47) 18.12.2024<br>(87) JP2019007098<br>06.09.2019                | G01C 21/00<br>G01S 7/48<br>G01S 17/42                                                                                        |
| (73) Babu, Killakathu Ramanathan                                                                           | (22) 25.02.2019                                                   | G01S 17/58                                                                                                                   |
| (72) Babu, Killakathu Ramanathan                                                                           | (54) CRANE AND METHOD FOR<br>ACQUIRING LENGTH OF SLINGING<br>TOOL | G01S 17/86<br>G01S 17/931                                                                                                    |
| (31) 202041023082                                                                                          |                                                                   | B66F 1/00                                                                                                                    |
| (32) 02.06.2020                                                                                            |                                                                   | B66F 9/075                                                                                                                   |
| (33) India                                                                                                 | (73) TADANO LTD.                                                  | B66F 9/06                                                                                                                    |
| (51) B66B 31/00                                                                                            | (72) MIZUKI, Kazuma                                               | G05D 1/00                                                                                                                    |
| B66B 23/00                                                                                                 | GOTO, Tomokazu                                                    | (11) EP4276564                                                                                                               |
| B66B 29/08                                                                                                 | KANDA, Shinsuke                                                   | (21) EP22216292.7                                                                                                            |
| (11) EP4355679                                                                                             | (31) 2018035208                                                   | (47) 18.12.2024                                                                                                              |
| (21) EP22730926.7                                                                                          | (32) 28.02.2018                                                   | (22) 23.12.2022                                                                                                              |
| (47) 18.12.2024                                                                                            | (33) Japan                                                        | (54) IMAGE AND RANGE SENSOR-BASED<br>POSITION CONTROLLER AND<br>ASSOCIATED METHOD                                            |
| (87) EP2022064858                                                                                          | (51) B66C 13/06                                                   | (73) Hiab AB                                                                                                                 |
| 22.12.2022                                                                                                 | B66C 23/90                                                        | (72) Mäenpää, Pekka                                                                                                          |
| (22) 01.06.2022                                                                                            | (11) EP3459899                                                    | Raivio, Leevi                                                                                                                |
| (54) PASSENGER TRANSPORT SYSTEM<br>COMPRISING A GUIDE DEVICE IN THE<br>ACCESS AREAS                        | (21) EP18194342.4                                                 | Aref, Mohammad M.                                                                                                            |
| (73) INVENTIO AG                                                                                           | (47) 18.12.2024                                                   | Sivananda, Krishnananda                                                                                                      |
| (72) KLEEWEIN, Gerhard                                                                                     | (22) 13.09.2018                                                   | Vihonen, Juho                                                                                                                |
| WAGENLEITNER, Georg                                                                                        | (54) DYNAMIC OPTIMISATION OF A CRANE<br>LOAD CURVE                |                                                                                                                              |
| GÖRCS, Stefan                                                                                              | (73) Manitowoc Crane Group France                                 | (51) B66F 9/075                                                                                                              |
| (31) 21179815                                                                                              | (72) CLAEYS, Xavier                                               | B66F 17/00                                                                                                                   |
| (32) 16.06.2021                                                                                            | (31) 1758745                                                      | G01G 19/08                                                                                                                   |
| (33) European Patent Office (EPO)                                                                          | (32) 21.09.2017                                                   | B60L 3/08                                                                                                                    |
| (51) B66C 1/10                                                                                             | (33) France                                                       | B60P 1/02                                                                                                                    |
| B66C 1/22                                                                                                  | (51) B66C 13/22                                                   | B60W 40/13                                                                                                                   |
| B66C 23/70                                                                                                 | B66C 23/00                                                        | B60L 15/20                                                                                                                   |
| (11) EP4008675                                                                                             | B66C 23/90                                                        | B60L 50/60                                                                                                                   |
| (21) EP20866202.3                                                                                          | B66C 13/08                                                        | B60W 30/14                                                                                                                   |
| (47) 18.12.2024                                                                                            | B66C 13/16                                                        | (11) EP3849932                                                                                                               |
| (87) JP2020031865                                                                                          | B66C 13/20                                                        | (21) EP19773251.4                                                                                                            |
| 25.03.2021                                                                                                 | B66C 13/46                                                        | (47) 18.12.2024                                                                                                              |
| (22) 24.08.2020                                                                                            | B66C 23/42                                                        | (87) US2019049882                                                                                                            |
| (54) WORK MACHINE SUSPENSION<br>DEVICE, RETENTION DEVICE,<br>AND METHOD FOR SUSPENDING<br>STRUCTURE MEMBER | B66C 13/06                                                        | 19.03.2020                                                                                                                   |
| (73) KOBELCO CONSTRUCTION<br>MACHINERY CO., LTD.                                                           | (11) EP3760569                                                    | (22) 06.09.2019                                                                                                              |
| (72) SHIMAZU, Yasuhiko                                                                                     | (21) EP19760969.6                                                 | (54) SYSTEM AND METHOD FOR<br>CONTROLLING A MAXIMUM VEHICLE<br>SPEED FOR AN INDUSTRIAL VEHICLE<br>BASED ON A CALCULATED LOAD |
| TAKAMATSU, Nobuhiro                                                                                        | (47) 18.12.2024                                                   | (73) Crown Equipment Corporation                                                                                             |
| KUDARA, Kazufumi                                                                                           | (87) JP2019007958                                                 | (72) ADDISON, Mark, E.                                                                                                       |
| MAEDO, Teppei                                                                                              | 06.09.2019                                                        | HAMMER, Joe, K.                                                                                                              |
| (31) 2019171662                                                                                            | (22) 28.02.2019                                                   | (31) 201862730810 P                                                                                                          |
| (32) 20.09.2019                                                                                            | (54) CRANE                                                        | (32) 13.09.2018                                                                                                              |
| (33) Japan                                                                                                 | (73) TADANO LTD.                                                  | (33) United States of America                                                                                                |
| (51) B66C 13/02                                                                                            | (72) KANDA, Shinsuke                                              | (51) B67C 3/28                                                                                                               |
| B66D 1/52                                                                                                  | MIZUKI, Kazuma                                                    | (11) EP4310048                                                                                                               |
| (11) EP3854746                                                                                             | GOTO, Tomokazu                                                    | (21) EP23182968.0                                                                                                            |
| (21) EP20153151.4                                                                                          | (31) 2018035209                                                   | (47) 18.12.2024                                                                                                              |
| (47) 18.12.2024                                                                                            | (32) 28.02.2018                                                   | (22) 03.07.2023                                                                                                              |
| (22) 22.01.2020                                                                                            | (33) Japan                                                        | (54) DEVICE FOR FILLING A CONTAINER<br>AND METHOD FOR OPERATING THE<br>DEVICE                                                |
| (54) HOISTING SYSTEM AND METHOD<br>FOR HOISTING A VERTICALLY-<br>SUSPENDED OBJECT                          | (51) B66C 13/46                                                   | (73) KRONES AG                                                                                                               |
| (73) Grant Prideco, Inc.                                                                                   | B66C 23/00                                                        | (72) GREN, Thomas                                                                                                            |
| (72) Tønnessen, Frank                                                                                      | B66C 23/90                                                        | PETER, Michael                                                                                                               |
| Strand, Thor                                                                                               | B66C 13/40                                                        | (31) 102022116838                                                                                                            |
| (51) B66C 13/06                                                                                            | (11) EP4036046                                                    | (32) 06.07.2022                                                                                                              |
| B66C 13/16                                                                                                 | (21) EP20869570.0                                                 | (33) Germany                                                                                                                 |
| B66C 23/42                                                                                                 | (47) 18.12.2024                                                   | (51) B67D 1/00                                                                                                               |
| B66C 13/46                                                                                                 | (87) JP2020036296                                                 | B67D 1/04                                                                                                                    |
| B66C 1/12                                                                                                  | 01.04.2021                                                        | B67D 3/00                                                                                                                    |
| (11) EP3760568                                                                                             | (22) 25.09.2020                                                   | B65D 85/804                                                                                                                  |
| (21) EP19760340.0                                                                                          | (54) CRANE INFORMATION DISPLAY<br>SYSTEM                          | (11) EP4313843                                                                                                               |
|                                                                                                            | (73) TADANO LTD.                                                  | (21) EP22718872.9                                                                                                            |
|                                                                                                            | (72) YONEDA, Mizuki                                               |                                                                                                                              |
|                                                                                                            | (31) 2019176782                                                   |                                                                                                                              |
|                                                                                                            | (32) 27.09.2019                                                   |                                                                                                                              |
|                                                                                                            | (33) Japan                                                        |                                                                                                                              |
|                                                                                                            | (51) B66F 9/07                                                    |                                                                                                                              |

|                                       |                                           |                                          |
|---------------------------------------|-------------------------------------------|------------------------------------------|
| (47) 18.12.2024                       | (73) Super Bock Bebidas, S.A.             | (73) HYDROGENIOUS LOHC                   |
| (87) EP2022057909                     | (72) JOSUÉ, SÓNIA                         | TECHNOLOGIES GMBH                        |
| 29.09.2022                            | CARAMELO, DANIEL                          | (72) Seidel, Alexander                   |
| (22) 25.03.2022                       | CARVALHO, AGOSTINHO                       | Büch, Holger                             |
| (54) CARTRIDGE TO BE INSERTED IN A    | COSTA, JOÃO PEDRO                         | Thommes, Matthias                        |
| BEVERAGE PREPARING APPARATUS,         | (31) 2022118017                           | Preuster, Patrick                        |
| METHOD FOR USING SUCH A               | (32) 30.05.2022                           | Paetz, Caspar                            |
| CARTRIDGE                             | (33) Portugal                             | Solymosi, Thomas                         |
| (73) Freezio AG                       | (51) B67D 3/00                            | Wasserscheid, Peter                      |
| (72) KRÜGER, Marc                     | (11) EP3911594                            | Bösmann, Andreas                         |
| EMPL, Günter                          | (21) EP20710267.4                         | Kadar, Julian                            |
| (31) 102021202961                     | (47) 18.12.2024                           | Weiß, Alexander                          |
| (32) 25.03.2021                       | (87) GR2020000006                         | Hestermann, Ines                         |
| (33) Germany                          | 23.07.2020                                | Grauert, Maximilian                      |
| (51) B67D 1/00                        | (22) 14.01.2020                           | (31) 102021203887                        |
| B67D 1/08                             | (54) DRINK DISPENSING DEVICE              | (32) 19.04.2021                          |
| A47J 31/00                            | (73) ELLINIKES PATENTES SINGLE            | (33) Germany                             |
| A47J 31/40                            | MEMBER P.C.                               | (51) C01B 32/16                          |
| F24D 17/00                            | (72) BILIAS, Panagiotis                   | B01J 6/00                                |
| F24D 17/02                            | (31) 20190100016                          | F23G 7/06                                |
| E03C 1/00                             | (32) 14.01.2019                           | B01J 2/04                                |
| F25D 31/00                            | (33) Greece                               | B01J 2/16                                |
| E03C 1/04                             | (51) B81B 3/00                            | (11) EP3339247                           |
| (11) EP3699138                        | B81C 99/00                                | (21) EP17827946.9                        |
| (21) EP19158639.5                     | (11) EP4098605                            | (47) 18.12.2024                          |
| (47) 18.12.2024                       | (21) EP22175725.5                         | (87) KR2017007459                        |
| (22) 21.02.2019                       | (47) 18.12.2024                           | 18.01.2018                               |
| (54) WATER BASED LIQUID SUPPLY        | (22) 27.05.2022                           | (22) 12.07.2017                          |
| SYSTEM                                | (54) ELECTROMECHANICAL                    | (54) DEVICE FOR DRYING AND               |
| (73) Unito Smart Technologies Limited | MICROSYSTEM                               | RECOVERING CARBON NANOTUBE               |
| (72) DAHAN, Yuval-Yoni                | (73) Commissariat à l'Energie Atomique et | PRODUCT AND METHOD FOR                   |
| DAHAN, Abraham                        | aux Energies Alternatives                 | MANUFACTURING CARBON                     |
| (51) B67D 1/00                        | (72) SAINT-PATRICE, Damien                | NANOTUBE USING SAME                      |
| B67D 1/08                             | MOLLARD, Laurent                          | (73) LG Chem, Ltd.                       |
| B67D 1/12                             | NICOLAS, Stéphane                         | (72) KIM, Ogsin                          |
| (11) EP4140940                        | (31) 2105640                              | WOO, Jihee                               |
| (21) EP22191515.0                     | (32) 31.05.2021                           | KIM, Seokwon                             |
| (47) 18.12.2024                       | (33) France                               | CHO, Dong Hyun                           |
| (22) 22.08.2022                       | (51) B81B 3/00                            | LEE, Seungyong                           |
| (54) BEVERAGE DEVICES, SYSTEMS, AND   | H01H 1/00                                 | YOON, Kwang Woo                          |
| METHODS                               | (11) EP3976527                            | (31) 20160089098                         |
| (73) B/E Aerospace, Inc.              | (21) EP20746388.6                         | (32) 14.07.2016                          |
| (72) MILLS, Brian P.                  | (47) 18.12.2024                           | (33) Korea (Republic)                    |
| ABU-SAYMEH, Mudar                     | (87) US2020035263                         | (51) C01B 39/02                          |
| ROGERS, Bryan                         | 03.12.2020                                | C01B 39/04                               |
| (31) 202117458036                     | (22) 29.05.2020                           | B01J 29/76                               |
| (32) 26.08.2021                       | (54) MEMS DEVICE HAVING DECREASED         | (11) EP3601164                           |
| (33) United States of America         | CONTACT RESISTANCE                        | (21) EP18715939.7                        |
| (51) B67D 1/04                        | (73) Qorvo US, Inc.                       | (47) 18.12.2024                          |
| B67D 1/08                             | (72) DASTIDER, Shibajyoti, Ghosh          | (87) GB2018050870                        |
| (11) EP4234478                        | RENAULT, Mickael                          | 04.10.2018                               |
| (21) EP22158861.9                     | MUYANGO, Jacques, Marcel                  | (22) 29.03.2018                          |
| (47) 18.12.2024                       | (31) 201962854826 P                       | (54) COMPOSITE MATERIAL                  |
| (22) 25.02.2022                       | (32) 30.05.2019                           | (73) Johnson Matthey Catalysts (Germany) |
| (54) COOLING ARRANGEMENT FOR A        | (33) United States of America             | GmbH                                     |
| BEVERAGE DISPENSING SYSTEM            | (51) C01B 3/00                            | (72) SELVAM, Thangaraj                   |
| (73) Carlsberg Breweries A/S          | B01J 8/02                                 | MUENCH, Joerg Werner                     |
| (72) Laybourn, Klaus                  | B01J 8/16                                 | SHAHID, Ameen                            |
| (51) B67D 1/04                        | B01J 8/08                                 | BAUER, Juergen                           |
| B67D 1/08                             | C01B 3/22                                 | PUROVA, Ralitsa                          |
| B67D 1/14                             | (11) EP4079681                            | SCHWIEGER, Wilhelm                       |
| (11) EP4286320                        | (21) EP22168396.4                         | DOTZEL, Ralf                             |
| (21) EP22178079.4                     | (47) 18.12.2024                           | (31) 201705235                           |
| (47) 18.12.2024                       | (22) 14.04.2022                           | (32) 31.03.2017                          |
| (22) 09.06.2022                       | (54) METHOD AND DEVICE FOR                | (33) United Kingdom                      |
| (54) TAPPING HEAD WITH TAP FOR        | CATALYTICALLY RELEASING A GAS             | (51) C02F 1/00                           |
| DISPENSING A PRESSURISED LIQUID       | FROM A CARRIER MATERIAL                   | (11) EP4067312                           |
| FROM A KEG                            |                                           | (21) EP22164579.9                        |

|                                      |                                         |                                              |
|--------------------------------------|-----------------------------------------|----------------------------------------------|
| (47) 18.12.2024                      | (21) EP21199511.3                       | (54) ELECTRICALLY CONDUCTIVE SIZING          |
| (22) 25.03.2022                      | (47) 18.12.2024                         | FOR CARBON FIBERS                            |
| (54) FILTER CARTRIDGE AND FILTER BAG | (22) 28.09.2021                         | (73) Zoltek Corporation                      |
| FOR A WATER FILTER DEVICE            | (54) METHOD FOR MANUFACTURING           | (72) CORBIN, David, Michael                  |
| (73) Götz, Christoph                 | OPTICAL FIBER PREFORM                   | BALDINI, Steven, Eric                        |
| (72) Götz, Christoph                 | (73) Shin-Etsu Chemical Co., Ltd.       | (31) 201862649035 P                          |
| (31) 202021001244 U                  | (72) MITTA, Ryo                         | (32) 28.03.2018                              |
| (32) 01.04.2021                      | (31) 2020165892                         | (33) United States of America                |
| (33) Germany                         | (32) 30.09.2020                         |                                              |
| (51) C02F 1/28                       | (33) Japan                              | (51) C04B 7/02                               |
| C02F 1/42                            | (51) C03B 37/02                         | C04B 28/04                                   |
| C08F 2/24                            | C03C 3/16                               | C04B 40/00                                   |
| C07C 53/21                           | C05B 13/02                              | (11) EP3447036                               |
| C02F 1/66                            | C03C 4/00                               | (21) EP16899311.1                            |
| C02F 1/68                            | C03C 13/00                              | (47) 18.12.2024                              |
| C02F 101/36                          | (11) EP4085030                          | (87) ES2016070274                            |
| C02F 103/36                          | (21) EP20830000.4                       | 26.10.2017                                   |
| C02F 1/38                            | (47) 18.12.2024                         | (22) 19.04.2016                              |
| C02F 1/44                            | (87) MA2020000014                       | (54) CEMENTS AND CEMENT MIXTURES             |
| C02F 1/52                            | 08.07.2021                              | HAVING HIGH MECHANICAL                       |
| (11) EP3862324                       | (22) 27.11.2020                         | PROPERTIES AT YOUNG AGES                     |
| (21) EP19869375.6                    | (54) METHOD FOR PRODUCING               | (73) Cement International Technologies, S.L. |
| (47) 18.12.2024                      | PHOSPHATE GLASS FIBRE                   | (72) LIZARRAGA GALARZA, Serafin              |
| (87) JP2019039190                    | (73) Universite Hassan II de Casablanca | (51) C04B 20/02                              |
| 09.04.2020                           | (UH2C)                                  | C04B 24/12                                   |
| (22) 03.10.2019                      | Universite Mohamed VI Polytechnique     | C04B 24/26                                   |
| (54) METHOD FOR REMOVING FLUORINE-   | (UM6P)                                  | C04B 40/00                                   |
| CONTAINING COMPOUND FROM             | École Supérieure des Industries du      | C08G 73/02                                   |
| WASTE WATER                          | Textile Et de l'Habillement (ESITH)     | C09K 8/18                                    |
| (73) DAIKIN INDUSTRIES, LTD.         | (72) CHERKAOU, Omar                     | C09K 8/467                                   |
| (72) HAYASHI, Tadao                  | SALOUMI, Nezha                          | C08L 79/02                                   |
| KATO, Taketo                         | EL BOUCHTI, Mehdi                       | (11) EP2817270                               |
| OKUI, Chiaki                         | TAMRAOUI, Youssef                       | (21) EP12720869.2                            |
| TANAKA, Yuuji                        | JAMALEDDINE, Oumaima                    | (47) 18.12.2024                              |
| KOIZUMI, Michinobu                   | LAHLOU, Mohamed                         | (87) EP2012058830                            |
| TAIRA, Takahiro                      | HANNACHE, Hassan                        | 29.08.2013                                   |
| YOSHIDA, Hirotochi                   | OUMAM, Mina                             | (22) 11.05.2012                              |
| HATAYAMA, Ryou                       | (31) 47836                              | (54) FUNCTIONALIZED POLYAMINES FOR           |
| (31) 2018188701                      | (32) 31.12.2019                         | CLAY MITIGATION                              |
| (32) 03.10.2018                      | (33) Morocco                            | (73) SNF S.A.S.                              |
| (33) Japan                           | (51) C03B 37/035                        | GCP Applied Technologies Inc.                |
| (51) C02F 1/461                      | C03C 25/12                              | (72) TREGGER, Nathan A.                      |
| C25B 9/00                            | C03B 37/025                             | KUO, Lawrence L.                             |
| C25B 9/23                            | C03B 37/027                             | FAVERO, Cedrick                              |
| C25B 15/08                           | C03B 37/03                              | ROUX, Christophe                             |
| C25B 1/13                            | C03C 25/1065                            | (31) 201261601730 P                          |
| (11) EP3822230                       | (11) EP3611139                          | (32) 22.02.2012                              |
| (21) EP19834422.8                    | (21) EP18784011.1                       | (33) United States of America                |
| (47) 18.12.2024                      | (47) 18.12.2024                         | (51) C04B 20/06                              |
| (87) JP2019027433                    | (87) JP2018004008                       | C04B 28/14                                   |
| 16.01.2020                           | 18.10.2018                              | (11) EP3147268                               |
| (22) 11.07.2019                      | (22) 06.02.2018                         | (21) EP16192540.9                            |
| (54) ELECTROLYZED LIQUID GENERATOR   | (54) OPTICAL FIBER MANUFACTURING        | (47) 18.12.2024                              |
| (73) Panasonic Intellectual Property | METHOD                                  | (22) 24.02.2012                              |
| Management Co., Ltd.                 | (73) Fujikura Ltd.                      | (54) LOW WEIGHT AND DENSITY FIRE-            |
| (72) NAGATA, Minoru                  | (72) ISHIDA Itaru                       | RESISTANT GYPSUM PANEL                       |
| IMAHORI, Osamu                       | (31) 2017077689                         | (73) United States Gypsum Company            |
| INAGAKI, Kenichiro                   | (32) 10.04.2017                         | (72) Song, Weixin David                      |
| MORI, Shunsuke                       | (33) Japan                              | Yu, Qiang                                    |
| YAMAGUCHI, Tomohiro                  | (51) C03C 25/44                         | Luan, Wenqi                                  |
| (31) 2018133659                      | D01F 9/22                               | Sirnivas, Veeramasuneni                      |
| 2018133658                           | C08K 3/04                               | (31) 201113035800                            |
| (32) 13.07.2018                      | (11) EP3774684                          | (32) 25.02.2011                              |
| 13.07.2018                           | (21) EP19717081.4                       | (33) United States of America                |
| (33) Japan                           | (47) 18.12.2024                         | (51) C04B 26/04                              |
| Japan                                | (87) US2019024557                       | C09J 171/02                                  |
| (51) C03B 37/014                     | 03.10.2019                              | (11) EP3743398                               |
| (11) EP3978451                       | (22) 28.03.2019                         | (21) EP19702210.6                            |
|                                      |                                         | (47) 18.12.2024                              |

|                                                                                 |                                                                                           |                                      |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------|
| (87) EP2019051510                                                               | 17.06.2021                                                                                | HUMIC SUBSTANCES OF VEGETABLE ORIGIN |
| 01.08.2019                                                                      | (22) 12.10.2020                                                                           | (73) Universidad de Almeria          |
| (22) 22.01.2019                                                                 | (54) COPPER/CERAMIC ASSEMBLY AND INSULATED CIRCUIT BOARD                                  | (72) LÓPEZ LÓPEZ, Maria José         |
| (54) METHOD FOR PRODUCING A JOINT                                               | (73) Mitsubishi Materials Corporation                                                     | CHIESA, Stefano                      |
| (73) ASK Chemicals GmbH                                                         | (72) TERASAKI, Nobuyuki                                                                   | VIGNALI, Giuseppe                    |
| (72) WALLENHORST, Carolin                                                       | (31) 2020169086                                                                           | SUAREZ ESTRELLA, Francisca           |
| WINTER, Reinhard                                                                | 2019224214                                                                                | CHIESA, Alessandro                   |
| KLESING, Jan                                                                    | (32) 06.10.2020                                                                           | LÓPEZ GONZÁLEZ, Juan Antonio         |
| (31) 102018000529                                                               | 12.12.2019                                                                                | JURADO RODRÍGUEZ, Macarena           |
| (32) 23.01.2018                                                                 | (33) Japan                                                                                | (51) C07C 2/04                       |
| (33) Germany                                                                    | Japan                                                                                     | C07C 11/107                          |
| (51) C04B 28/02                                                                 | (51) C04B 41/00                                                                           | C07C 11/02                           |
| C04B 28/04                                                                      | C04B 41/89                                                                                | (11) EP4313918                       |
| C04B 33/13                                                                      | C04B 41/50                                                                                | (21) EP22718184.9                    |
| C04B 20/10                                                                      | C04B 41/52                                                                                | (47) 18.12.2024                      |
| C04B 28/24                                                                      | C04B 41/87                                                                                | (87) EP2022057937                    |
| C04B 28/26                                                                      | C04B 35/111                                                                               | 06.10.2022                           |
| C04B 35/18                                                                      | C04B 35/14                                                                                | (22) 25.03.2022                      |
| (11) EP3818027                                                                  | C04B 35/565                                                                               | (54) OLIGOMERISATION PROCESS         |
| (21) EP19733526.8                                                               | C04B 35/80                                                                                | COMPRISING A STEP OF RECYCLING       |
| (47) 18.12.2024                                                                 | F01D 5/28                                                                                 | A PRE-COOLED SOLVENT                 |
| (87) EP2019067571                                                               | (11) EP3274317                                                                            | (73) IFP Energies nouvelles          |
| 09.01.2020                                                                      | (21) EP15886695.4                                                                         | (72) COTTE, Olivier                  |
| (22) 01.07.2019                                                                 | (47) 18.12.2024                                                                           | BREUIL, Pierre-Alain                 |
| (54) PARTICLE-STABILIZED FOAMS USING SUSTAINABLE MATERIALS                      | (87) US2015042085                                                                         | (31) 2103228                         |
| (73) ETH Zurich                                                                 | 29.09.2016                                                                                | (32) 30.03.2021                      |
| (72) STUDART, André R.                                                          | (22) 24.07.2015                                                                           | (33) France                          |
| CARPENTER, Julia                                                                | (54) THERMAL AND ENVIRONMENTAL BARRIER COATING FOR CERAMIC SUBSTRATES                     | (51) C07C 2/50                       |
| TRAN, Ka Lie Bettina                                                            | (73) HRL Laboratories LLC                                                                 | C07C 13/61                           |
| TERVOORT, Elena                                                                 | (72) SCHAEGLER, Tobias, A.                                                                | (11) EP3802468                       |
| FREITAG, Jonas                                                                  | (31) 201514666745                                                                         | (21) EP19733870.0                    |
| RÜHS, Patrick                                                                   | (32) 24.03.2015                                                                           | (47) 18.12.2024                      |
| JEOFFROY, Etienne                                                               | (33) United States of America                                                             | (87) IB2019053953                    |
| MINAS, Clara                                                                    | (51) C05B 11/08                                                                           | 12.12.2019                           |
| (31) 18181539                                                                   | C05B 17/00                                                                                | (22) 13.05.2019                      |
| (32) 03.07.2018                                                                 | C05C 9/00                                                                                 | (54) DIMERIZATION OF                 |
| (33) European Patent Office (EPO)                                               | (11) EP3997052                                                                            | CYCLOPENTADIENE USING                |
| (51) C04B 35/58                                                                 | (21) EP20740087.0                                                                         | REACTIVE JET MIXING                  |
| C04B 35/626                                                                     | (47) 18.12.2024                                                                           | (73) SABIC Global Technologies B.V.  |
| C04B 35/645                                                                     | (87) IB2020056346                                                                         | (72) SHARMA, Ananth                  |
| C04B 35/65                                                                      | 21.01.2021                                                                                | ABDELGHANI, Mohamed Sabri            |
| (11) EP4289805                                                                  | (22) 06.07.2020                                                                           | VANCHIYIL, Rethesh Madhusudan        |
| (21) EP23155356.1                                                               | (54) UREA PHOSPHATE CALCIUM SULFATE GRANULES AND METHODS FOR PRODUCING AND USING THE SAME | RAJARETHNAM, John Byron Smith        |
| (47) 18.12.2024                                                                 | (73) Sabic Agri-Nutrients Company                                                         | UEHARA, Ernesto                      |
| (22) 07.02.2023                                                                 | (72) AL-ROHILY, Khalid                                                                    | (31) 201862680211 P                  |
| (54) METHOD FOR MANUFACTURING A CUTTING TOOL FROM A HIGHLY REFRACTORY COMPOSITE | KELLS, Andrew George                                                                      | (32) 04.06.2018                      |
| (73) Akademia Gorniczno-Hutnicza im. Stanisława Staszica w Krakowie             | SHARMA, Yogesh Omprakash                                                                  | (33) United States of America        |
| (72) NIERODA, Pawe                                                              | BAG, Nilkamal                                                                             | (51) C07C 29/143                     |
| KOZIE , Dawid                                                                   | (31) 201962873521 P                                                                       | C07C 29/145                          |
| P DZICH, Zbigniew                                                               | (32) 12.07.2019                                                                           | C07C 45/45                           |
| CHLUBNY, Leszek                                                                 | (33) United States of America                                                             | C07C 69/24                           |
| (31) 44138322                                                                   | (51) C05F 5/00                                                                            | C07C 49/39                           |
| (32) 06.06.2022                                                                 | C05F 17/00                                                                                | C07C 53/124                          |
| (33) Poland                                                                     | C05F 17/60                                                                                | C07C 31/12                           |
| (51) C04B 37/02                                                                 | C05G 5/20                                                                                 | C07C 35/04                           |
| H01L 23/15                                                                      | (11) EP4249455                                                                            | C07C 29/09                           |
| H01L 23/373                                                                     | (21) EP22382269.3                                                                         | C07C 29/14                           |
| H05K 1/03                                                                       | (47) 18.12.2024                                                                           | C07C 45/64                           |
| H05K 3/38                                                                       | (22) 24.03.2022                                                                           | C07C 51/09                           |
| H01L 23/36                                                                      | (54) PROCEDURE FOR OBTAINING ORGANIC LIQUID FERTILIZER RICH IN                            | C07C 67/00                           |
| (11) EP4074678                                                                  | (22) 30.11.2021                                                                           | (11) EP4255873                       |
| (21) EP20897945.0                                                               |                                                                                           | (21) EP21835026.2                    |
| (47) 18.12.2024                                                                 |                                                                                           | (47) 18.12.2024                      |
| (87) JP2020038489                                                               |                                                                                           | (87) US2021061083                    |



|                                                                                                                                                          |                                                                                                                                |                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) PRODUCTION OF 2,2,4,4-TETRAMETHYLCYCLOBUTANE-1, 3-DIOL FROM ISOBUTANOL USING A HOMOGENEOUS CATALYST                                                 | (21) EP18774681.3                                                                                                              | C07C 237/46                                                                                                                                                          |
| (73) Eastman Chemical Company                                                                                                                            | (47) 18.12.2024                                                                                                                | (11) EP4126814                                                                                                                                                       |
| (72) HEMBRE, Robert Thomas                                                                                                                               | (87) CN2018078618                                                                                                              | (21) EP21716188.4                                                                                                                                                    |
| JANKA, Mesfin Eijerssa                                                                                                                                   | 04.10.2018                                                                                                                     | (47) 18.12.2024                                                                                                                                                      |
| (31) 202063199051 P                                                                                                                                      | (22) 09.03.2018                                                                                                                | (87) EP2021058529                                                                                                                                                    |
| (32) 04.12.2020                                                                                                                                          | (54) SALICYLIC ACID-BASED FUMARATE DERIVATIVE AND USE IN TREATMENT OF PARKINSON'S DISEASE AND OTHER NEURODEGENERATIVE DISEASES | 07.10.2021                                                                                                                                                           |
| (33) United States of America                                                                                                                            | (73) Chongqing Neuropark Bioscience Co., Ltd.                                                                                  | (22) 31.03.2021                                                                                                                                                      |
| (51) C07C 37/20                                                                                                                                          | (72) YANG, Lichuan                                                                                                             | (54) CONTINUOUS CRYSTALLISATION METHOD                                                                                                                               |
| C07C 37/84                                                                                                                                               | THOMAS, Bobby                                                                                                                  | (73) GE Healthcare AS                                                                                                                                                |
| C07C 41/30                                                                                                                                               | GUO, Mingyue                                                                                                                   | (72) KVANDE, Heidi                                                                                                                                                   |
| C07C 41/40                                                                                                                                               | (31) 201710191351                                                                                                              | HAALAND, Torfinn                                                                                                                                                     |
| C07C 39/16                                                                                                                                               | (32) 28.03.2017                                                                                                                | ASKILDSEN, Arne                                                                                                                                                      |
| C07C 43/23                                                                                                                                               | (33) China                                                                                                                     | (31) 202004773                                                                                                                                                       |
| (11) EP3571180                                                                                                                                           | (51) C07C 67/56                                                                                                                | (32) 31.03.2020                                                                                                                                                      |
| (21) EP18702635.6                                                                                                                                        | C07C 69/22                                                                                                                     | (33) United Kingdom                                                                                                                                                  |
| (47) 18.12.2024                                                                                                                                          | C07C 69/63                                                                                                                     | (51) C07C 253/28                                                                                                                                                     |
| (87) EP2018051526                                                                                                                                        | C07C 67/26                                                                                                                     | C07C 253/34                                                                                                                                                          |
| 26.07.2018                                                                                                                                               | (11) EP4039673                                                                                                                 | C07C 255/51                                                                                                                                                          |
| (22) 23.01.2018                                                                                                                                          | (21) EP20871963.3                                                                                                              | (11) EP4112598                                                                                                                                                       |
| (54) PRODUCTION OF HIGHLY PURE META,META-COUPLED BIS(4-ALKYLPHENOL) DERIVATIVES AND USES THEREOF                                                         | (47) 18.12.2024                                                                                                                | (21) EP21759902.6                                                                                                                                                    |
| (73) Katholieke Universiteit Leuven                                                                                                                      | (87) JP2020036909                                                                                                              | (47) 18.12.2024                                                                                                                                                      |
| (72) KOELEWIJN, Steven-Friso                                                                                                                             | 08.04.2021                                                                                                                     | (87) JP2021007291                                                                                                                                                    |
| SELS, Bert                                                                                                                                               | (22) 29.09.2020                                                                                                                | 02.09.2021                                                                                                                                                           |
| (31) 201701113                                                                                                                                           | (54) METHOD FOR PRODUCING PROPIONIC ACID DERIVATIVE                                                                            | (22) 26.02.2021                                                                                                                                                      |
| 201701112                                                                                                                                                | (73) Daikin Industries, Ltd.                                                                                                   | (54) METHOD FOR PRODUCING PURIFIED PHTHALONITRILE AND METHOD FOR PURIFYING PHTHALONITRILE                                                                            |
| (32) 23.01.2017                                                                                                                                          | (72) SHIRAI, Atsushi                                                                                                           | (73) MITSUBISHI GAS CHEMICAL COMPANY, INC.                                                                                                                           |
| 23.01.2017                                                                                                                                               | YOSHIYAMA, Asako                                                                                                               | (72) MUNEYASU, Kuniaki                                                                                                                                               |
| (33) United Kingdom                                                                                                                                      | MATSUURA, Makoto                                                                                                               | (31) 2020033525                                                                                                                                                      |
| United Kingdom                                                                                                                                           | KUROKI, Yoshichika                                                                                                             | (32) 28.02.2020                                                                                                                                                      |
| (51) C07C 45/64                                                                                                                                          | (31) 2020000399                                                                                                                | (33) Japan                                                                                                                                                           |
| C07C 49/493                                                                                                                                              | 2019179617                                                                                                                     | (51) C07C 321/14                                                                                                                                                     |
| C07C 29/143                                                                                                                                              | (32) 06.01.2020                                                                                                                | C07C 323/52                                                                                                                                                          |
| C07C 35/04                                                                                                                                               | 30.09.2019                                                                                                                     | C08F 20/38                                                                                                                                                           |
| C07C 45/29                                                                                                                                               | (33) Japan                                                                                                                     | (11) EP3795597                                                                                                                                                       |
| C07C 49/08                                                                                                                                               | Japan                                                                                                                          | (21) EP19852211.2                                                                                                                                                    |
| (11) EP4255881                                                                                                                                           | (51) C07C 231/00                                                                                                               | (47) 18.12.2024                                                                                                                                                      |
| (21) EP21840729.4                                                                                                                                        | C07C 233/47                                                                                                                    | (87) JP2019032456                                                                                                                                                    |
| (47) 18.12.2024                                                                                                                                          | C07C 323/59                                                                                                                    | 27.02.2020                                                                                                                                                           |
| (87) US2021061085                                                                                                                                        | C07C 319/12                                                                                                                    | (22) 20.08.2019                                                                                                                                                      |
| 09.06.2022                                                                                                                                               | A61K 8/44                                                                                                                      | (54) (METH)ACRYLATE, MONOMER COMPOSITION FOR DENTAL MATERIAL, MOLDED BODY, COMPOSITION FOR DENTAL MATERIAL, DENTAL MATERIAL, AND METHOD FOR PRODUCING (METH)ACRYLATE |
| (22) 30.11.2021                                                                                                                                          | A61Q 11/00                                                                                                                     | (73) Mitsui Chemicals, Inc.                                                                                                                                          |
| (54) PRODUCTION OF 2,2,4, 4-TETRAMETHYLCYCLOBUTANE-1, 3-DIOL FROM SECONDARY ALCOHOLS AND 2,2,4,4-TETRAMETHYLCYCLOBUTANEDIONE USING HOMOGENEOUS CATALYSTS | C02F 1/24                                                                                                                      | (72) KAKINUMA, Naoyuki                                                                                                                                               |
| (73) Eastman Chemical Company                                                                                                                            | B03D 1/01                                                                                                                      | KOIZUMI, Eri                                                                                                                                                         |
| (72) TESTERMAN, Stephanie Rollins                                                                                                                        | B03D 1/012                                                                                                                     | (31) 2018154943                                                                                                                                                      |
| KLINE, Robert Sterling                                                                                                                                   | B03D 1/02                                                                                                                      | 2018154942                                                                                                                                                           |
| BARNICKI, Scott Donald                                                                                                                                   | C11D 1/10                                                                                                                      | 2018154941                                                                                                                                                           |
| JANKA, Mesfin Eijerssa                                                                                                                                   | (11) EP3927684                                                                                                                 | (32) 21.08.2018                                                                                                                                                      |
| HEMBRE, Robert Thomas                                                                                                                                    | (21) EP20760013.1                                                                                                              | 21.08.2018                                                                                                                                                           |
| (31) 202063199052 P                                                                                                                                      | (47) 18.12.2024                                                                                                                | 21.08.2018                                                                                                                                                           |
| (32) 04.12.2020                                                                                                                                          | (87) AU2020050142                                                                                                              | (33) Japan                                                                                                                                                           |
| (33) United States of America                                                                                                                            | 27.08.2020                                                                                                                     | Japan                                                                                                                                                                |
| (51) C07C 67/29                                                                                                                                          | (22) 18.02.2020                                                                                                                | Japan                                                                                                                                                                |
| C07C 69/60                                                                                                                                               | (54) METHOD OF ACYLATING AMINO ACIDS AND USES OF N-ACYL AMINO ACID PRODUCTS                                                    | (51) C07D 205/04                                                                                                                                                     |
| A61K 31/222                                                                                                                                              | (73) NewSouth Innovations Pty Limited                                                                                          | C07D 207/08                                                                                                                                                          |
| A61P 25/16                                                                                                                                               | (72) TASEIDIFAR, Mojtaba                                                                                                       | C07D 207/48                                                                                                                                                          |
| A61P 25/00                                                                                                                                               | PASHLEY, Richard Mark                                                                                                          | C07D 209/10                                                                                                                                                          |
| (11) EP3611157                                                                                                                                           | (31) 2019900519                                                                                                                | C07D 211/24                                                                                                                                                          |
|                                                                                                                                                          | (32) 18.02.2019                                                                                                                | C07D 211/96                                                                                                                                                          |
|                                                                                                                                                          | (33) Australia                                                                                                                 |                                                                                                                                                                      |
|                                                                                                                                                          | (51) C07C 231/24                                                                                                               |                                                                                                                                                                      |

|                                                                                                              |                                                                                                       |                                                                                       |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| C07D 307/10                                                                                                  | (54) METHOD FOR PRODUCING 5-HYDROXYPIPERIDINE-2-CARBOXYLIC ACID                                       | GUO, Liangqin                                                                         |
| C07D 309/04                                                                                                  |                                                                                                       | PASTERNAK, Alexander                                                                  |
| C07D 401/04                                                                                                  |                                                                                                       | LIM, Jongwon                                                                          |
| C07D 401/06                                                                                                  | (73) API Corporation                                                                                  | YU, Wensheng                                                                          |
| C07D 401/12                                                                                                  | (72) MAEDA, Tomoko                                                                                    | (31) 201862746764 P                                                                   |
| C07D 403/04                                                                                                  | TAKEHARA, Jun                                                                                         | (32) 17.10.2018                                                                       |
| C07D 403/06                                                                                                  | OHTANI, Takashi                                                                                       | (33) United States of America                                                         |
| C07D 405/04                                                                                                  | HIDAKA, Tsugihiko                                                                                     | (51) C07D 235/08                                                                      |
| C07D 405/06                                                                                                  | MURAI, Masato                                                                                         | C07D 487/14                                                                           |
| C07D 409/04                                                                                                  | (31) 2013272766                                                                                       | C07D 405/14                                                                           |
| C07D 409/06                                                                                                  | (32) 27.12.2013                                                                                       | C07D 403/14                                                                           |
| C07D 409/12                                                                                                  | (33) Japan                                                                                            | C07D 307/91                                                                           |
| C07D 417/04                                                                                                  | (51) C07D 211/76                                                                                      | H10K 101/20                                                                           |
| C07D 417/06                                                                                                  | A61K 31/45                                                                                            | H10K 101/40                                                                           |
| (11) EP3911631                                                                                               | A61K 31/454                                                                                           | H10K 85/60                                                                            |
| (21) EP20741015.0                                                                                            | A61K 31/5377                                                                                          | H10K 50/12                                                                            |
| (47) 18.12.2024                                                                                              | A61K 31/64                                                                                            | (11) EP3879592                                                                        |
| (87) IB2020050216                                                                                            | A61P 35/00                                                                                            | (21) EP21152571.2                                                                     |
| 23.07.2020                                                                                                   | (11) EP3858812                                                                                        | (47) 18.12.2024                                                                       |
| (22) 13.01.2020                                                                                              | (21) EP19864128.4                                                                                     | (22) 24.12.2014                                                                       |
| (54) NOVEL SUBSTITUTED SULFONYLUREA DERIVATIVES                                                              | (47) 18.12.2024                                                                                       | (54) ORGANIC ELECTROLUMINESCENT ELEMENT AND ELECTRONIC DEVICE                         |
| (73) Zydus Lifesciences Limited                                                                              | (87) CN2019109428                                                                                     | (73) Idemitsu Kosan Co., Ltd.                                                         |
| (72) AGARWAL, Sameer                                                                                         | 02.04.2020                                                                                            | (72) YOSHIDA, Kei                                                                     |
| SHARMA, Rajiv                                                                                                | (22) 30.09.2019                                                                                       | OGIWARA, Toshinari                                                                    |
| (31) 201921001555                                                                                            | (54) MDM2 INHIBITOR, PREPARATION METHOD THEREFOR, PHARMACEUTICAL COMPOSITION THEREOF, AND USE THEREOF | MIZUKI, Yumiko                                                                        |
| (32) 14.01.2019                                                                                              |                                                                                                       | HASHIMOTO, Ryohei                                                                     |
| (33) India                                                                                                   | (73) Shanghai Longwood Biopharmaceuticals Co., Ltd.                                                   | (31) 2014052133                                                                       |
| (51) C07D 209/30                                                                                             | (72) WANG, Zhe                                                                                        | 2013270267                                                                            |
| A61P 35/00                                                                                                   | JIANG, Rongzhen                                                                                       | (32) 14.03.2014                                                                       |
| A61K 31/404                                                                                                  | ZENG, Zhihong                                                                                         | 26.12.2013                                                                            |
| (11) EP3889136                                                                                               | (31) 201811160163                                                                                     | (33) Japan                                                                            |
| (21) EP19888746.5                                                                                            | (32) 30.09.2018                                                                                       | Japan                                                                                 |
| (47) 18.12.2024                                                                                              | (33) China                                                                                            | (51) C07D 241/08                                                                      |
| (87) CN2019111624                                                                                            | (51) C07D 231/54                                                                                      | A23K 20/142                                                                           |
| 04.06.2020                                                                                                   | C07D 401/06                                                                                           | A23K 50/80                                                                            |
| (22) 17.10.2019                                                                                              | C07D 401/12                                                                                           | (11) EP4271666                                                                        |
| (54) SALT FORM OF ESTROGEN RECEPTOR DOWNREGULATOR, CRYSTALLINE FORM THEREOF, AND PREPARATION METHOD THEREFOR | A61P 35/00                                                                                            | (21) EP21845012.0                                                                     |
| (73) Luoxin Pharmaceutical (Shanghai) Co., Ltd.                                                              | A61P 37/00                                                                                            | (47) 18.12.2024                                                                       |
| Shandong Luoxin Pharmaceutical Group Stock Co., Ltd.                                                         | A61P 27/12                                                                                            | (87) EP2021087451                                                                     |
| (72) SHI, Shenyi                                                                                             | A61P 25/28                                                                                            | 07.07.2022                                                                            |
| DING, Charles Z.                                                                                             | A61P 25/24                                                                                            | (22) 23.12.2021                                                                       |
| LU, Jianyu                                                                                                   | A61K 31/416                                                                                           | (54) PROCESS FOR THE DIASTEREOMERICALLY PURE PREPARATION OF DL/LD-METHIONYLMETHIONINE |
| DONG, Jiaqiang                                                                                               | C07D 401/14                                                                                           | (73) Evonik Operations GmbH                                                           |
| SHI, Bin                                                                                                     | C07D 403/06                                                                                           | (72) HASSELBACH, Hans-Joachim                                                         |
| WANG, Tie-Lin                                                                                                | C07D 405/14                                                                                           | BRAUNE, Sascha                                                                        |
| HE, Huijun                                                                                                   | C07D 413/06                                                                                           | VAN EESTER, Geert                                                                     |
| HU, Lihong                                                                                                   | C07D 413/14                                                                                           | DYBALLA, Claudia                                                                      |
| YANG, Wenqian                                                                                                | A61P 1/00                                                                                             | (31) 20217816                                                                         |
| (31) 201811434915                                                                                            | (11) EP3867232                                                                                        | (32) 30.12.2020                                                                       |
| (32) 28.11.2018                                                                                              | (21) EP19872407.2                                                                                     | (33) European Patent Office (EPO)                                                     |
| (33) China                                                                                                   | (47) 18.12.2024                                                                                       | (51) C07D 307/82                                                                      |
| (51) C07D 211/60                                                                                             | (87) US2019055761                                                                                     | C07D 491/04                                                                           |
| C07C 233/47                                                                                                  | 23.04.2020                                                                                            | C07D 333/62                                                                           |
| C07C 309/66                                                                                                  | (22) 11.10.2019                                                                                       | C07C 311/56                                                                           |
| C07D 498/08                                                                                                  | (54) NOVEL ARYLALKYL PYRAZOLE COMPOUNDS AS INDOLEAMINE 2,3-DIOXYGENASE INHIBITORS                     | A61K 31/343                                                                           |
| C07B 61/00                                                                                                   | (73) Merck Sharp & Dohme LLC                                                                          | A61K 31/55                                                                            |
| (11) EP3915975                                                                                               | (72) CLAUSEN, Dane                                                                                    | A61K 31/4162                                                                          |
| (21) EP21184133.3                                                                                            | CHEN, Ping                                                                                            | A61P 1/04                                                                             |
| (47) 18.12.2024                                                                                              | XIAO, Li                                                                                              | A61P 1/16                                                                             |
| (22) 26.12.2014                                                                                              | HE, Shuwen                                                                                            | A61P 3/00                                                                             |
|                                                                                                              | HAN, Yongxin                                                                                          | A61P 3/04                                                                             |
|                                                                                                              | FRADERA, Xavier                                                                                       | A61P 3/10                                                                             |
|                                                                                                              | MARTINOT, Theodore, A.                                                                                | A61P 9/00                                                                             |
|                                                                                                              |                                                                                                       | A61P 9/10                                                                             |

|                                                                                                                                                                                                        |                                                                                                  |                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| A61P 11/00                                                                                                                                                                                             | KANG, Su Yeon                                                                                    | INHIBITORS AND METHODS OF USE                                                                                        |
| A61P 11/06                                                                                                                                                                                             | AN, Kyung Mi                                                                                     | THEREOF                                                                                                              |
| A61P 25/28                                                                                                                                                                                             | HONG, Chang Hee                                                                                  | (73) Enanta Pharmaceuticals, Inc.                                                                                    |
| A61P 37/00                                                                                                                                                                                             | IM, A Rang                                                                                       | (72) WANG, Guoqiang                                                                                                  |
| A61P 37/06                                                                                                                                                                                             | HEO, Jae Ho                                                                                      | MA, Jun                                                                                                              |
| (11) EP3999496                                                                                                                                                                                         | LEE, Joo Yun                                                                                     | WANG, Bin                                                                                                            |
| (21) EP20757941.8                                                                                                                                                                                      | LEE, Jung Woo                                                                                    | HE, Yong                                                                                                             |
| (47) 18.12.2024                                                                                                                                                                                        | YOO, Yeong Ran                                                                                   | HE, Jing                                                                                                             |
| (87) IB2020000634                                                                                                                                                                                      | KIM, Jung Ho                                                                                     | GRANGER, Brett                                                                                                       |
| 21.01.2021                                                                                                                                                                                             | SONG, Yoon Sung                                                                                  | XING, Xuechao                                                                                                        |
| (22) 16.07.2020                                                                                                                                                                                        | HONG, Da Hae                                                                                     | SHEN, Ruichao                                                                                                        |
| (54) N-((1,2,3,5,6,7-HEXAHYDRO-S-INDACEN-4-YL)CARBAMOYL)-4,5,6,7-TETRAHYDROBENZOFURAN-2-SULFONAMIDE DERIVATIVES AND RELATED COMPOUNDS AS NLPR3 MODULATORS FOR THE TREATMENT OF MULTIPLE SCLEROSIS (MS) | JE, In Gyu                                                                                       | LONG, Jiang                                                                                                          |
| (73) Zomagen Biosciences Ltd                                                                                                                                                                           | SHIN, Jae Eui                                                                                    | OR, Yat Sun                                                                                                          |
| (72) NUSS, John                                                                                                                                                                                        | PARK, Joon Tae                                                                                   | (31) 201862665789 P                                                                                                  |
| YUAN, Shendong                                                                                                                                                                                         | (31) 20200073900                                                                                 | (32) 02.05.2018                                                                                                      |
| HARRIS, Jason                                                                                                                                                                                          | (32) 17.06.2020                                                                                  | (33) United States of America                                                                                        |
| MOHAN, Raju                                                                                                                                                                                            | (33) Korea (Republic)                                                                            | (51) C07D 401/14                                                                                                     |
| (31) 201962875402 P                                                                                                                                                                                    | (51) C07D 401/14                                                                                 | C07D 413/14                                                                                                          |
| (32) 17.07.2019                                                                                                                                                                                        | A01N 43/653                                                                                      | C07D 401/10                                                                                                          |
| (33) United States of America                                                                                                                                                                          | C07D 405/14                                                                                      | C07D 417/06                                                                                                          |
| (51) C07D 309/32                                                                                                                                                                                       | (11) EP4232443                                                                                   | C07D 417/10                                                                                                          |
| (11) EP4273133                                                                                                                                                                                         | (21) EP21790929.0                                                                                | C07D 417/14                                                                                                          |
| (21) EP21921796.5                                                                                                                                                                                      | (47) 18.12.2024                                                                                  | C07D 471/04                                                                                                          |
| (47) 18.12.2024                                                                                                                                                                                        | (87) EP2021078878                                                                                | C07D 487/04                                                                                                          |
| (87) CN2021074150                                                                                                                                                                                      | 28.04.2022                                                                                       | C07D 498/04                                                                                                          |
| 04.08.2022                                                                                                                                                                                             | (22) 19.10.2021                                                                                  | C07D 513/04                                                                                                          |
| (22) 28.01.2021                                                                                                                                                                                        | (54) 1-(PYRIDYL)-5-AZINYLPYRAZOL DERIVATIVES AND USE OF SAME FOR COMBATING UNDESIRE PLANT GROWTH | A61K 31/439                                                                                                          |
| (54) METHOD FOR PREPARING 6-HYDROXY-6 (HYDROXYMETHYL)-2H-PYRAN-3(6H)-ONE BY MEANS OF CATALYTIC OXIDATION                                                                                               | (73) Bayer Aktiengesellschaft                                                                    | A61P 25/30                                                                                                           |
| (73) Ningbo Institute of Materials Technology & Engineering, Chinese Academy of Sciences                                                                                                               | (72) BOLLENBACH-WAHL, Birgit                                                                     | (11) EP3676261                                                                                                       |
| (72) HAN, Yingying                                                                                                                                                                                     | JAKOBI, Harald                                                                                   | (21) EP18766021.2                                                                                                    |
| ZHANG, Jian                                                                                                                                                                                            | REINGRUBER, Anna Maria                                                                           | (47) 18.12.2024                                                                                                      |
| LI, Zhenyu                                                                                                                                                                                             | MUELLER, Thomas                                                                                  | (87) GB2018052479                                                                                                    |
| HAO, Panpan                                                                                                                                                                                            | BUSCATO, Estella                                                                                 | 07.03.2019                                                                                                           |
| (51) C07D 401/12                                                                                                                                                                                       | DITTGEN, Jan                                                                                     | (22) 31.08.2018                                                                                                      |
| A61K 31/4439                                                                                                                                                                                           | HOFFMANN, Michael Gerhard                                                                        | (54) SUBSTITUTED 2-AZABICYCLO[3.1.1]HEPTANE AND 2-AZABICYCLO[3.2.1]OCTANE DERIVATIVES AS OREXIN RECEPTOR ANTAGONISTS |
| A61K 31/4025                                                                                                                                                                                           | GATZWEILER, Elmar                                                                                | (73) Chronos Therapeutics Limited                                                                                    |
| A61K 31/4178                                                                                                                                                                                           | (31) 20203487                                                                                    | (72) POZZAN, Alfonso                                                                                                 |
| A61K 31/4155                                                                                                                                                                                           | (32) 23.10.2020                                                                                  | SEMERARO, Teresa                                                                                                     |
| A61P 29/00                                                                                                                                                                                             | (33) European Patent Office (EPO)                                                                | TARSI, Luca                                                                                                          |
| A61P 1/04                                                                                                                                                                                              | (51) C07D 401/14                                                                                 | GIBSON, Karl Richard                                                                                                 |
| A61P 1/14                                                                                                                                                                                              | C07D 405/14                                                                                      | RAVEGLIA, Luca                                                                                                       |
| C07D 409/14                                                                                                                                                                                            | C07D 407/14                                                                                      | CREMONESI, Susanna                                                                                                   |
| C07D 403/12                                                                                                                                                                                            | C07D 409/14                                                                                      | ZANALETI, Riccardo                                                                                                   |
| (11) EP4148050                                                                                                                                                                                         | C07D 413/14                                                                                      | LUKER, Timothy Jon                                                                                                   |
| (21) EP21826347.3                                                                                                                                                                                      | C07D 417/14                                                                                      | MICHELI, Fabrizio                                                                                                    |
| (47) 18.12.2024                                                                                                                                                                                        | A61K 31/4164                                                                                     | BERTANI, Barbara                                                                                                     |
| (87) KR2021007572                                                                                                                                                                                      | A61K 31/4196                                                                                     | DI FABIO, Romano                                                                                                     |
| 23.12.2021                                                                                                                                                                                             | A61K 31/4439                                                                                     | (31) 201804745                                                                                                       |
| (22) 16.06.2021                                                                                                                                                                                        | A61K 31/444                                                                                      | 201714049                                                                                                            |
| (54) NOVEL ACID SECRETION INHIBITOR AND USE THEREOF                                                                                                                                                    | A61K 31/5377                                                                                     | (32) 23.03.2018                                                                                                      |
| (73) Ildong Pharmaceutical Co., Ltd.                                                                                                                                                                   | A61P 1/16                                                                                        | 01.09.2017                                                                                                           |
| (72) JEON, Woo Jin                                                                                                                                                                                     | A61P 3/00                                                                                        | (33) United Kingdom                                                                                                  |
| CHANG, Min Whan                                                                                                                                                                                        | A61P 9/00                                                                                        | United Kingdom                                                                                                       |
| PARK, Jung Eun                                                                                                                                                                                         | A61P 13/12                                                                                       | (51) C07D 403/12                                                                                                     |
| YOON, Hong Chul                                                                                                                                                                                        | A61P 25/28                                                                                       | A61P 25/16                                                                                                           |
| SOHN, Te Ik                                                                                                                                                                                            | A61P 29/00                                                                                       | A61P 25/28                                                                                                           |
|                                                                                                                                                                                                        | A61P 37/06                                                                                       | A61P 29/00                                                                                                           |
|                                                                                                                                                                                                        | (11) EP3787621                                                                                   | A61P 35/00                                                                                                           |
|                                                                                                                                                                                                        | (21) EP19797015.5                                                                                | A61K 31/506                                                                                                          |
|                                                                                                                                                                                                        | (47) 18.12.2024                                                                                  | (11) EP3953348                                                                                                       |
|                                                                                                                                                                                                        | (87) US2019030183                                                                                | (21) EP20787582.4                                                                                                    |
|                                                                                                                                                                                                        | 07.11.2019                                                                                       | (47) 18.12.2024                                                                                                      |
|                                                                                                                                                                                                        | (22) 01.05.2019                                                                                  | (87) US2020027742                                                                                                    |
|                                                                                                                                                                                                        | (54) TETRAZOLE CONTAINING APOPTOSIS SIGNAL-REGULATING KINASE 1                                   | 15.10.2020                                                                                                           |

|                                                                                        |                                                                                       |                                                                      |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| (22) 10.04.2020                                                                        | PHARMACEUTICAL COMPOSITIONS                                                           | WATERSON, Alex                                                       |
| (54) COMPOUNDS, COMPOSITIONS AND METHODS                                               | COMPRISING THE SAME                                                                   | ABBOTT, Jason                                                        |
| (73) Denali Therapeutics Inc.                                                          | (73) Hexapharmatec Co., Ltd.                                                          | MANTOULIDIS, Andreas                                                 |
| (72) SWEENEY, Zachary K.                                                               | (72) HAN, Shin                                                                        | LITTLE, Andrew                                                       |
| ESTRADA, Anthony A.                                                                    | LEE, Jae-Hyoung                                                                       | SARKAR, Dhruva                                                       |
| DE VICENTE FIDALGO, Javier                                                             | (31) 20180084536                                                                      | TREU, Matthias                                                       |
| FENG, Jianwen A.                                                                       | (32) 20.07.2018                                                                       | CUI, Jianwen                                                         |
| (31) 201962832775 P                                                                    | (33) Korea (Republic)                                                                 | SUN, Qi                                                              |
| (32) 11.04.2019                                                                        | (51) C07D 413/14                                                                      | KAROLYI-OEZGUER, Jale                                                |
| (33) United States of America                                                          | C07D 405/12                                                                           | PHAN, Jason                                                          |
| (51) C07D 403/12                                                                       | C07D 405/14                                                                           | SMETHURST, Christian Alan Paul                                       |
| C07D 413/12                                                                            | A61K 31/496                                                                           | (31) 202063033505 P                                                  |
| C07D 249/08                                                                            | A61P 3/10                                                                             | 20212067                                                             |
| A61P 1/00                                                                              | (11) EP4219487                                                                        | (32) 02.06.2020                                                      |
| A61P 3/04                                                                              | (21) EP23155747.1                                                                     | 05.12.2020                                                           |
| A61P 3/10                                                                              | (47) 18.12.2024                                                                       | (33) United States of America                                        |
| A61P 11/00                                                                             | (22) 11.06.2019                                                                       | European Patent Office (EPO)                                         |
| A61P 17/02                                                                             | (54) GLP-1 RECEPTOR AGONISTS AND USES THEREOF                                         | (51) C07D 471/04                                                     |
| A61P 25/00                                                                             | (73) Pfizer Inc.                                                                      | (11) EP4038071                                                       |
| A61P 25/28                                                                             | (72) FLANAGAN, Mark E.                                                                | (21) EP20793533.9                                                    |
| A61P 27/02                                                                             | LIAN, Yajing                                                                          | (47) 18.12.2024                                                      |
| A61P 29/00                                                                             | FUTATSUGI, Kentaro                                                                    | (87) US2020053904                                                    |
| A61P 31/12                                                                             | HUARD, Kim                                                                            | 08.04.2021                                                           |
| A61P 35/00                                                                             | ASPINES, Gary Erik                                                                    | (22) 02.10.2020                                                      |
| A61P 35/02                                                                             | CURTO, John M.                                                                        | (54) PROCESS FOR PREPARING AN ACTIVIN RECEPTOR-LIKE KINASE INHIBITOR |
| A61P 37/02                                                                             | PIOTROWSKI, David W.                                                                  | (73) Blueprint Medicines Corporation                                 |
| A61P 37/06                                                                             | MATHIOWETZ, Alan M.                                                                   | (72) OHMER, Harald                                                   |
| A61P 37/08                                                                             | RUGGERI, Roger B.                                                                     | HEINRICH, Brian                                                      |
| A61P 43/00                                                                             | EDMONDS, David James                                                                  | SIEGEL, Dominik                                                      |
| A61K 31/4196                                                                           | GRIFFITH, David A.                                                                    | WILKIE, Gordon                                                       |
| (11) EP3663291                                                                         | LIMBERAKIS, Chris                                                                     | (31) 201962909533 P                                                  |
| (21) EP20153455.9                                                                      | LONDREGAN, Allyn T.                                                                   | (32) 02.10.2019                                                      |
| (47) 18.12.2024                                                                        | BAGLEY, Scott W.                                                                      | (33) United States of America                                        |
| (22) 09.05.2013                                                                        | (31) 201962851206 P                                                                   | (51) C07D 471/04                                                     |
| (54) NUCLEAR TRANSPORT MODULATORS AND USES THEREOF                                     | 201962846944 P                                                                        | A61K 31/4375                                                         |
| (73) Karyopharm Therapeutics Inc.                                                      | 201862684696 P                                                                        | A61P 11/00                                                           |
| (72) BALOGLU, Erkan                                                                    | (32) 22.05.2019                                                                       | (11) EP4086254                                                       |
| SHACHAM, Sharon                                                                        | 13.05.2019                                                                            | (21) EP22173105.2                                                    |
| MCCAULEY, Dilara                                                                       | 13.06.2018                                                                            | (47) 18.12.2024                                                      |
| SANDANAYAKA, Vincent, P.                                                               | (33) United States of America                                                         | (22) 29.08.2019                                                      |
| SHECHTER, Sharon                                                                       | United States of America                                                              | (54) INTEGRIN INHIBITORS                                             |
| (31) 201361798188 P                                                                    | United States of America                                                              | (73) Morphic Therapeutic, Inc.                                       |
| 201261644802 P                                                                         | (51) C07D 413/14                                                                      | (72) HICKEY, Eugene                                                  |
| (32) 15.03.2013                                                                        | C07D 417/14                                                                           | BURSAVICH, Matthew G.                                                |
| 09.05.2012                                                                             | C07D 409/14                                                                           | ROGERS, Bruce N.                                                     |
| (33) United States of America                                                          | A61P 35/00                                                                            | TROAST, Dawn M.                                                      |
| United States of America                                                               | A61K 31/381                                                                           | LIPPA, Blaise S.                                                     |
| (51) C07D 409/06                                                                       | C07D 471/08                                                                           | KONZE, Kyle D.                                                       |
| A61K 31/496                                                                            | C07D 471/10                                                                           | GERASYUTO, Aleksey I.                                                |
| A61K 31/381                                                                            | C07D 487/08                                                                           | BORTOLATO, Andrea                                                    |
| A61K 31/385                                                                            | C07D 487/10                                                                           | SVENSSON, Mats A.                                                    |
| A61P 25/00                                                                             | (11) EP4157837                                                                        | KIM, Byungchan                                                       |
| A61P 25/16                                                                             | (21) EP21729877.7                                                                     | HARRISON, Bryce A.                                                   |
| A61P 25/28                                                                             | (47) 18.12.2024                                                                       | LIN, Fu-Yang                                                         |
| C07D 409/12                                                                            | (87) EP2021064616                                                                     | ZHONG, Cheng                                                         |
| C07D 333/38                                                                            | 09.12.2021                                                                            | QIAO, Qi                                                             |
| (11) EP3814340                                                                         | (22) 01.06.2021                                                                       | DOWLING, James E.                                                    |
| (21) EP19837491.0                                                                      | (54) ANNULATED 2-AMINO-3-CYANO THIOPHENES AND DERIVATIVES FOR THE TREATMENT OF CANCER | DAY, Tyler                                                           |
| (47) 18.12.2024                                                                        | (73) Boehringer Ingelheim International GmbH                                          | HAHN, Kristopher N.                                                  |
| (87) KR2019008805                                                                      | Vanderbilt University                                                                 | SOSA, Brian                                                          |
| 23.01.2020                                                                             | (72) HODGES, Tim                                                                      | (31) 201962859457 P                                                  |
| (22) 17.07.2019                                                                        | BROEKER, Joachim                                                                      | 201862724423 P                                                       |
| (54) NOVEL CATECHOL DERIVATIVES OR SALT THEREOF, PROCESSES FOR PREPARING THE SAME, AND | FESIK, Stephen W.                                                                     | (32) 10.06.2019                                                      |
|                                                                                        | GOLLNER, Andreas                                                                      | 29.08.2018                                                           |
|                                                                                        |                                                                                       | (33) United States of America                                        |
|                                                                                        |                                                                                       | United States of America                                             |

|                                                                                                                                                   |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) C07D 471/04<br>A61K 31/517<br>A61K 31/519<br>A61P 11/08                                                                                      | AKAMATSU, Masahiko<br>Guliang Xia<br>MIKAMI, Norihisa<br>UJIHARA, Satoru                                                                                                                                | United States of America<br>United States of America<br>United States of America<br>United States of America                                                                                                                                                                                                 |
| (11) EP3822272<br>(21) EP19834834.4<br>(47) 18.12.2024<br>(87) CN2019095826<br>16.01.2020                                                         | NAKAMURA, Naoto<br>HARADA, Hironori<br>(31) 201762491279 P<br>201762451807 P<br>(32) 28.04.2017<br>30.01.2017                                                                                           | (51) C07D 487/04<br>C07D 487/16<br>C07D 487/22<br>C07D 515/22<br>C07D 491/147<br>A61P 31/04<br>A61K 31/519                                                                                                                                                                                                   |
| (22) 12.07.2019<br>(54) FUSED TRI-CYCLIC COMPOUND AS<br>PDE3/PDE4 DUAL INHIBITOR                                                                  | (33) United States of America<br>United States of America                                                                                                                                               | (11) EP3044225<br>(21) EP14844214.8<br>(47) 18.12.2024<br>(87) US2014055019<br>19.03.2015                                                                                                                                                                                                                    |
| (73) Chia Tai Tianqing Pharmaceutical Group<br>Co., Ltd.                                                                                          | (51) C07D 471/06<br>A61K 31/506<br>A61P 35/00<br>A61P 35/02<br>C07D 519/00                                                                                                                              | (22) 10.09.2014<br>(54) TRICYCLIC GYRASE INHIBITORS<br>(73) Lawrence Livermore National Security,<br>LLC<br>Merck Sharp & Dohme LLC                                                                                                                                                                          |
| (72) SU, Sheng<br>WANG, Yong<br>PAN, Jianfeng<br>LUO, Yunfu<br>CHEN, Shuhui<br>ZHANG, Guoli                                                       | (11) EP3998268<br>(21) EP20835453.0<br>(47) 18.12.2024<br>(87) CN2020099916<br>07.01.2021<br>(22) 02.07.2020                                                                                            | (72) NGUYEN, Toan, B.<br>TRZOSS, Michael<br>PHILLIPSON, Douglas<br>BORCHARDT, Allen John<br>TARI, Leslie William<br>ONG, Voon<br>FINN, John<br>CHEN, Zhiyong<br>BENSEN, Daniel<br>LIGHTSTONE, Felice, C.<br>ZHANG, Junhu<br>WONG, Sergio, E.<br>LAM, Thanh To<br>TENG, Min<br>LEE, Suk Joong<br>LI, Xiaoming |
| (31) 201810772374<br>(32) 13.07.2018<br>(33) China                                                                                                | (54) COMPOUND FOR INHIBITING EGFR<br>KINASE AND PREPARATION METHOD<br>AND USE THEREOF<br>(73) Wigen Biomedicine Technology<br>(Shanghai) Co., Ltd.<br>(72) FAN, Houxing<br>XIE, Yuli<br>CAO, Gang       | (31) 201361876688 P<br>(32) 11.09.2013<br>(33) United States of America                                                                                                                                                                                                                                      |
| (51) C07D 471/04<br>A61P 1/04<br>A61K 31/437<br>A61K 31/444<br>A61K 31/4545<br>A61K 31/4709<br>A61K 31/5377                                       | (31) 201910600229<br>(32) 04.07.2019<br>(33) China                                                                                                                                                      | (51) C07K 7/08<br>C07K 14/51<br>A61L 27/22<br>A61L 27/54                                                                                                                                                                                                                                                     |
| (11) EP3808747<br>(21) EP19859445.9<br>(47) 18.12.2024<br>(87) JP2019035792<br>19.03.2020                                                         | (51) C07D 487/04<br>A61K 8/49<br>A61Q 19/02<br>C07D 209/12<br>A61P 17/00<br>A61K 31/404<br>A61Q 17/04                                                                                                   | (11) EP3492487<br>(21) EP17752273.7<br>(47) 18.12.2024<br>(87) KR2017002436<br>01.02.2018<br>(22) 07.03.2017<br>(54) PEPTIDE HAVING TITANIUM BINDING<br>ABILITY<br>(73) Seoul National University R&DB<br>Foundation<br>Nano Intelligent Biomedical Engineering<br>Co. Ltd                                   |
| (22) 12.09.2019<br>(54) IMIDAZOPYRIDINONE COMPOUND<br>(73) KISSEI PHARMACEUTICAL CO., LTD.                                                        | (11) EP3774811<br>(21) EP19721453.9<br>(47) 18.12.2024<br>(87) US2019027181<br>17.10.2019<br>(22) 12.04.2019                                                                                            | (72) PARK, Yoon Jeong<br>CHUNG, Chong-Pyoung<br>LEE, Jue-Yeon<br>LEE, Dong Woo<br>KIM, Yeonsu                                                                                                                                                                                                                |
| (72) MORIYAMA Akihiro<br>TAKIGAWA Yasushi                                                                                                         | (54) PHOTOPROTECTIVE COMPOSITIONS<br>CONTAINING MALASSEZIA-DERIVED<br>COMPOUNDS AND/OR CHEMICAL<br>ANALOGS THEREOF<br>(73) VERSICOLOR TECHNOLOGIES, LLC<br>(72) Einziger, Michael<br>Simpson, Ann Marie | (31) 20160094893<br>(32) 26.07.2016<br>(33) Korea (Republic)                                                                                                                                                                                                                                                 |
| (31) 2018171839<br>(32) 13.09.2018<br>(33) Japan                                                                                                  | (31) 201862742657 P<br>201862722412 P<br>201862686912 P<br>201862685800 P<br>201862668007 P<br>201862656769 P<br>(32) 08.10.2018<br>24.08.2018<br>19.06.2018<br>15.06.2018<br>07.05.2018<br>12.04.2018  | (51) C07K 14/03<br>(11) EP3823979<br>(21) EP19742045.8<br>(47) 18.12.2024                                                                                                                                                                                                                                    |
| (51) C07D 471/04<br>A61P 37/08<br>A61P 37/06<br>A61P 35/00<br>A61P 29/00<br>A61K 35/17<br>A61K 31/497<br>A61K 31/437<br>A61K 39/00<br>C12N 5/0783 | (33) United States of America<br>United States of America                                                                                                                                               |                                                                                                                                                                                                                                                                                                              |
| (11) EP3575297<br>(21) EP18744360.1<br>(47) 18.12.2024<br>(87) JP2018002826<br>02.08.2018<br>(22) 30.01.2018                                      |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                              |
| (54) NOVEL COMPOUND, AND METHOD<br>FOR PRODUCING REGULATORY T<br>CELLS                                                                            |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                              |
| (73) Astellas Pharma Inc.<br>Kyoto University                                                                                                     |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                              |
| (72) NARUMIYA, Shuh<br>SAKAGUCHI, Shimon<br>HAMAGUCHI, Hisao<br>OHKURA, Naganari                                                                  |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                              |

|                                                                                                                                    |                                                                  |                                                                |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------|
| (87) EP2019069562<br>23.01.2020                                                                                                    | (22) 25.08.2016                                                  | (32) 08.03.2016                                                |
| (22) 19.07.2019                                                                                                                    | (54) COMPOUNDS FOR INDUCING TISSUE<br>FORMATION AND USES THEREOF | (33) European Patent Office (EPO)                              |
| (54) METHODS FOR SCREENING<br>AND IDENTIFYING AGENTS THAT<br>INHIBIT OR MODULATE THE<br>NUCLEAR EGRESS COMPLEX OF<br>HERPESVIRUSES | (73) Histide AG                                                  | (51) C07K 16/18                                                |
| (73) Friedrich-Alexander-Universität Erlangen-<br>Nürnberg                                                                         | (72) ZOUANI, Omar F.                                             | A61P 25/16                                                     |
| AiCuris GmbH & Co. KG                                                                                                              | (31) 201562209406 P                                              | (11) EP3555127                                                 |
| (72) EICHLER, Jutta                                                                                                                | 15307126                                                         | (21) EP17835611.9                                              |
| STICHT, Heinrich                                                                                                                   | (32) 25.08.2015                                                  | (47) 18.12.2024                                                |
| MULLER, Yves                                                                                                                       | 23.12.2015                                                       | (87) EP2017082749                                              |
| MARSCHALL, Manfred                                                                                                                 | (33) United States of America                                    | 21.06.2018                                                     |
| (31) 18184806                                                                                                                      | European Patent Office (EPO)                                     | (22) 14.12.2017                                                |
| (32) 20.07.2018                                                                                                                    | (51) C07K 14/51                                                  | (54) AGENTS, USES AND METHODS                                  |
| (33) European Patent Office (EPO)                                                                                                  | (11) EP3341398                                                   | (73) H. Lundbeck A/S                                           |
| (51) C07K 14/315                                                                                                                   | (21) EP16762749.6                                                | (72) KALLUNKI, Pekka                                           |
| C07K 14/705                                                                                                                        | (47) 18.12.2024                                                  | FOG, Karina                                                    |
| C07K 16/18                                                                                                                         | (87) EP2016070133                                                | STAVENHAGEN, Jeffrey B.                                        |
| (11) EP3701009                                                                                                                     | 02.03.2017                                                       | (31) PA201600769                                               |
| (21) EP18800517.7                                                                                                                  | (22) 25.08.2016                                                  | (32) 16.12.2016                                                |
| (47) 18.12.2024                                                                                                                    | (54) COMPOUNDS FOR INDUCING TISSUE<br>FORMATION AND USES THEREOF | (33) Denmark                                                   |
| (87) EP2018079355                                                                                                                  | (73) Histide AG                                                  | (51) C07K 16/28                                                |
| 02.05.2019                                                                                                                         | (72) ZOUANI, Omar F.                                             | A61K 38/20                                                     |
| (22) 25.10.2018                                                                                                                    | (31) 201562209411 P                                              | A61K 38/21                                                     |
| (54) DISPLAY OF HETEROLOGOUS<br>MOLECULES ON BACTERIAL CELLS<br>AND MEMBRANE VESICLES                                              | 15307127                                                         | G01N 33/574                                                    |
| (73) Abera Bioscience AB                                                                                                           | (32) 25.08.2015                                                  | G01N 33/569                                                    |
| (72) JONG, Wouter Simon Petrus                                                                                                     | 23.12.2015                                                       | G01N 33/50                                                     |
| VAN DEN BERG VAN SAPAROE, A.                                                                                                       | (33) United States of America                                    | C12Q 1/6886                                                    |
| Hendrik Bart                                                                                                                       | European Patent Office (EPO)                                     | C12N 15/113                                                    |
| LUIRINK, Joen                                                                                                                      | (51) C07K 14/62                                                  | (11) EP3428191                                                 |
| (31) 17198241                                                                                                                      | A61K 38/28                                                       | (21) EP18167823.6                                              |
| (32) 25.10.2017                                                                                                                    | A61K 47/60                                                       | (47) 18.12.2024                                                |
| (33) European Patent Office (EPO)                                                                                                  | (11) EP3666792                                                   | (22) 06.10.2005                                                |
| (51) C07K 14/435                                                                                                                   | (21) EP19211801.6                                                | (54) B7-H1 AND PD-1 IN TREATMENT OF<br>RENAL CELL CARCINOMA    |
| C12N 15/866                                                                                                                        | (47) 18.12.2024                                                  | (73) Mayo Foundation for Medical Education<br>and Research     |
| (11) EP3334754                                                                                                                     | (22) 19.11.2015                                                  | (72) STROME, Scott E.                                          |
| (21) EP16834771.4                                                                                                                  | (54) INSULIN RECEPTOR PARTIAL<br>AGONISTS                        | KWON, Eugene D.                                                |
| (47) 18.12.2024                                                                                                                    | (73) Merck Sharp & Dohme LLC                                     | CHENG, Lieping                                                 |
| (87) IL2016050874                                                                                                                  | (72) Kecec, Ahmet                                                | (31) 642794 P                                                  |
| 16.02.2017                                                                                                                         | Feng, Danying                                                    | 616590 P                                                       |
| (22) 10.08.2016                                                                                                                    | Zhu, Yuping                                                      | (32) 11.01.2005                                                |
| (54) COMPOSITIONS AND METHODS FOR<br>FABRICATING SYNTHETIC DRAGLINE<br>SPIDER SILK                                                 | Madsen-Duggan, Christina, B.                                     | 06.10.2004                                                     |
| (73) Seevix Material Sciences Ltd.                                                                                                 | Lin, Songnian                                                    | (33) United States of America                                  |
| (72) GAT, Uri                                                                                                                      | Wu, Zhicai                                                       | United States of America                                       |
| SHIMEL, Meni                                                                                                                       | Mu, Yingjun                                                      | (51) C07K 16/28                                                |
| ITTAH, Shmulik                                                                                                                     | Huo, Pei                                                         | C07K 16/42                                                     |
| (31) 201662317572 P                                                                                                                | Shi, Zhi-Cai                                                     | G01N 33/00                                                     |
| 201662293880 P                                                                                                                     | Nargund, Ravi                                                    | (11) EP3491024                                                 |
| 201562203102 P                                                                                                                     | Pissarnitski, Dmitri                                             | (21) EP17754531.6                                              |
| (32) 03.04.2016                                                                                                                    | Yan, Lin                                                         | (47) 18.12.2024                                                |
| 11.02.2016                                                                                                                         | (31) 201562242503 P                                              | (87) US2017044560                                              |
| 10.08.2015                                                                                                                         | 201462082857 P                                                   | 01.02.2018                                                     |
| (33) United States of America                                                                                                      | (32) 16.10.2015                                                  | (22) 29.07.2017                                                |
| United States of America                                                                                                           | 21.11.2014                                                       | (54) ANTI-IDIOTYPIC ANTIBODIES<br>AGAINST ANTI-CD19 ANTIBODIES |
| United States of America                                                                                                           | (33) United States of America                                    | (73) Juno Therapeutics, Inc.                                   |
| (51) C07K 14/51                                                                                                                    | United States of America                                         | (72) SMITH, Jeff                                               |
| (11) EP3341397                                                                                                                     | (51) C07K 14/74                                                  | HEIPEL, Mark, D.                                               |
| (21) EP16762748.8                                                                                                                  | (11) EP3795588                                                   | SUTHERLAND, Claire, L.                                         |
| (47) 18.12.2024                                                                                                                    | (21) EP20192762.1                                                | SATHALIYA, Taher                                               |
| (87) EP2016070130                                                                                                                  | (47) 18.12.2024                                                  | HAUSKINS, Collin                                               |
| 02.03.2017                                                                                                                         | (22) 07.03.2017                                                  | (31) 201662369008 P                                            |
|                                                                                                                                    | (54) HLA-B57 OPEN CONFORMERS                                     | (32) 29.07.2016                                                |
|                                                                                                                                    | (73) Universität Zürich                                          | (33) United States of America                                  |
|                                                                                                                                    | Universität Basel                                                | (51) C08B 15/06                                                |
|                                                                                                                                    | (72) MARROQUIN BELAUNZARAN, Osiris                               | B01J 8/00                                                      |
|                                                                                                                                    | RENNER, Christoph                                                | (11) EP4132978                                                 |
|                                                                                                                                    | PETRAUSCH, Ulf                                                   | (21) EP21718161.9                                              |
|                                                                                                                                    | (31) 16159099                                                    | (47) 18.12.2024                                                |

|                                                                           |                                                                                                                   |                                                                                                                                                                     |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (87) FI2021050210<br>14.10.2021                                           | (32) 26.04.2017                                                                                                   | (51) C08F 8/14                                                                                                                                                      |
| (22) 26.03.2021                                                           | (33) United Kingdom                                                                                               | C08F 216/06                                                                                                                                                         |
| (54) PROCESS FOR PRODUCING<br>CELLULOSE CARBAMATE                         | (51) C08F 4/659                                                                                                   | (11) EP4219569                                                                                                                                                      |
| (73) Andritz Oy                                                           | C08F 210/16                                                                                                       | (21) EP21872487.0                                                                                                                                                   |
| (72) RAMARK, Hannu                                                        | (11) EP3642248                                                                                                    | (47) 18.12.2024                                                                                                                                                     |
| PELKONEN, Jukka-Pekka                                                     | (21) EP18738158.7                                                                                                 | (87) JP2021034784                                                                                                                                                   |
| VANHATALO, Kari                                                           | (47) 18.12.2024                                                                                                   | 31.03.2022                                                                                                                                                          |
| PESONEN, Elina                                                            | (87) US2018038050                                                                                                 | (22) 22.09.2021                                                                                                                                                     |
| (31) 20205365                                                             | 27.12.2018                                                                                                        | (54) ACETOACETYL GROUP-CONTAINING<br>POLY(VINYL ALCOHOL)-BASED RESIN<br>AND METHOD FOR PRODUCING<br>ACETOACETYL GROUP-CONTAINING<br>POLY(VINYL ALCOHOL)-BASED RESIN |
| (32) 06.04.2020                                                           | (22) 18.06.2018                                                                                                   | (73) Mitsubishi Chemical Corporation                                                                                                                                |
| (33) Finland                                                              | (54) BIARYL PHENOXY GROUP IV<br>TRANSITION METAL CATALYSTS FOR<br>OLEFIN POLYMERIZATION                           | (72) TSUJIMOTO, Takayuki                                                                                                                                            |
| (51) C08B 37/00                                                           | (73) Dow Global Technologies LLC                                                                                  | YANO, Tomotake                                                                                                                                                      |
| C08L 5/00                                                                 | (72) SUN, Lixin                                                                                                   | (31) 2020159249                                                                                                                                                     |
| (11) EP3521320                                                            | FROESE, Robert, D., J.                                                                                            | (32) 24.09.2020                                                                                                                                                     |
| (21) EP17856501.6                                                         | DEVORE, David, D.                                                                                                 | (33) Japan                                                                                                                                                          |
| (47) 18.12.2024                                                           | KRASOVSKIY, Arkady, L.                                                                                            | (51) C08F 14/06                                                                                                                                                     |
| (87) JP2017035739                                                         | SZUROMI, Endre                                                                                                    | C08F 2/26                                                                                                                                                           |
| 05.04.2018                                                                | FRAZIER, Kevin A.                                                                                                 | C08F 2/44                                                                                                                                                           |
| (22) 29.09.2017                                                           | RENNY, Joseph, S.                                                                                                 | C08K 3/26                                                                                                                                                           |
| (54) LOW MOLECULAR GUM GHATTI                                             | (31) 201762522200 P                                                                                               | (11) EP4029885                                                                                                                                                      |
| (73) San-Ei Gen F.F.I., INC.                                              | (32) 20.06.2017                                                                                                   | (21) EP20863125.9                                                                                                                                                   |
| (72) MATSUKURA, Takuma                                                    | (33) United States of America                                                                                     | (47) 18.12.2024                                                                                                                                                     |
| KINOSHITA, Keigo                                                          | (51) C08F 4/659                                                                                                   | (87) KR2020012064                                                                                                                                                   |
| MARUYAMA, Ryo                                                             | C08F 210/16                                                                                                       | 18.03.2021                                                                                                                                                          |
| MIUCHI, Takeshi                                                           | (11) EP3642250                                                                                                    | (22) 07.09.2020                                                                                                                                                     |
| (31) 2016195238                                                           | (21) EP18746022.5                                                                                                 | (54) METHOD FOR PRODUCING VINYL<br>CHLORIDE-BASED POLYMER                                                                                                           |
| (32) 30.09.2016                                                           | (47) 18.12.2024                                                                                                   | (73) LG CHEM, LTD.                                                                                                                                                  |
| (33) Japan                                                                | (87) US2018038492                                                                                                 | (72) PARK, Jae Hyun                                                                                                                                                 |
| (51) C08B 37/16                                                           | 27.12.2018                                                                                                        | HA, Hyun Kyou                                                                                                                                                       |
| (11) EP4180464                                                            | (22) 20.06.2018                                                                                                   | JEON, Yang Jun                                                                                                                                                      |
| (21) EP21850057.7                                                         | (54) BIARYL PHENOXY GROUP IV<br>TRANSITION METAL CATALYSTS FOR<br>OLEFIN POLYMERIZATION                           | LEE, Kwang Jin                                                                                                                                                      |
| (47) 18.12.2024                                                           | (73) DOW GLOBAL TECHNOLOGIES LLC                                                                                  | (31) 20190113003                                                                                                                                                    |
| (87) JP2021027276                                                         | (72) DEVORE, David D.                                                                                             | (32) 11.09.2019                                                                                                                                                     |
| 03.02.2022                                                                | CAMELIO, Andrew M.                                                                                                | (33) Korea (Republic)                                                                                                                                               |
| (22) 21.07.2021                                                           | FROESE, Robert D. J.                                                                                              | (51) C08F 210/16                                                                                                                                                    |
| (54) CYCLODEXTRIN DERIVATIVE HAVING<br>POLYMERIZABLE UNSATURATED<br>GROUP | SZUROMI, Endre                                                                                                    | C08F 4/6592                                                                                                                                                         |
| (73) Kyoisha Chemical Co., Ltd.                                           | (31) 201762522213 P                                                                                               | C08J 5/18                                                                                                                                                           |
| (72) OSAKI, Motofumi                                                      | (32) 20.06.2017                                                                                                   | (11) EP3717527                                                                                                                                                      |
| YAMAGUCHI, Tsuyoshi                                                       | (33) United States of America                                                                                     | (21) EP18797331.8                                                                                                                                                   |
| KURE, Bunsho                                                              | (51) C08F 4/6592                                                                                                  | (47) 18.12.2024                                                                                                                                                     |
| TAKENAKA, Naomi                                                           | C08F 210/16                                                                                                       | (87) US2018055871                                                                                                                                                   |
| TAKASHIMA, Yoshinori                                                      | (11) EP3365379                                                                                                    | 06.06.2019                                                                                                                                                          |
| HARADA, Akira                                                             | (21) EP16857946.4                                                                                                 | (22) 15.10.2018                                                                                                                                                     |
| TAKAHASHI, Yuya                                                           | (47) 18.12.2024                                                                                                   | (54) POLYETHYLENE COMPOSITIONS AND<br>FILMS MADE THEREFROM                                                                                                          |
| (31) 2020128269                                                           | (87) US2016049057                                                                                                 | (73) ExxonMobil Chemical Patents Inc.                                                                                                                               |
| (32) 29.07.2020                                                           | 27.04.2017                                                                                                        | (72) BEDOYA, Matthew S.                                                                                                                                             |
| (33) Japan                                                                | (22) 26.08.2016                                                                                                   | KUPPUSWAMY, Subramaniam                                                                                                                                             |
| (51) C08F 4/04                                                            | (54) PRODUCTION OF POLYOLEFINS<br>WITH INTERNAL UNSATURATION<br>STRUCTURES USING A<br>METALLOCENE CATALYST SYSTEM | HOLTCAMP, Matthew W.                                                                                                                                                |
| C08F 12/36                                                                | (73) ExxonMobil Chemical Patents Inc.                                                                             | SANDERS, David F.                                                                                                                                                   |
| C08F 2/38                                                                 | (72) SANDERS, David, F.                                                                                           | LI, Dongming                                                                                                                                                        |
| C08F 122/10                                                               | MATTLER, Sarah, J.                                                                                                | LUE, Ching-tai                                                                                                                                                      |
| C08F 222/10                                                               | DAY, Gregory, S.                                                                                                  | SILVA, Adriana S.                                                                                                                                                   |
| (11) EP3615577                                                            | HOLTCAMP, Matthew, W.                                                                                             | (31) 201762591557 P                                                                                                                                                 |
| (21) EP18728695.0                                                         | YE, Xuan                                                                                                          | (32) 28.11.2017                                                                                                                                                     |
| (47) 18.12.2024                                                           | BEDOYA, Matthew, S.                                                                                               | (33) United States of America                                                                                                                                       |
| (87) GB2018051106                                                         | (31) 201562245603 P                                                                                               | (51) C08F 236/04                                                                                                                                                    |
| 01.11.2018                                                                | 15197699                                                                                                          | C08F 236/10                                                                                                                                                         |
| (22) 26.04.2018                                                           | (32) 23.10.2015                                                                                                   | C08F 236/14                                                                                                                                                         |
| (54) BRANCHED POLYMERS                                                    | 03.12.2015                                                                                                        | C08F 279/02                                                                                                                                                         |
| (73) The University Of Liverpool                                          | (33) United States of America                                                                                     | C08F 236/12                                                                                                                                                         |
| (72) CASSIN, Savannah                                                     | European Patent Office (EPO)                                                                                      | C08K 3/04                                                                                                                                                           |
| CHAMBON, Pierre                                                           |                                                                                                                   | C08K 3/36                                                                                                                                                           |
| RANNARD, Steve                                                            |                                                                                                                   |                                                                                                                                                                     |
| (31) 201706658                                                            |                                                                                                                   |                                                                                                                                                                     |

|                                                                                     |                                                    |                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C08F 130/08                                                                         | C08J 7/044                                         | C08G 59/38                                                                                                                                                                                                                                          |
| C08F 299/00                                                                         | C08K 5/19                                          | C08J 5/04                                                                                                                                                                                                                                           |
| (11) EP3901187                                                                      | C09D 7/65                                          | (11) EP4029897                                                                                                                                                                                                                                      |
| (21) EP20864068.0                                                                   | (11) EP4119348                                     | (21) EP19944961.2                                                                                                                                                                                                                                   |
| (47) 18.12.2024                                                                     | (21) EP21767283.1                                  | (47) 18.12.2024                                                                                                                                                                                                                                     |
| (87) KR2020012329                                                                   | (47) 18.12.2024                                    | (87) JP2019035866                                                                                                                                                                                                                                   |
| 18.03.2021                                                                          | (87) JP2021007656                                  | 18.03.2021                                                                                                                                                                                                                                          |
| (22) 11.09.2020                                                                     | 16.09.2021                                         | (22) 12.09.2019                                                                                                                                                                                                                                     |
| (54) MODIFIED CONJUGATED DIENE-BASED POLYMER AND RUBBER COMPOSITION COMPRISING SAME | (22) 01.03.2021                                    | (54) EPOXY RESIN COMPOSITION, RESIN CURED PRODUCT, FIBER-REINFORCED COMPOSITE MATERIAL, AND PRODUCTION METHODS THEREFOR                                                                                                                             |
| (73) LG Chem, Ltd.                                                                  | (54) WHITE EASY-ADHESIVE POLYESTER FILM            | (73) Teijin Limited                                                                                                                                                                                                                                 |
| (72) KIM, Yu Jin                                                                    | (73) TOYOBO CO., LTD.                              | (72) OSAKI, Kohei                                                                                                                                                                                                                                   |
| LEE, Hyoung Woo                                                                     | (72) KUMAGAI, Eiji                                 | KONEKO, Toru                                                                                                                                                                                                                                        |
| LEE, Ro Mi                                                                          | KUBO, Takeshi                                      | OZAWA, Suguru                                                                                                                                                                                                                                       |
| (31) 20200116401                                                                    | (31) 2020039747                                    |                                                                                                                                                                                                                                                     |
| 20190113004                                                                         | (32) 09.03.2020                                    |                                                                                                                                                                                                                                                     |
| (32) 10.09.2020                                                                     | (33) Japan                                         |                                                                                                                                                                                                                                                     |
| 11.09.2019                                                                          | (51) C08G 18/10                                    | (51) C08G 65/48                                                                                                                                                                                                                                     |
| (33) Korea (Republic)                                                               | C08G 18/28                                         | H01M 50/414                                                                                                                                                                                                                                         |
| Korea (Republic)                                                                    | C08G 18/38                                         | C25B 13/08                                                                                                                                                                                                                                          |
| (51) C08F 287/00                                                                    | C08G 18/72                                         | H01M 4/62                                                                                                                                                                                                                                           |
| C08F 255/10                                                                         | C08G 18/79                                         | H01M 8/1025                                                                                                                                                                                                                                         |
| C08F 2/50                                                                           | C09J 175/08                                        | H01M 8/10                                                                                                                                                                                                                                           |
| C09J 4/06                                                                           | (11) EP4172225                                     | (11) EP4298150                                                                                                                                                                                                                                      |
| C09J 5/00                                                                           | (21) EP21736594.9                                  | (21) EP22748236.1                                                                                                                                                                                                                                   |
| H01L 21/683                                                                         | (47) 18.12.2024                                    | (47) 18.12.2024                                                                                                                                                                                                                                     |
| C08L 23/20                                                                          | (87) EP2021067604                                  | (87) DE2022100466                                                                                                                                                                                                                                   |
| C08K 5/3492                                                                         | 06.01.2022                                         | 29.12.2022                                                                                                                                                                                                                                          |
| C08K 5/3475                                                                         | (22) 28.06.2021                                    | (22) 23.06.2022                                                                                                                                                                                                                                     |
| (11) EP4148096                                                                      | (54) POLYETHER-MODIFIED POLYISOCYANATE COMPOSITION | (54) PHOSPHONIC NON-FLUORINATED AND PARTIALLY FLUORINATED ARYLPOLYMERS FROM SULPHONATED ARYLPOLYMERS AND POLYMERIC PERFLUOROPHOSPHONIC ACIDS FROM POLYMERIC PERFLUOROSULPHONIC ACIDS, METHOD OF MANUFACTURE AND USE IN ELECTROMEMBRANE APPLICATIONS |
| (21) EP21808188.3                                                                   | (73) Covestro Deutschland AG                       | (73) Riva Power Systems GmbH & Co. KG                                                                                                                                                                                                               |
| (47) 18.12.2024                                                                     | (72) ZHENG, Junchao                                | (72) CHROMIK, Andreas                                                                                                                                                                                                                               |
| (87) JP2021018671                                                                   | LIU, Hao                                           | (31) 102021003228                                                                                                                                                                                                                                   |
| 25.11.2021                                                                          | PIRES, Raul                                        | (32) 23.06.2021                                                                                                                                                                                                                                     |
| (22) 17.05.2021                                                                     | MA, Yaguang                                        | (33) Germany                                                                                                                                                                                                                                        |
| (54) COMPOSITION                                                                    | LAAS, Hans-Josef                                   | (51) C08G 73/10                                                                                                                                                                                                                                     |
| (73) Denka Company Limited                                                          | SHEN, Jianping                                     | C08G 73/02                                                                                                                                                                                                                                          |
| (72) WATANABE, Jun                                                                  | (31) 202010607517                                  | (11) EP3147306                                                                                                                                                                                                                                      |
| UCHIDA, Tometomo                                                                    | 20203838                                           | (21) EP15796975.9                                                                                                                                                                                                                                   |
| SUDO, Megumi                                                                        | (32) 29.06.2020                                    | (47) 18.12.2024                                                                                                                                                                                                                                     |
| TANIGAWA, Takako                                                                    | 26.10.2020                                         | (87) CN2015070280                                                                                                                                                                                                                                   |
| ARAI, Toru                                                                          | (33) China                                         | 26.11.2015                                                                                                                                                                                                                                          |
| YOSHIDA, Jun                                                                        | European Patent Office (EPO)                       | (22) 07.01.2015                                                                                                                                                                                                                                     |
| DOMOTO, Takashi                                                                     | (51) C08G 59/38                                    | (54) FAST-RESPONSE THERMOPLASTIC SHAPE-MEMORY POLYIMIDE AND PREPARATION METHOD THEREFOR                                                                                                                                                             |
| (31) 2020198857                                                                     | C08G 59/40                                         | (73) Harbin Institute of Technology                                                                                                                                                                                                                 |
| 2020089229                                                                          | C08G 59/68                                         | (72) LIU, Yanju                                                                                                                                                                                                                                     |
| (32) 30.11.2020                                                                     | C08L 63/00                                         | KONG, Deyan                                                                                                                                                                                                                                         |
| 21.05.2020                                                                          | (11) EP4277943                                     | LENG, Jingsong                                                                                                                                                                                                                                      |
| (33) Japan                                                                          | (21) EP22701201.0                                  | XIAO, Xinli                                                                                                                                                                                                                                         |
| Japan                                                                               | (47) 18.12.2024                                    | (31) 201410221959                                                                                                                                                                                                                                   |
| (51) C08G 18/08                                                                     | (87) EP2022050753                                  | (32) 23.05.2014                                                                                                                                                                                                                                     |
| C08G 18/12                                                                          | 21.07.2022                                         | (33) China                                                                                                                                                                                                                                          |
| C08G 18/28                                                                          | (22) 14.01.2022                                    | (51) C08G 73/10                                                                                                                                                                                                                                     |
| C08G 18/32                                                                          | (54) COMPOSITION                                   | C08J 5/18                                                                                                                                                                                                                                           |
| C08G 18/42                                                                          | (73) Kansai Helios Austria GmbH                    | (11) EP3153539                                                                                                                                                                                                                                      |
| C08G 18/44                                                                          | (72) HERKER, Mario                                 | (21) EP15803165.8                                                                                                                                                                                                                                   |
| C08G 18/48                                                                          | BREITWIESER, Christian                             |                                                                                                                                                                                                                                                     |
| C08G 18/66                                                                          | SCHELLENBERG, Johann                               |                                                                                                                                                                                                                                                     |
| C09D 7/63                                                                           | RAMETSTEINER, Karl                                 |                                                                                                                                                                                                                                                     |
| C09D 167/02                                                                         | TYPPELT, Gerhard                                   |                                                                                                                                                                                                                                                     |
| C09D 175/04                                                                         | (31) 21151780                                      |                                                                                                                                                                                                                                                     |
| C08G 18/34                                                                          | (32) 15.01.2021                                    |                                                                                                                                                                                                                                                     |
| C08G 18/73                                                                          | (33) European Patent Office (EPO)                  |                                                                                                                                                                                                                                                     |
| C08G 18/75                                                                          | (51) C08G 59/50                                    |                                                                                                                                                                                                                                                     |
| C08G 63/183                                                                         | B29B 15/08                                         |                                                                                                                                                                                                                                                     |
| C08G 63/688                                                                         | C08G 59/28                                         |                                                                                                                                                                                                                                                     |
| C08J 7/04                                                                           | C08G 59/32                                         |                                                                                                                                                                                                                                                     |



|                                                                                                          |                                                                                                    |                                                                        |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| (47) 18.12.2024                                                                                          | MATHEW, Mathew, C.                                                                                 | MA, Weiming                                                            |
| (87) JP2015066173                                                                                        | (31) 201762558909 P                                                                                | MADENJIAN, Lisa, S.                                                    |
| 10.12.2015                                                                                               | (32) 15.09.2017                                                                                    | YANG, Hong                                                             |
| (22) 04.06.2015                                                                                          | (33) United States of America                                                                      | SUN, Yabin                                                             |
| (54) METHOD FOR PRODUCING<br>POLYIMIDE FILM                                                              | (51) C08J 9/14                                                                                     | (51) C08L 5/14                                                         |
| (73) Ube Corporation                                                                                     | C08L 25/04                                                                                         | (11) EP3436516                                                         |
| (72) NAKAYAMA, Takeshige                                                                                 | (11) EP3452538                                                                                     | (21) EP17719642.5                                                      |
| NAKAYAMA, Tomonori                                                                                       | (21) EP17723828.4                                                                                  | (47) 18.12.2024                                                        |
| INOUE, Shohei                                                                                            | (47) 18.12.2024                                                                                    | (87) FI2017050222                                                      |
| KITAYAMA, Naoki                                                                                          | (87) US2017030587                                                                                  | 05.10.2017                                                             |
| YAMASHITA, Hiroo                                                                                         | 09.11.2017                                                                                         | (22) 29.03.2017                                                        |
| (31) 2014115815                                                                                          | (22) 02.05.2017                                                                                    | (54) METHOD OF PRODUCING<br>HEMICELLULOSE EXTRACTS                     |
| (32) 04.06.2014                                                                                          | (54) Z-HFO-1336MZZ BLOWING AGENT<br>FOR FOAMING THERMOPLASTIC<br>POLYMER COMPRISING<br>POLYSTYRENE | (73) CH-Bioforce Oy                                                    |
| (33) Japan                                                                                               | (73) The Chemours Company FC, LLC                                                                  | (72) LAX, Nicholas                                                     |
| (51) C08G 77/20                                                                                          | (72) CREAZZO, Joseph Anthony                                                                       | VÄHÄSALO, Lari                                                         |
| C08G 77/38                                                                                               | ROBIN, Mark L.                                                                                     | VON SCHOLTZ, Sebastian                                                 |
| C08L 83/07                                                                                               | (31) 201662332616 P                                                                                | (31) 20165264                                                          |
| C08K 3/22                                                                                                | (32) 06.05.2016                                                                                    | (32) 29.03.2016                                                        |
| C08G 77/18                                                                                               | (33) United States of America                                                                      | (33) Finland                                                           |
| (11) EP4053190                                                                                           | (51) C08J 11/06                                                                                    | (51) C08L 21/00                                                        |
| (21) EP20881404.6                                                                                        | B29B 7/48                                                                                          | C08K 3/04                                                              |
| (47) 18.12.2024                                                                                          | B29B 7/88                                                                                          | C08K 3/36                                                              |
| (87) JP2020040773                                                                                        | B29B 9/06                                                                                          | B60C 11/03                                                             |
| 06.05.2021                                                                                               | B29B 9/16                                                                                          | (11) EP4108720                                                         |
| (22) 30.10.2020                                                                                          | C08K 3/22                                                                                          | (21) EP21879779.3                                                      |
| (54) ORGANOPOLYSILOXANE AND<br>METHOD FOR PRODUCING SAME,<br>AND HEAT-CONDUCTIVE SILICONE<br>COMPOSITION | C21C 5/52                                                                                          | (47) 18.12.2024                                                        |
| (73) Dow Toray Co., Ltd.                                                                                 | C21C 7/00                                                                                          | (87) JP2021032672                                                      |
| (72) TOYAMA, Kyoko                                                                                       | B29B 7/72                                                                                          | 21.04.2022                                                             |
| KISHIMOTO, Norihisa                                                                                      | C21B 5/02                                                                                          | (22) 06.09.2021                                                        |
| FUKUI, Hiroshi                                                                                           | (11) EP3969625                                                                                     | (54) TIRE                                                              |
| (31) 2019197782                                                                                          | (21) EP20731586.2                                                                                  | (73) Sumitomo Rubber Industries, Ltd.                                  |
| (32) 30.10.2019                                                                                          | (47) 18.12.2024                                                                                    | (72) HAMAMURA, Kenji                                                   |
| (33) Japan                                                                                               | (87) IT2020050114                                                                                  | (31) 2020173414                                                        |
| (51) C08H 1/06                                                                                           | 19.11.2020                                                                                         | (32) 14.10.2020                                                        |
| C08K 5/053                                                                                               | (22) 12.05.2020                                                                                    | (33) Japan                                                             |
| C08L 89/06                                                                                               | (54) PROCESS OF PRODUCTION OF A<br>POLYMER PRODUCT                                                 | (51) C08L 23/06                                                        |
| C09D 189/06                                                                                              | (73) I.BLU S.r.l.                                                                                  | (11) EP4247892                                                         |
| (11) EP3929235                                                                                           | (72) GOSPARINI, Elia                                                                               | (21) EP21801140.1                                                      |
| (21) EP21401027.4                                                                                        | BOTTOLO, Mirko                                                                                     | (47) 18.12.2024                                                        |
| (47) 18.12.2024                                                                                          | GOSPARINI, Paolo                                                                                   | (87) EP2021080481                                                      |
| (22) 24.06.2021                                                                                          | (31) 201900006770                                                                                  | 27.05.2022                                                             |
| (54) MULTICOMPONENT SYSTEM FOR<br>PRODUCING A MATERIAL                                                   | (32) 13.05.2019                                                                                    | (22) 03.11.2021                                                        |
| (73) Klinger, Christian                                                                                  | (33) Italy                                                                                         | (54) PEELABLE COMPOSITION                                              |
| (72) Klinger, Christian                                                                                  | (51) C08K 5/3492                                                                                   | (73) Basell Poliolefine Italia S.r.l.                                  |
| (31) 102020116722                                                                                        | C08L 23/08                                                                                         | (72) MUSACCHI, Gianluca                                                |
| (32) 25.06.2020                                                                                          | H01L 31/042                                                                                        | IZZl, Marco                                                            |
| (33) Germany                                                                                             | B32B 27/32                                                                                         | (31) 20208010                                                          |
| (51) C08J 7/18                                                                                           | B32B 27/18                                                                                         | (32) 17.11.2020                                                        |
| C08F 2/48                                                                                                | B32B 27/26                                                                                         | (33) European Patent Office (EPO)                                      |
| C08F 222/10                                                                                              | C08K 5/14                                                                                          | (51) C08L 23/12                                                        |
| C08F 265/06                                                                                              | C08K 5/5425                                                                                        | (11) EP4081590                                                         |
| C09D 4/06                                                                                                | (11) EP3630881                                                                                     | (21) EP20838013.9                                                      |
| C09D 11/101                                                                                              | (21) EP17911664.5                                                                                  | (47) 18.12.2024                                                        |
| (11) EP3681938                                                                                           | (47) 18.12.2024                                                                                    | (87) EP2020087082                                                      |
| (21) EP18856453.8                                                                                        | (87) CN2017086554                                                                                  | 01.07.2021                                                             |
| (47) 18.12.2024                                                                                          | 06.12.2018                                                                                         | (22) 18.12.2020                                                        |
| (87) US2018050145                                                                                        | (22) 31.05.2017                                                                                    | (54) POLYMER COMPOSITION WITH<br>A HIGH HEAT DEFLECTION<br>TEMPERATURE |
| 21.03.2019                                                                                               | (54) NON-POLAR ETHYLENE-BASED<br>POLYMER COMPOSITIONS FOR<br>ENCAPSULANT FILMS                     | (73) SABIC Global Technologies B.V.                                    |
| (22) 10.09.2018                                                                                          | (73) Dow Global Technologies LLC                                                                   | (72) VAN BEEK, Dimphna, Johanna, Maria                                 |
| (54) LOW MIGRATION ENERGY CURABLE<br>INKS                                                                | (72) Li, Yuyan                                                                                     | GREIN, Christelle, Marie, Hélène                                       |
| (73) Sun Chemical Corporation                                                                            | GONG, Yonghua                                                                                      | FAHIMI, Zahra                                                          |
| (72) BIRO, David                                                                                         | HABERSBERGER, Brian, M.                                                                            | BIEMOND, Gerard, Jan, Eduard                                           |
|                                                                                                          |                                                                                                    | DONNERS, Rob                                                           |
|                                                                                                          |                                                                                                    | (31) 19219578                                                          |
|                                                                                                          |                                                                                                    | (32) 24.12.2019                                                        |

|                                   |                                                |                                   |
|-----------------------------------|------------------------------------------------|-----------------------------------|
| (33) European Patent Office (EPO) | (73) Covestro Deutschland AG                   | KANAI, Shimon                     |
| (51) C08L 27/12                   | (72) GAO, Arron                                | (31) 2015129998                   |
| B32B 1/08                         | REN, Lily                                      | (32) 29.06.2015                   |
| B32B 25/08                        | WAN, Shun                                      | (33) Japan                        |
| B32B 27/30                        | GUO, Vivian                                    | (51) C08L 101/00                  |
| C08J 3/24                         | (31) PCT/CN2021/089939                         | C08G 81/02                        |
| C08J 5/00                         | 21174270                                       | C08K 5/14                         |
| C08L 27/18                        | (32) 26.04.2021                                | C08L 1/02                         |
| C08L 27/22                        | 18.05.2021                                     | C08L 23/26                        |
| F16L 11/04                        | (33) World Intellectual Property Office (WIPO) | C08L 51/06                        |
| (11) EP3760674                    | European Patent Office (EPO)                   | F21S 41/10                        |
| (21) EP19761158.5                 | (51) C08L 69/00                                | C08J 5/04                         |
| (47) 18.12.2024                   | (11) EP4330332                                 | C08L 23/06                        |
| (87) JP2019007348                 | (21) EP22723438.2                              | (11) EP3689972                    |
| 06.09.2019                        | (47) 18.12.2024                                | (21) EP18860137.1                 |
| (22) 26.02.2019                   | (87) EP2022060331                              | (47) 18.12.2024                   |
| (54) THERMOPLASTIC RESIN          | 03.11.2022                                     | (87) JP2018036582                 |
| COMPOSITION AND METHOD FOR        | (22) 20.04.2022                                | 04.04.2019                        |
| PRODUCING SAME                    | (54) FLAME RETARDANT                           | (22) 28.09.2018                   |
| (73) DAIKIN INDUSTRIES, LTD.      | POLYCARBONATE COMPOSITION                      | (54) MOLDED ARTICLE               |
| (72) ONO, Tsuyoshi                | WITH HIGH COMPARATIVE TRACKING                 | (73) Furukawa Electric Co., Ltd.  |
| TOKUHIRA, Katsusada               | INDEX                                          | (72) SUYAMA Kenichi               |
| UEDA, Akinori                     | (73) Covestro Deutschland AG                   | NAKAJIMA Yasuo                    |
| (31) 2018034987                   | (72) WAN, Shun                                 | KOZAWA Eiji                       |
| (32) 28.02.2018                   | GUO, Vivian                                    | KIM Jaekyung                      |
| (33) Japan                        | GAO, Arron                                     | (31) 2018098147                   |
| (51) C08L 33/06                   | REN, Lily                                      | 2017210340                        |
| C08L 51/04                        | (31) PCT/CN2021/089937                         | 2017190816                        |
| C08F 220/18                       | 21174269                                       | 2017190815                        |
| C08F 222/40                       | (32) 26.04.2021                                | 2017190813                        |
| C08F 265/06                       | 18.05.2021                                     | 2017190812                        |
| C08F 212/08                       | (33) World Intellectual Property Office (WIPO) | (32) 22.05.2018                   |
| C08L 35/06                        | European Patent Office (EPO)                   | 31.10.2017                        |
| C08L 33/12                        | (51) C08L 69/00                                | 29.09.2017                        |
| C08F 220/14                       | (11) EP4249561                                 | 29.09.2017                        |
| (11) EP3882311                    | (21) EP22167695.0                              | 29.09.2017                        |
| (21) EP20878652.5                 | (47) 18.12.2024                                | 29.09.2017                        |
| (47) 18.12.2024                   | (22) 11.04.2022                                | (33) Japan                        |
| (87) KR2020012988                 | (54) POLYCARBONATE COMPOSITION                 | Japan                             |
| 29.04.2021                        | (73) Covestro Deutschland AG                   | Japan                             |
| (22) 24.09.2020                   | (72) Ren, Lily                                 | Japan                             |
| (54) THERMOPLASTIC RESIN          | Wan, Shun                                      | Japan                             |
| COMPOSITION, PREPARATION          | Nolte, Marius                                  | Japan                             |
| METHOD THEREFOR, AND MOLDED       | (31) PCT/CN2022/082957                         | (51) C09B 67/04                   |
| PRODUCT COMPRISING SAME           | (32) 25.03.2022                                | C09B 67/48                        |
| (73) LG Chem, Ltd.                | (33) World Intellectual Property Office (WIPO) | C09B 67/22                        |
| (72) SHIN, Seongjae               | (51) C08L 77/06                                | C09B 67/40                        |
| KIM, Gyu Sun                      | C08K 3/22                                      | C09B 67/42                        |
| PARK, Jung Tae                    | C08K 5/13                                      | C09B 67/54                        |
| LEE, Dae Woo                      | C08K 5/134                                     | C09D 11/037                       |
| SEO, Jae Bum                      | C08K 5/52                                      | D06P 5/30                         |
| JANG, Jiuk                        | G02B 5/08                                      | C09D 11/322                       |
| (31) 20200121468                  | H01L 33/60                                     | (11) EP3981840                    |
| 20190132326                       | C08K 7/14                                      | (21) EP21197346.6                 |
| (32) 21.09.2020                   | C08K 5/00                                      | (47) 18.12.2024                   |
| 23.10.2019                        | (11) EP3315557                                 | (22) 17.09.2021                   |
| (33) Korea (Republic)             | (21) EP16817933.1                              | (54) PIGMENT PREPARATIONS         |
| Korea (Republic)                  | (47) 18.12.2024                                | CONTAINING DERIVATIVES OF         |
| (51) C08L 69/00                   | (87) JP2016069179                              | AZOBARBITURIC ACID AND OF         |
| (11) EP4330331                    | 05.01.2017                                     | MELAMINE                          |
| (21) EP22723436.6                 | (22) 28.06.2016                                | (73) LANXESS Deutschland GmbH     |
| (47) 18.12.2024                   | (54) POLYAMIDE COMPOSITION FOR                 | (72) MICHAELIS, Stephan           |
| (87) EP2022060327                 | LED REFLECTION PLATE, LED                      | LINKE, Frank                      |
| 03.11.2022                        | REFLECTION PLATE, AND LIGHT-                   | BORST, Hans-Ulrich                |
| (22) 20.04.2022                   | EMITTING DEVICE INCLUDING                      | ENDERT, Sabine                    |
| (54) POLYCARBONATE COMPOSITION    | REFLECTION PLATE                               | (31) 20200172                     |
| WITH HIGH COMPARATIVE TRACKING    | (73) Kuraray Co., Ltd.                         | (32) 06.10.2020                   |
| INDEX                             | (72) SHIGEMATSU, Takaharu                      | (33) European Patent Office (EPO) |

|                                    |                                   |                                  |
|------------------------------------|-----------------------------------|----------------------------------|
| (51) C09D 5/08                     | SWISSA, Smadar                    | SHIMIZU, Yosuke                  |
| C08G 59/50                         | (31) 202063063440 P               | TAKASHIMA, Atsushi               |
| C09D 7/45                          | (32) 10.08.2020                   | MIZUHARA, Ginji                  |
| C09D 163/00                        | (33) United States of America     | OKADA, Kenichi                   |
| C08F 212/08                        | (51) C09D 11/54                   | (31) 2018126577                  |
| C08F 20/28                         | C09D 11/38                        | 2018109385                       |
| C08L 33/08                         | C09D 11/40                        | 2018018621                       |
| C09D 133/08                        | C09D 11/322                       | (32) 03.07.2018                  |
| C08F 220/28                        | B41J 2/01                         | 07.06.2018                       |
| (11) EP3891233                     | B41M 5/00                         | 05.02.2018                       |
| (21) EP18941961.7                  | (11) EP3875555                    | (33) Japan                       |
| (47) 18.12.2024                    | (21) EP19880877.6                 | Japan                            |
| (87) CN2018118894                  | (47) 18.12.2024                   | Japan                            |
| 11.06.2020                         | (87) JP2019041369                 | (51) C09J 11/04                  |
| (22) 03.12.2018                    | 07.05.2020                        | C09J 153/02                      |
| (54) DISPERSANT AND WATERBORNE     | (22) 21.10.2019                   | C09J 201/00                      |
| EPOXY COATING COMPOSITION          | (54) INK SET AND RECORDING METHOD | A61F 13/15                       |
| (73) Dow Global Technologies LLC   | FOR PRINTED MATTER                | A61F 13/51                       |
| (72) YANG, Weijun                  | (73) artience Co., Ltd.           | A61L 9/00                        |
| LI, Hu                             | TOYOCOLOR CO., LTD.               | A61Q 19/00                       |
| CUI, Longlan                       | (72) JONAI Kazuhiro               | C08J 3/22                        |
| (51) C09D 5/08                     | YODA Atsushi                      | A61K 8/27                        |
| C09D 7/61                          | HAYAMIZU Mayuko                   | C09J 11/06                       |
| C08K 3/22                          | (31) 2018204285                   | C08K 9/02                        |
| (11) EP3918009                     | (32) 30.10.2018                   | C08K 7/26                        |
| (21) EP20708387.4                  | (33) Japan                        | C08K 5/00                        |
| (47) 18.12.2024                    | (51) C09D 103/02                  | (11) EP3831904                   |
| (87) US2020016011                  | C08L 1/28                         | (21) EP20786430.7                |
| 06.08.2020                         | C08L 3/02                         | (47) 18.12.2024                  |
| (22) 31.01.2020                    | C09D 101/28                       | (87) JP2020023079                |
| (54) EROSION AND CORROSION         | D06M 15/01                        | 15.04.2021                       |
| RESISTANT OVERLAY COATING          | D21H 19/12                        | (22) 11.06.2020                  |
| SYSTEMS FOR PROTECTION OF          | D21H 19/82                        | (54) PRESSURE-SENSITIVE ADHESIVE |
| METAL COMPONENTS                   | (11) EP4051740                    | COMPOSITION, METHOD FOR          |
| (73) Praxair S.T. Technology, Inc. | (21) EP20883251.9                 | PRODUCING PRESSURE-SENSITIVE     |
| (72) PERPALL, Mark W.              | (47) 18.12.2024                   | ADHESIVE COMPOSITION, AND        |
| BELOV, Irina                       | (87) SE2020051003                 | ARTICLE INCLUDING PRESSURE-      |
| (31) 202016776927                  | 06.05.2021                        | SENSITIVE ADHESIVE COMPOSITION   |
| 201962800037 P                     | (22) 20.10.2020                   | (73) Koyo Corporation            |
| (32) 30.01.2020                    | (54) FLOUROCARBON FREE AND        | (72) IKEDA, Ryuzo                |
| 01.02.2019                         | BIOBASED OIL AND WATER            | SHIRAI, Atsuko                   |
| (33) United States of America      | BARRIER MATERIALS COMPRISING      | KAKINUMA, Hideyuki               |
| United States of America           | POLYELECTROLYTE COMPLEXES         | (31) 2019185099                  |
| (51) C09D 5/18                     | (73) OrganoClick AB               | (32) 08.10.2019                  |
| C09D 5/02                          | (72) AYDIN, Juhanes               | (33) Japan                       |
| C09D 7/40                          | WENNMAN, Maria                    | (51) C09K 8/528                  |
| C09D 7/61                          | (31) 1951246                      | C08F 2/22                        |
| C09K 21/02                         | (32) 31.10.2019                   | C08F 2/38                        |
| C08K 3/22                          | (33) Sweden                       | C08F 220/18                      |
| C09D 7/65                          | (51) C09J 5/00                    | C08F 220/56                      |
| C09K 21/14                         | C09J 7/38                         | C09K 8/88                        |
| C09D 7/45                          | C09J 201/00                       | C08F 293/00                      |
| C09D 7/80                          | G02B 1/18                         | (11) EP3818129                   |
| B05D 7/08                          | G02B 5/30                         | (21) EP19733536.7                |
| C09D 201/00                        | (11) EP3750962                    | (47) 18.12.2024                  |
| C08L 101/04                        | (21) EP19747282.2                 | (87) EP2019067683                |
| (11) EP4192917                     | (47) 18.12.2024                   | 09.01.2020                       |
| (21) EP21783056.1                  | (87) JP2019002784                 | (22) 02.07.2019                  |
| (47) 18.12.2024                    | 08.08.2019                        | (54) PROGRESSIVE SALTING-OUT OF  |
| (87) IL2021050972                  | (22) 28.01.2019                   | POLYMER CHAINS IN A LIQUID       |
| 17.02.2022                         | (54) METHOD FOR PEELING PRESSURE- | MEDIUM                           |
| (22) 09.08.2021                    | SENSITIVE ADHESIVE SHEET          | (73) Energy Solutions (US) LLC   |
| (54) FLAME RETARDANT FORMULATIONS  | (73) Nitto Denko Corporation      | (72) LABARRE, Dominique          |
| FOR WOOD COATING                   | (72) SHIMOKURI, Taiki             | WILSON, David James              |
| (73) Bromine Compounds Ltd.        | KOSAKA, Naofumi                   | (31) 1856076                     |
| (72) ABECASSIS WOLFOVICH, Meyrav   | HONDA, Satoshi                    | (32) 02.07.2018                  |
| ALESSIO, Gerald R.                 | TAKARADA, Shou                    | (33) France                      |
| LISON, Jakub                       | SATAKE, Masayuki                  | (51) C09K 11/02                  |

|                                     |                                  |                                    |
|-------------------------------------|----------------------------------|------------------------------------|
| C09K 11/56                          | (32) 04.09.2015                  | (72) GRAINGER, John                |
| C09K 11/70                          | (33) United States of America    | SMITH, Geoff                       |
| C09K 11/88                          | (51) C10G 9/36                   | (31) 201512590                     |
| G02F 1/13357                        | C10G 11/00                       | (32) 17.07.2015                    |
| (11) EP3898887                      | C10G 51/04                       | (33) United Kingdom                |
| (21) EP20708277.7                   | C07C 4/04                        | (51) C10L 5/40                     |
| (47) 18.12.2024                     | C07C 7/167                       | (11) EP4150032                     |
| (87) US2020014432                   | C10G 45/32                       | (21) EP21726628.7                  |
| 13.08.2020                          | C10G 69/06                       | (47) 18.12.2024                    |
| (22) 21.01.2020                     | C10G 70/02                       | (87) EP2021062814                  |
| (54) METHODS FOR SYNTHESIS OF       | C07C 5/333                       | 18.11.2021                         |
| INORGANIC NANOSTRUCTURES            | (11) EP3986982                   | (22) 14.05.2021                    |
| USING MOLTEN SALT CHEMISTRY         | (21) EP20750466.3                | (54) BRIQUETTE FROM WASTE MATERIAL |
| (73) Shoen Chemical Inc.            | (47) 18.12.2024                  | AND PROCESS TO PRODUCE             |
| (72) IPPEN, Christian               | (87) US2020036586                | BRIQUETTE FROM WASTE MATERIAL      |
| WANG, Chunming                      | 30.12.2020                       | (73) Hatch Küttner GmbH            |
| GUO, Wenzhou                        | (22) 08.06.2020                  | Bernegger GmbH                     |
| HOTZ, Charles                       | (54) METHODS FOR OPERATING       | (72) BERNEGGER, Kurt               |
| CURLEY, John J.                     | ACETYLENE HYDROGENATION UNITS    | SALEHI, Farzad                     |
| TU, Alexander                       | IN INTEGRATED STEAM CRACKING     | BEHRMANN, Dirk                     |
| (31) 201962801460 P                 | AND FLUIDIZED CATALYTIC          | BREUER, Thomas                     |
| (32) 05.02.2019                     | DEHYDROGENATION SYSTEMS          | HANUSCH, Bernhard                  |
| (33) United States of America       | (73) Dow Global Technologies LLC | (31) 102020206095                  |
| (51) C09K 11/06                     | (72) MALEK, Andrzej              | (32) 14.05.2020                    |
| C07F 5/02                           | PRETZ, Matthew T.                | (33) Germany                       |
| H10K 85/60                          | LUO, Lin                         | (51) C10M 131/02                   |
| H10K 50/11                          | LIU, Yu                          | C10M 131/04                        |
| (11) EP4306612                      | WANG, Hangyao                    | C10M 131/10                        |
| (21) EP23155290.2                   | (31) 201962865594 P              | C10M 135/02                        |
| (47) 18.12.2024                     | (32) 24.06.2019                  | C10M 137/04                        |
| (22) 07.02.2023                     | (33) United States of America    | C10M 105/52                        |
| (54) HETEROCYCLIC COMPOUND,         | (51) C10L 1/02                   | C10M 105/54                        |
| ORGANIC LIGHT-EMITTING DEVICE       | (11) EP4399265                   | C10M 105/72                        |
| INCLUDING THE SAME, AND             | (21) EP22772542.1                | C10M 105/74                        |
| ELECTRONIC APPARATUS INCLUDING      | (47) 18.12.2024                  | C09K 5/10                          |
| THE ORGANIC LIGHT-EMITTING          | (87) FI2022050590                | C09K 21/08                         |
| DEVICE                              | 16.03.2023                       | C10N 30/00                         |
| (73) Samsung Electronics Co., Ltd.  | (22) 06.09.2022                  | C10N 30/08                         |
| (72) LEE, Eunhyung                  | (54) A MARINE FUEL BLEND         | C10N 40/04                         |
| MARUYAMA, Yusuke                    | (73) Neste Oyj                   | C10N 40/14                         |
| WON, Joonghee                       | (72) KIISKI, Ulla                | C10N 40/16                         |
| KIM, Jiwhan                         | HAARA, Riikka-Mari               | C10N 50/00                         |
| CHOI, Hyeonho                       | KARVINEN, Esko                   | (11) EP3820975                     |
| JUNG, Yongsik                       | KOUVA, Merja                     | (21) EP19737540.5                  |
| KIM, Sangmo                         | (31) 20215938                    | (47) 18.12.2024                    |
| IHN, Sooghang                       | (32) 07.09.2021                  | (87) EP2019068613                  |
| NAM, Sungho                         | (33) Finland                     | 16.01.2020                         |
| (31) 20220087079                    | (51) C10L 3/10                   | (22) 10.07.2019                    |
| (32) 14.07.2022                     | C10K 1/04                        | (54) COOLING AND FLAME-RETARDANT   |
| (33) Korea (Republic)               | C10G 70/04                       | COMPOSITION FOR A PROPULSION       |
| (51) C10G 2/00                      | F28F 9/22                        | SYSTEM OF AN ELECTRIC OR           |
| B01J 21/04                          | F28G 3/12                        | HYBRID VEHICLE                     |
| B01J 21/12                          | F28D 1/06                        | (73) TotalEnergies OneTech         |
| B01J 23/89                          | F28D 7/06                        | (72) CHINA, Philippe               |
| B01J 37/00                          | F28D 7/16                        | KRAFFT, Marie-Pierre               |
| B01J 37/02                          | F28F 19/00                       | LACROIX, Eric                      |
| (11) EP3344725                      | F28F 1/36                        | RONDELEZ, Francis                  |
| (21) EP16758051.3                   | (11) EP3325580                   | (31) 1856477                       |
| (47) 18.12.2024                     | (21) EP16744463.7                | (32) 13.07.2018                    |
| (87) US2016047996                   | (47) 18.12.2024                  | (33) France                        |
| 09.03.2017                          | (87) GB2016052163                | (51) C10M 131/02                   |
| (22) 22.08.2016                     | 26.01.2017                       | C10M 131/04                        |
| (54) CATALYST SUPPORT MATERIALS AND | (22) 15.07.2016                  | C10M 131/10                        |
| CATALYST MATERIALS USEFUL FOR       | (54) GAS CONDITIONING PROCESS    | C10M 135/02                        |
| FISCHER-TROPSCH PROCESSES           | AND SYSTEM FOR EXTRACTING A      | C10M 137/04                        |
| (73) Clariant International Ltd     | CONDENSABLE VAPOUR FROM A        | C10M 105/52                        |
| (72) ZHAO, Shizhong                 | SUPPLIED GAS                     | C10M 105/54                        |
| (31) 201562214418 P                 | (73) Itero Technologies Limited  | C10M 105/72                        |

|                                   |                                     |                                    |
|-----------------------------------|-------------------------------------|------------------------------------|
| C10M 105/74                       | C10N 30/00                          | NEUTRAL ENRICHED KRILL OILS        |
| C09K 5/10                         | C10N 50/10                          | USING MELTING AND EVAPORATION      |
| C09K 21/08                        | C10N 70/00                          | (73) Tharos Ltd.                   |
| H01M 10/613                       | (11) EP3957709                      | (72) SCLABOS KATEVAS, Dimitri      |
| H01M 10/6595                      | (21) EP21188775.7                   | TORO GUERRA, Raúl                  |
| C10N 30/00                        | (47) 18.12.2024                     | (31) 201462079864 P                |
| C10N 30/08                        | (22) 15.05.2017                     | (32) 14.11.2014                    |
| C10N 40/04                        | (54) METHOD OF MANUFACTURING        | (33) United States of America      |
| C10N 40/14                        | CALCIUM MAGNESIUM SULFONATE         | (51) C11D 1/52                     |
| C10N 40/16                        | GREASES                             | C11D 3/18                          |
| (11) EP3820976                    | (73) NCH Corporation                | C11D 3/37                          |
| (21) EP19737542.1                 | (72) WAYNICK, Andrew J.             | C11D 3/43                          |
| (47) 18.12.2024                   | (31) 201715593792                   | C11D 11/00                         |
| (87) EP2019068616                 | 201662338193 P                      | B08B 9/00                          |
| 16.01.2020                        | (32) 12.05.2017                     | C10N 20/00                         |
| (22) 10.07.2019                   | 18.05.2016                          | C10N 30/04                         |
| (54) COOLING AND FLAME-RETARDANT  | (33) United States of America       | C10N 30/00                         |
| COMPOSITION FOR A PROPULSION      | United States of America            | C10N 50/06                         |
| SYSTEM OF AN ELECTRIC OR          | (51) C10M 163/00                    | C10M 173/02                        |
| HYBRID VEHICLE                    | (11) EP3510130                      | C11D 3/00                          |
| (73) TotalEnergies OneTech        | (21) EP17768323.2                   | (11) EP4097198                     |
| (72) RONDELEZ, Francis            | (47) 18.12.2024                     | (21) EP21700646.9                  |
| CHINA, Philippe                   | (87) US2017050034                   | (47) 18.12.2024                    |
| LACROIX, Eric                     | 15.03.2018                          | (87) IB2021050377                  |
| (31) 1856474                      | (22) 05.09.2017                     | 05.08.2021                         |
| (32) 13.07.2018                   | (54) TOTAL BASE NUMBER BOOSTERS     | (22) 19.01.2021                    |
| (33) France                       | FOR MARINE DIESEL ENGINE            | (54) PRODUCTS AND METHOD FOR       |
| (51) C10M 135/32                  | LUBRICATING COMPOSITIONS            | DECONTAMINATION AND CLEANING       |
| C10M 135/36                       | (73) The Lubrizol Corporation       | OF SYSTEMS CONTAINING              |
| C10M 141/08                       | (72) GUO, Binbin                    | HYDROCARBONS                       |
| C10N 30/12                        | DELBRIDGE, Ewan, E.                 | (73) Chimec S.p.A.                 |
| C10N 40/25                        | PUDELSKI, John, K.                  | (72) ALESSANDRINI, Luca            |
| (11) EP3440165                    | DIFLAVIO, John-louis                | MANTARRO, Milena                   |
| (21) EP17718189.8                 | (31) 201662393242 P                 | DE MARTINO, Felice                 |
| (47) 18.12.2024                   | (32) 12.09.2016                     | CIARDI, Umberto                    |
| (87) US2017024972                 | (33) United States of America       | BANCONI, Michele                   |
| 12.10.2017                        | (51) C10M 171/00                    | BRUNO, Massimo                     |
| (22) 30.03.2017                   | C10M 171/06                         | VOLPONI, Andrea                    |
| (54) MERCAPTOAZOLE DERIVATIVES AS | C10M 177/00                         | ZOCCARATO, Tatiana                 |
| LUBRICATING ADDITIVES             | (11) EP4012009                      | (31) 202000001945                  |
| (73) The Lubrizol Corporation     | (21) EP21205566.9                   | (32) 31.01.2020                    |
| (72) NGUYEN, Nga H.               | (47) 18.12.2024                     | (33) Italy                         |
| ZHANG, Yanshi                     | (22) 29.10.2021                     | (51) C11D 1/94                     |
| (31) 201662319340 P               | (54) SOLID DRY-TYPE LUBRICANT       | C11D 3/04                          |
| (32) 07.04.2016                   | (73) Iowa State University Research | C11D 3/37                          |
| (33) United States of America     | Foundation, Inc.                    | C11D 17/00                         |
| (51) C10M 137/08                  | (72) THUO, Martin                   | A61K 8/36                          |
| (11) EP3615640                    | DU, Chuanshen                       | A61K 8/44                          |
| (21) EP18724069.2                 | GREGORY, Paul Ramon                 | A61K 8/46                          |
| (47) 18.12.2024                   | CHANG, Boyce S.                     | A61K 8/86                          |
| (87) US2018029344                 | (31) 202017110939                   | A61Q 19/10                         |
| 01.11.2018                        | (32) 03.12.2020                     | (11) EP4334424                     |
| (22) 25.04.2018                   | (33) United States of America       | (21) EP22725237.6                  |
| (54) METHOD OF LUBRICATING A      | (51) C11B 1/04                      | (47) 18.12.2024                    |
| MECHANICAL DEVICE WITH HIGH       | C11B 1/16                           | (87) EP2022060870                  |
| PYROPHOSPHATE LEVEL LUBRICANT     | A23D 7/005                          | 10.11.2022                         |
| (73) The Lubrizol Corporation     | A23D 7/01                           | (22) 25.04.2022                    |
| (72) PATTERSON, Suzanne           | A23D 9/013                          | (54) HYDRATABLE CONCENTRATED       |
| BARTON, William R.S.              | C11B 1/06                           | SURFACTANT COMPOSITION             |
| FILIPPINI, Brian B.               | (11) EP3218456                      | SUBSTANTIALLY FREE OF              |
| (31) 201762490697 P               | (21) EP15819865.5                   | ISETHIONATES                       |
| (32) 27.04.2017                   | (47) 18.12.2024                     | (73) Unilever IP Holdings B.V.     |
| (33) United States of America     | (87) IB2015058789                   | (72) VASUDEVAN, Tirucherai Varahan |
| (51) C10M 159/24                  | 19.05.2016                          | MOADDEL, Teanoosh                  |
| C10M 121/04                       | (22) 13.11.2015                     | HIBAN, Douglas John                |
| C10N 20/02                        | (54) SOLVENT-FREE PROCESS FOR       | (31) 21171969                      |
| C10N 20/06                        | OBTAINING PHOSPHOLIPIDS AND         | (32) 04.05.2021                    |
| C10N 30/06                        |                                     | (33) European Patent Office (EPO)  |

|                                                                                        |                                                                                                |                                                                                                                         |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| (51) C11D 1/94<br>C11D 3/386<br>C11D 11/00                                             | (72) CERVERA-PADRELL, Albert E.<br>SHANG, Lei<br>BACH, Poul                                    | 375596 P<br>(32) 16.02.2010<br>20.08.2010                                                                               |
| (11) EP3802764<br>(21) EP19733298.4<br>(47) 18.12.2024                                 | SIMONSEN, Ole<br>NISSEN, Lotte Elisabeth<br>JENSEN, Lars                                       | (33) United States of America<br>United States of America                                                               |
| (87) US2019035706<br>12.12.2019                                                        | (31) 17196659<br>(32) 16.10.2017                                                               | (51) C12M 1/34<br>C12Q 1/02                                                                                             |
| (22) 06.06.2019                                                                        | (33) European Patent Office (EPO)                                                              | (11) EP3150694                                                                                                          |
| (54) ENZYMATIC POT AND PAN<br>DETERGENT                                                | (51) C12G 3/02<br>C12G 3/021<br>C12G 3/024<br>C12G 3/06<br>C12G 3/07<br>C12G 3/08<br>C12H 6/02 | (21) EP15799811.3<br>(47) 18.12.2024<br>(87) JP2015063884<br>03.12.2015                                                 |
| (73) Ecolab USA Inc.                                                                   | (11) EP4107244                                                                                 | (22) 14.05.2015                                                                                                         |
| (72) JENSEN, Lyndal<br>LIU, Johnny Zhengrong<br>WERST, Elena<br>HODGE, Charles A.      | (21) EP21709499.4<br>(47) 18.12.2024                                                           | (54) CELL EVALUATION DEVICE, METHOD,<br>AND PROGRAM                                                                     |
| (31) 201862681796 P<br>(32) 07.06.2018                                                 | (87) NL2021050108<br>26.08.2021                                                                | (73) FUJIFILM Corporation                                                                                               |
| (33) United States of America                                                          | (22) 18.02.2021                                                                                | (72) MATSUBARA Kenta                                                                                                    |
| (51) C11D 3/00<br>C08G 63/672<br>C08G 63/78<br>C11D 3/37                               | (54) METHOD FOR MAKING SUGARCANE<br>DISTILLATE                                                 | (31) 2014112135<br>(32) 30.05.2014<br>(33) Japan                                                                        |
| (11) EP3802765<br>(21) EP19722640.0<br>(47) 18.12.2024                                 | (73) Koster, Erik Theodorus Maria<br>(72) Koster, Erik Theodorus Maria                         | (51) C12N 1/15<br>C12N 15/09<br>C12P 21/02<br>C12N 9/10<br>C12N 9/18<br>C12N 9/90<br>C12N 15/80                         |
| (87) EP2019062165<br>28.11.2019                                                        | (31) 2024944<br>(32) 19.02.2020                                                                | (11) EP3620509                                                                                                          |
| (22) 13.05.2019                                                                        | (33) Netherlands                                                                               | (21) EP18794769.2                                                                                                       |
| (54) SOIL RELEASE POLYESTERS FOR<br>USE IN DETERGENT COMPOSITIONS                      | (51) C12M 1/00<br>A23F 3/10<br>C12C 11/00                                                      | (47) 18.12.2024<br>(87) JP2018017474<br>08.11.2018                                                                      |
| (73) Clariant International Ltd                                                        | (11) EP4291629                                                                                 | (22) 01.05.2018                                                                                                         |
| (72) MUTCH, Kevin<br>ARNDT, Matthias<br>GILLISSEN, Martijn                             | (21) EP22710432.0<br>(47) 18.12.2024                                                           | (54) MUTANT FILAMENTOUS FUNGUS<br>AND SUBSTANCE PRODUCTION<br>METHOD IN WHICH SAID MUTANT<br>FILAMENTOUS FUNGUS IS USED |
| (31) 18173987<br>(32) 24.05.2018                                                       | (87) IB2022051192<br>18.08.2022                                                                | (73) Tohoku University                                                                                                  |
| (33) European Patent Office (EPO)                                                      | (22) 10.02.2022                                                                                | Kanazawa Institute of Technology                                                                                        |
| (51) C11D 3/386                                                                        | (54) METHOD AND DEVICE FOR THE<br>INDUSTRIAL PRODUCTION OF<br>KOMBUCHA                         | (72) SANO, Motoaki<br>YOSHIMI, Akira<br>TABATA, Fuka<br>MIYAZAWA, Ken<br>GOMI, Katsuya<br>ABE, Keietsu                  |
| (11) EP3511404<br>(21) EP19158709.6<br>(47) 18.12.2024                                 | (73) Duvel Moortgat NV<br>(72) NEVEN, Hedwig<br>MOORTGAT, Michel<br>BRITTON, Scott             | (31) 2017091734<br>(32) 02.05.2017<br>(33) Japan                                                                        |
| (22) 18.06.2015                                                                        | (31) 202105100<br>(32) 11.02.2021                                                              | (51) C12N 5/00<br>(11) EP3119876                                                                                        |
| (54) LIQUID CLEANING COMPOSITION<br>CONTAINING LIQUID AND SOLID<br>ENZYME FORMULATIONS | (33) Belgium                                                                                   | (21) EP15715840.3<br>(47) 18.12.2024                                                                                    |
| (73) Henkel AG & Co. KGaA                                                              | (51) C12M 1/00<br>C12M 1/12<br>C12M 1/32<br>C12M 3/00<br>B01J 19/00                            | (87) IB2015051943<br>24.09.2015                                                                                         |
| (72) Bastigkeit, Thorsten<br>Wrubbel, Noelle<br>Mussmann, Nina<br>Eiting, Thomas       | (11) EP2536819<br>(21) EP11745150.0<br>(47) 18.12.2024                                         | (22) 17.03.2015                                                                                                         |
| (31) 102014212643<br>(32) 30.06.2014                                                   | (87) US2011025018<br>25.08.2011                                                                | (54) METHOD OF CELL CULTURE                                                                                             |
| (33) Germany                                                                           | (22) 16.02.2011                                                                                | (73) Pfizer Inc.                                                                                                        |
| (51) C11D 3/386<br>C11D 3/38<br>C11D 3/43<br>C11D 3/20<br>C11D 7/50<br>C12N 9/98       | (54) ARRAY OF MICROMOLDED<br>STRUCTURES FOR COLLECTING OR<br>CULTURING OF CELLS                | (72) HILLER, Gregory Walter<br>MULUKUTLA, Bhanu Chandra                                                                 |
| (11) EP3697881<br>(21) EP18789584.2<br>(47) 18.12.2024                                 | (73) The University of North Carolina at<br>Chapel Hill                                        | (31) 201461955273 P<br>(32) 19.03.2014                                                                                  |
| (87) EP2018078115<br>25.04.2019                                                        | (72) SIMS, Christopher<br>ALLBRITTON, Nancy<br>WANG, Yuli                                      | (33) United States of America                                                                                           |
| (22) 15.10.2018                                                                        | (31) 305067 P                                                                                  | (51) C12N 5/0783<br>A61K 38/00<br>A61K 35/17<br>C07K 14/725<br>C07K 14/705<br>C07K 16/28                                |
| (54) LOW DUSTING GRANULES                                                              |                                                                                                |                                                                                                                         |
| (73) Novozymes A/S                                                                     |                                                                                                |                                                                                                                         |

|                                   |                                 |                                    |
|-----------------------------------|---------------------------------|------------------------------------|
| (11) EP3473707                    | (54) CRISPR/CAS-RELATED METHODS | (22) 31.08.2017                    |
| (21) EP18210258.2                 | AND COMPOSITIONS FOR TREATING   | (54) ANALYSIS OF CHROMATIN USING A |
| (47) 18.12.2024                   | HERPES SIMPLEX VIRUS TYPE 1     | NICKING ENZYME                     |
| (22) 13.05.2013                   | (HSV-1)                         | (73) New England Biolabs, Inc.     |
| (54) METHODS FOR ENGINEERING      | (73) Editas Medicine, Inc.      | (72) PONNALURI, Chaithanya         |
| ALLOGENEIC AND                    | (72) MAEDER, Morgan L.          | ESTEVE, Pierre Olivier             |
| IMMUNOSUPPRESSIVE RESISTANT T     | FRIEDLAND, Ari E.               | CHIN, Hang-Gyeong                  |
| CELL FOR IMMUNOTHERAPY            | BUMCROT, David A.               | PRADHAN, Sriharsa                  |
| (73) Cellectis                    | WELSTEAD, G. Grant              | (31) 201662383151 P                |
| (72) GOUBLE, Agnes                | (31) 201461973793 P             | (32) 02.09.2016                    |
| GROSSE, Stephanie                 | (32) 01.04.2014                 | (33) United States of America      |
| GALETTO, Roman                    | (33) United States of America   | (51) C12Q 1/68                     |
| POIROT, Laurent                   | (51) C12P 19/34                 | G01N 33/574                        |
| MANNIOUI, Cécile                  | C12Q 1/6806                     | G01N 33/53                         |
| SMITH, Julianne                   | C12Q 1/6869                     | C12Q 1/6806                        |
| SCHARENBERG, Andrew               | C12Q 1/6853                     | C12Q 1/6886                        |
| (31) 201261696612 P               | (11) EP4017989                  | C12Q 1/6841                        |
| 201261651933 P                    | (21) EP20853637.5               | (11) EP3371327                     |
| (32) 04.09.2012                   | (47) 18.12.2024                 | (21) EP16862785.9                  |
| 25.05.2012                        | (87) US2020047214               | (47) 18.12.2024                    |
| (33) United States of America     | 25.02.2021                      | (87) US2016059877                  |
| United States of America          | (22) 20.08.2020                 | 11.05.2017                         |
| (51) C12N 9/02                    | (54) HAIRPIN PRIMER DESIGN FOR  | (22) 01.11.2016                    |
| C11D 3/386                        | SEQUENTIAL PCR PRODUCTION OF    | (54) SINGLE CELL GENOMIC PROFILING |
| C12N 9/08                         | TARGETED SEQUENCING LIBRARIES   | OF CIRCULATING TUMOR CELLS         |
| (11) EP3444337                    | (73) ILLUMINA, INC.             | (CTCS) IN METASTATIC DISEASE       |
| (21) EP18189275.3                 | (72) FONTANEZ, Kristina         | TO CHARACTERIZE DISEASE            |
| (47) 18.12.2024                   | MELTZER, Robert                 | HETEROGENEITY                      |
| (22) 16.08.2018                   | SCHENK, Desiree                 | (73) Epic Sciences, Inc.           |
| (54) METHOD OF CLEANING           | (31) 201962889105 P             | (72) DITTAMORE, Ryan               |
| (73) The Procter & Gamble Company | (32) 20.08.2019                 | MARRINUCCI, Dena                   |
| (72) PATTERSON, Steven George     | (33) United States of America   | (31) 201562250422 P                |
| VASQUEZ VALDIVIESO, Montserrat    | (51) C12Q 1/06                  | (32) 03.11.2015                    |
| Guadalupe                         | G01N 1/02                       | (33) United States of America      |
| LANT, Neil Joseph                 | G01N 1/34                       | (51) C12Q 1/6806                   |
| (31) 17186888                     | G01N 1/40                       | C12Q 1/6869                        |
| (32) 18.08.2017                   | G01N 33/02                      | (11) EP3947723                     |
| (33) European Patent Office (EPO) | G01N 1/10                       | (21) EP20722098.9                  |
| (51) C12N 15/10                   | (11) EP3665300                  | (47) 18.12.2024                    |
| C12Q 1/6806                       | (21) EP18769247.0               | (87) US2020026421                  |
| (11) EP4240842                    | (47) 18.12.2024                 | 08.10.2020                         |
| (21) EP21807261.9                 | (87) US2018045699               | (22) 02.04.2020                    |
| (47) 18.12.2024                   | 14.02.2019                      | (54) METHODS AND COMPOSITIONS FOR  |
| (87) IB2021060130                 | (22) 08.08.2018                 | ANALYZING NUCLEIC ACID             |
| 12.05.2022                        | (54) METHOD AND APPARATUS FOR   | (73) Claret Bioscience, LLC        |
| (22) 02.11.2021                   | APPLYING AGGREGATING SAMPLING   | (72) KAPP, Joshua, D.              |
| (54) TARGETED SEQUENCING METHOD   | TO FOOD ITEMS                   | TROLL, Christopher, J.             |
| AND KIT THEREOF FOR DETECTING     | (73) Fremonta Corporation       | HARKINS KINCAID, Kelly M.          |
| GENE ALTERATION                   | (72) HUANG, Yongqing            | NAUGHTON, Colin, Patrick           |
| (73) ACT Genomics (IP) Limited    | WU, Florence Q.                 | RAO, Varsha                        |
| (72) CHEN, Yu-Ling                | HASTINGS, Jason Thomas          | (31) 201962925132 P                |
| CHEN, Shu-Jen                     | WILHELMSEN, Eric Child          | 201962861594 P                     |
| HSU, An                           | (31) 201816057137               | 201962830211 P                     |
| CHEN, Hua-Chien                   | 201862656164 P                  | (32) 23.10.2019                    |
| LIN, Pei-Yi                       | 201762589755 P                  | 14.06.2019                         |
| LAI, Yi-Hsuan                     | 201762543220 P                  | 05.04.2019                         |
| (31) 202163153956 P               | (32) 07.08.2018                 | (33) United States of America      |
| 202063108932 P                    | 11.04.2018                      | United States of America           |
| (32) 26.02.2021                   | 22.11.2017                      | United States of America           |
| 03.11.2020                        | 09.08.2017                      | (51) C12Q 1/6844                   |
| (33) United States of America     | (33) United States of America   | C12Q 1/6853                        |
| United States of America          | United States of America        | (11) EP4010493                     |
| (51) C12N 15/113                  | United States of America        | (21) EP20754816.5                  |
| C12N 15/63                        | United States of America        | (47) 18.12.2024                    |
| (11) EP4123024                    | (51) C12Q 1/68                  | (87) GB2020051890                  |
| (21) EP22180134.3                 | (11) EP4219746                  | 18.02.2021                         |
| (47) 18.12.2024                   | (21) EP23156800.7               | (22) 07.08.2020                    |
| (22) 01.04.2015                   | (47) 18.12.2024                 |                                    |

|                                                                                     |                                      |                                               |
|-------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------|
| (54) METHODS FOR THE MULTIPLEXED ISOTHERMAL AMPLIFICATION OF NUCLEIC ACID SEQUENCES | (87) BG2021000026<br>23.06.2022      | OKADA, Shuji                                  |
| (73) DNAe Diagnostics Limited                                                       | (22) 18.10.2021                      | (31) 2017082195                               |
| (72) OST, Toby                                                                      | (54) ANGLED MAGNETIC COUPLING        | 2016089470                                    |
| (31) 201911421                                                                      | (73) PL Project Ltd.                 | 2016085963                                    |
| (32) 09.08.2019                                                                     | (72) TZONEV, Plamen Dimitrov         | (32) 18.04.2017                               |
| (33) United Kingdom                                                                 | VELEV, Goran Valchev                 | 27.04.2016                                    |
| (51) C12Q 1/6883                                                                    | ROYDEV, Miroslav Dinchev             | 22.04.2016                                    |
| (11) EP3679157                                                                      | BORISOV, Lyubomir Todorov            | (33) Japan                                    |
| (21) EP18765623.6                                                                   | (31) 520020                          | Japan                                         |
| (47) 18.12.2024                                                                     | (32) 18.12.2020                      | (51) C22C 21/00                               |
| (87) EP2018073905                                                                   | (33) Bulgaria                        | C22C 23/00                                    |
| 14.03.2019                                                                          | (51) C21D 1/18                       | C22C 21/02                                    |
| (22) 05.09.2018                                                                     | C21D 1/28                            | H10N 10/851                                   |
| (54) NON-CODING RNAs (NCRNA) FOR THE DIAGNOSIS OF COGNITIVE DISORDERS               | C21D 1/673                           | B23K 35/28                                    |
| (73) Amoneta Diagnostics                                                            | C21D 6/00                            | C01B 33/06                                    |
| (72) MOUSSAOUI, Saliha                                                              | C21D 7/13                            | C22C 13/00                                    |
| SCHORDAN, Eric                                                                      | C21D 8/04                            | H10N 10/817                                   |
| FIRAT, Hueseyin                                                                     | C21D 9/48                            | H10N 10/01                                    |
| (31) 201762554427 P                                                                 | C22C 38/02                           | H10N 10/855                                   |
| (32) 05.09.2017                                                                     | C22C 38/04                           | C30B 29/52                                    |
| (33) United States of America                                                       | C22C 38/06                           | (11) EP4050669                                |
| (51) C12Q 1/70                                                                      | C22C 38/12                           | (21) EP20878073.4                             |
| C12Q 1/6844                                                                         | C23C 2/12                            | (47) 18.12.2024                               |
| (11) EP4112743                                                                      | C22C 38/60                           | (87) JP2020034386                             |
| (21) EP21759577.6                                                                   | (11) EP4388141                       | 29.04.2021                                    |
| (47) 18.12.2024                                                                     | (21) EP22764728.6                    | (22) 11.09.2020                               |
| (87) JP2021006907                                                                   | (47) 18.12.2024                      | (54) THERMOELECTRIC CONVERSION                |
| 02.09.2021                                                                          | (87) EP2022072557                    | ELEMENT, METHOD FOR                           |
| (22) 24.02.2021                                                                     | 23.02.2023                           | MANUFACTURING THE SAME, AND                   |
| (54) METHOD FOR DETECTING SINGLE-STRANDED RNA VIRUS                                 | (22) 11.08.2022                      | THERMOELECTRIC CONVERSION                     |
| (73) EIKEN KAGAKU KABUSHIKI KAISHA                                                  | (54) STEEL WITH IMPROVED             | DEVICE                                        |
| (72) MICHYUKI Satoru                                                                | PROCESSING PROPERTIES                | (73) National Institute for Materials Science |
| YOKONO Kota                                                                         | FOR FORMING AT ELEVATED              | Mitsuba Corporation                           |
| SEMBA Syouhei                                                                       | TEMPERATURES                         | (72) ISODA, Yukihiko                          |
| YAMAMOTO Machiko                                                                    | (73) ThyssenKrupp Steel Europe AG    | TADA, Satoki                                  |
| (31) 2020031780                                                                     | (72) ROSENSTOCK, Dirk                | (31) 2019194228                               |
| (32) 27.02.2020                                                                     | KÖYER, Maria                         | (32) 25.10.2019                               |
| (33) Japan                                                                          | STILLE, Sebastian                    | (33) Japan                                    |
| (51) C14B 1/62                                                                      | CASTRO MÜLLER, Cássia                | (51) C22C 30/00                               |
| B25J 15/06                                                                          | BANIK, Janko                         | C22F 1/00                                     |
| B65G 47/91                                                                          | GERBER, Thomas                       | (11) EP3693483                                |
| C14B 17/06                                                                          | (31) 22175106                        | (21) EP18814482.8                             |
| (11) EP4247982                                                                      | 21192187                             | (47) 18.12.2024                               |
| (21) EP21806377.4                                                                   | (32) 24.05.2022                      | (87) KR2018003772                             |
| (47) 18.12.2024                                                                     | 19.08.2021                           | 02.05.2019                                    |
| (87) IB2021059804                                                                   | (33) European Patent Office (EPO)    | (22) 30.03.2018                               |
| 27.05.2022                                                                          | European Patent Office (EPO)         | (54) TRANSFORMATION-INDUCED                   |
| (22) 25.10.2021                                                                     | (51) C22B 1/245                      | PLASTICITY HIGH-ENTROPY ALLOY,                |
| (54) DEVICE FOR HANDLING HIDES                                                      | C22B 5/10                            | AND MANUFACTURING METHOD                      |
| (73) COSMOTEC di Trevisan Andrea                                                    | C22B 23/02                           | THEREFOR                                      |
| (72) TREVISAN, Andrea                                                               | C21B 13/00                           | (73) Postech Academy-Industry Foundation      |
| (31) 202000027609                                                                   | C21B 13/10                           | (72) KIM, Hyoung-seop                         |
| (32) 18.11.2020                                                                     | C22B 1/14                            | LEE, Byeong-joo                               |
| (33) Italy                                                                          | C22B 1/24                            | LEE, Sung-hak                                 |
| (51) C14B 11/00                                                                     | C22B 1/244                           | KIM, Dong-geun                                |
| A43D 8/42                                                                           | C01G 53/04                           | CHOI, Won-mi                                  |
| A43D 95/06                                                                          | C10L 5/00                            | SOHN, Seok-su                                 |
| D06B 1/14                                                                           | (11) EP3778937                       | JO, Yong-hee                                  |
| H02K 49/10                                                                          | (21) EP20197570.3                    | (31) 20180006851                              |
| H02K 51/00                                                                          | (47) 18.12.2024                      | 20170139052                                   |
| (11) EP4263876                                                                      | (22) 19.04.2017                      | (32) 19.01.2018                               |
| (21) EP21809907.5                                                                   | (54) METHOD FOR SMELTING NICKEL      | 25.10.2017                                    |
| (47) 18.12.2024                                                                     | OXIDE ORE                            | (33) Korea (Republic)                         |
|                                                                                     | (73) SUMITOMO METAL MINING CO., LTD. | Korea (Republic)                              |
|                                                                                     | (72) KOBAYASHI, Jun-ichi             | (51) C22C 38/00                               |
|                                                                                     | ISEKI, Takashi                       | C22C 38/60                                    |
|                                                                                     | GODA, Yukihiko                       | H01F 1/147                                    |



|                                               |                                                |                                                |
|-----------------------------------------------|------------------------------------------------|------------------------------------------------|
| C21D 8/12                                     | (21) EP20753621.0                              | KOIKE, Atsushi                                 |
| C21D 9/46                                     | (47) 18.12.2024                                | (31) PCT/JP2012/061334                         |
| C21D 1/76                                     | (87) US2020042905                              | (32) 27.04.2012                                |
| C22C 38/02                                    | 04.03.2021                                     | (33) World Intellectual Property Office (WIPO) |
| C21D 3/04                                     | (22) 21.07.2020                                | (51) D03D 1/00                                 |
| C22C 38/12                                    | (54) SODIUM VAPORIZER AND METHOD               | D03D 13/00                                     |
| C22C 38/16                                    | FOR USE OF SODIUM VAPORIZER                    | D03D 5/00                                      |
| C23C 28/04                                    | (73) TerraPower, LLC                           | (11) EP4060104                                 |
| (11) EP3831974                                | (72) REGAN, Christopher, M.                    | (21) EP20887248.1                              |
| (21) EP19843927.5                             | WILCOX, Jacob                                  | (47) 18.12.2024                                |
| (47) 18.12.2024                               | (31) 201962891244 P                            | (87) CN2020107834                              |
| (87) JP2019030059                             | (32) 23.08.2019                                | 20.05.2021                                     |
| 06.02.2020                                    | (33) United States of America                  | (22) 07.08.2020                                |
| (22) 31.07.2019                               | (51) C23C 16/40                                | (54) WEAVING METHOD FOR CLOSING                |
| (54) GRAIN-ORIENTED ELECTRICAL                | C23C 16/04                                     | WEBBING EDGES                                  |
| STEEL SHEET                                   | (11) EP3080331                                 | (73) Hing Man (Lee's) Co., Ltd.                |
| (73) NIPPON STEEL CORPORATION                 | (21) EP14780989.1                              | (72) LI, Junhui                                |
| (72) KAWAMURA Yusuke                          | (47) 18.12.2024                                | (31) 201911094836                              |
| NAKAMURA Shuichi                              | (87) US2014056467                              | (32) 11.11.2019                                |
| MORIMOTO Shota                                | 18.06.2015                                     | (33) China                                     |
| (31) 2018143905                               | (22) 19.09.2014                                | (51) D03J 1/18                                 |
| 2018143904                                    | (54) GRADIENT THIN FILMS                       | (11) EP4033020                                 |
| 2018143902                                    | (73) The Boeing Company                        | (21) EP21153267.6                              |
| 2018143901                                    | (72) RANADE, Alpna                             | (47) 18.12.2024                                |
| 2018143900                                    | MATOS, Marvi A.                                | (22) 25.01.2021                                |
| 2018143898                                    | (31) 201314104796                              | (54) YARN-CLAMPING DEVICE, YARN                |
| (32) 31.07.2018                               | (32) 12.12.2013                                | FRAME AND DRAWING-IN MACHINE                   |
| 31.07.2018                                    | (33) United States of America                  | INCLUDING SUCH A YARN-CLAMPING                 |
| 31.07.2018                                    | (51) C23F 11/04                                | DEVICE, METHOD FOR CLAMPING                    |
| 31.07.2018                                    | C09K 8/54                                      | YARNS WITH SUCH A YARN-                        |
| 31.07.2018                                    | C09K 8/74                                      | CLAMPING DEVICE                                |
| (33) Japan                                    | C23G 1/06                                      | (73) Stäubli Sargans AG                        |
| Japan                                         | C23G 1/08                                      | (72) FROMMELT, Igor                            |
| Japan                                         | C09K 8/60                                      | GUNTLI, Fabian                                 |
| Japan                                         | C09K 8/52                                      | (51) D04B 15/32                                |
| Japan                                         | C09K 8/584                                     | D04B 15/34                                     |
| Japan                                         | (11) EP3548646                                 | (11) EP3953514                                 |
| (51) C23C 14/06                               | (21) EP17875107.9                              | (21) EP20717321.2                              |
| C23C 28/04                                    | (47) 18.12.2024                                | (47) 18.12.2024                                |
| C23C 14/35                                    | (87) CA2017000256                              | (87) IB2020053384                              |
| B23B 27/00                                    | 07.06.2018                                     | 15.10.2020                                     |
| C23C 30/00                                    | (22) 30.11.2017                                | (22) 09.04.2020                                |
| (11) EP3692182                                | (54) NOVEL CORROSION INHIBITION                | (54) SUPPORT AND CONTROL DEVICE                |
| (21) EP18782075.8                             | PACKAGE                                        | FOR CIRCULAR KNITTING MACHINES                 |
| (47) 18.12.2024                               | (73) DORF KETAL CHEMICALS FZE                  | (73) SANTONI S.p.A.                            |
| (87) EP2018077335                             | (72) PURDY, Clay                               | (72) ANDREOLI, Marco                           |
| 11.04.2019                                    | WEISSENBERGER, Markus                          | RIZZI, Stefano                                 |
| (22) 08.10.2018                               | (31) 2950370                                   | (31) 201900005730                              |
| (54) A COATED SUBSTRATE WITH A                | (32) 02.12.2016                                | (32) 12.04.2019                                |
| COATING COMPRISING A TERNARY                  | (33) Canada                                    | (33) Italy                                     |
| TM-DIBORIDE COATING FILM, A                   | (51) C30B 29/36                                | (51) D04H 1/4209                               |
| METHOD FOR PRODUCING THE                      | C09K 3/14                                      | C09D 183/04                                    |
| COATED SUBSTRATE                              | C30B 33/00                                     | D04H 1/4218                                    |
| (73) Oerlikon Surface Solutions AG, Pfäffikon | H01L 29/34                                     | D04H 1/64                                      |
| (72) POLCIK, Peter                            | H01L 21/02                                     | D04H 3/002                                     |
| MAYRHOFER, Paul Heinz                         | H01L 29/16                                     | D04H 3/004                                     |
| MORAES, Vincent                               | (11) EP2843089                                 | F16L 59/14                                     |
| ARNDT, Mirjam                                 | (21) EP13780614.7                              | (11) EP3676434                                 |
| BOLVARDI, Hamid                               | (47) 18.12.2024                                | (21) EP18759117.7                              |
| (31) 201862660390 P                           | (87) JP2013061096                              | (47) 18.12.2024                                |
| 201762569064 P                                | 31.10.2013                                     | (87) EP2018073273                              |
| (32) 20.04.2018                               | (22) 12.04.2013                                | 07.03.2019                                     |
| 06.10.2017                                    | (54) Method for preparing a singly crystal SiC | (22) 29.08.2018                                |
| (33) United States of America                 | substrate having a CMP-treated polished        | (54) USE OF A MINERAL WOOL PRODUCT             |
| United States of America                      | surface                                        | (73) ROCKWOOL A/S                              |
| (51) C23C 14/24                               | (73) Mitsui Mining and Smelting Co., Ltd.      | (72) ZWAAG, Claudia                            |
| (11) EP4018014                                | (72) SATO, Ryuichi                             | (31) 17188636                                  |
|                                               | TABIRA, Yasunori                               | (32) 30.08.2017                                |

|                                                                                                                                            |                                                                                                                                                                                             |                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| (33) European Patent Office (EPO)                                                                                                          | (73) Qingdao Haier Drum Washing Machine Co., Ltd.<br>Haier Smart Home Co., Ltd.                                                                                                             | D06P 3/32<br>C14C 3/28<br>C14C 3/30                                                                                                          |
| (51) D06F 39/00<br>A47L 15/42<br>D06F 39/08                                                                                                | (72) LI, Wenwei<br>YI, Shaolei<br>XING, Benfu<br>PAN, Jihui<br>AI, Lellei<br>ZHAO, Zhiwei                                                                                                   | (11) EP3963133<br>(21) EP20723284.4<br>(47) 18.12.2024<br>(87) DK2020050119<br>05.11.2020<br>(22) 29.04.2020                                 |
| (11) EP4074881<br>(21) EP21168654.8<br>(47) 18.12.2024<br>(22) 15.04.2021                                                                  | (31) 201810144723<br>(32) 12.02.2018<br>(33) China                                                                                                                                          | (54) METHOD FOR DYEING AND/OR RETANNING OF LEATHER                                                                                           |
| (54) LAUNDRY TREATMENT APPLIANCE WITH WATER SOFTENING SYSTEM AND METHOD FOR OPERATING THE SAME                                             | (73) Ecco Sko A/S                                                                                                                                                                           | (73) Ecco Sko A/S                                                                                                                            |
| (73) ELECTROLUX APPLIANCES AKTIEBOLAG                                                                                                      | (51) D06F 58/20<br>D06F 58/22<br>F24F 5/00                                                                                                                                                  | (72) PETRUSIC, Stojanka<br>GØGSIG, Thomas<br>COREMANS, Ilona Francisca Maria                                                                 |
| (72) ZATTIN, Andrea<br>DE PAOLI, Stefano<br>LEONE, Carlo Antonio<br>DEL POS, Maurizio<br>LORENC, Marcin                                    | (11) EP4267789<br>(21) EP20839116.9<br>(47) 18.12.2024<br>(87) EP2020087943<br>07.07.2022<br>(22) 28.12.2020                                                                                | (31) PA201970268<br>(32) 29.04.2019<br>(33) Denmark                                                                                          |
| (51) D06F 39/00<br>D06F 31/00<br>G01N 1/20<br>D06F 34/22                                                                                   | (54) LAUNDRY DRYING APPLIANCE WITH AMBIENT AIR DEHUMIDIFICATION OPERATION MODE                                                                                                              | (51) D21C 1/02<br>D21B 1/02<br>D21B 1/12<br>D21C 3/20<br>D21C 9/00                                                                           |
| (11) EP3844335<br>(21) EP19765919.6<br>(47) 18.12.2024<br>(87) US2019048365<br>05.03.2020<br>(22) 27.08.2019                               | (73) ELECTROLUX APPLIANCES AKTIEBOLAG                                                                                                                                                       | (11) EP4291708<br>(21) EP22702851.1<br>(47) 18.12.2024<br>(87) AT2022060028<br>18.08.2022<br>(22) 31.01.2022                                 |
| (54) SYSTEM AND TECHNIQUE FOR EXTRACTING PARTICULATE-CONTAINING LIQUID SAMPLES WITHOUT FILTRATION                                          | (72) DEL MASCHIO, Federico<br>REID, Nicola<br>ROSSI, Giuseppe<br>CONTARINI, Andrea                                                                                                          | (54) METHOD FOR A CHEMICALLY ASSISTED MECHANICAL PULPING PROCESS OF WOOD CHIPS OR SHAVINGS                                                   |
| (73) Ecolab USA Inc.<br>(72) LANG, Jason Gregory<br>NYGAARD, Timothy Charles<br>STOKES, Jimmy Maxwell                                      | (51) D06M 13/292<br>D04H 1/728<br>D06M 15/21<br>H01B 1/06<br>H01M 8/02<br>H01M 8/10<br>H01M 8/1018<br>H01M 8/1053<br>H01M 8/106<br>H01M 8/1062<br>H01M 8/1069<br>H01M 8/1086<br>H01M 8/1088 | (73) Mondi AG<br>(72) FISKARI, Juha<br>(31) 500892021<br>(32) 12.02.2021<br>(33) Austria                                                     |
| (31) 201862723438 P<br>(32) 27.08.2018<br>(33) United States of America                                                                    | (11) EP3505677<br>(21) EP17843529.3<br>(47) 18.12.2024<br>(87) JP2017029772<br>01.03.2018<br>(22) 21.08.2017                                                                                | (51) D21C 7/06<br>B65G 33/18<br>(11) EP4305236<br>(21) EP22711051.7<br>(47) 18.12.2024<br>(87) EP2022055846<br>15.09.2022<br>(22) 08.03.2022 |
| (51) D06F 39/00<br>D06F 34/18<br>D06F 33/00                                                                                                | (54) SURFACE-MODIFIED NANOFIBERS, ELECTROLYTE MEMBRANE, METHOD FOR PRODUCING ELECTROLYTE MEMBRANE, MEMBRANE ELECTRODE ASSEMBLY AND SOLID POLYMER FUEL CELL                                  | (54) REACTION CHAMBER, PROCESSING SYSTEM AND PROCESSING METHOD                                                                               |
| (11) EP3696309<br>(21) EP20156156.0<br>(47) 18.12.2024<br>(22) 07.02.2020                                                                  | (73) Candy S.p.A.<br>(72) APPIANO, Luca<br>SERGI, Leonardo<br>MALACRIDA, Alessandro                                                                                                         | (73) Trifilon AB<br>(72) LIDSTRAND, Martin<br>(31) 202103185<br>(32) 08.03.2021<br>(33) United Kingdom                                       |
| (54) METHOD AND SYSTEM FOR DETERMINING A TREATMENT WHICH CAN BE PERFORMED BY A HOUSEHOLD APPLIANCE OR BY A USER ON A TEXTILE MATERIAL ITEM | (73) Tokyo Metropolitan Public University Corporation<br>(72) KAWAKAMI Hiroyoshi<br>TANAKA Manabu<br>MAKINOUCHI Takahito                                                                    | (51) D21F 2/00<br>D21F 3/00<br>D21F 7/00<br>D21G 3/00                                                                                        |
| (73) Candy S.p.A.<br>(72) APPIANO, Luca<br>SERGI, Leonardo<br>MALACRIDA, Alessandro                                                        | (31) 2016162455<br>(32) 23.08.2016<br>(33) Japan                                                                                                                                            | (11) EP4257744<br>(21) EP23166655.3<br>(47) 18.12.2024<br>(22) 05.04.2023                                                                    |
| (31) 201900001927<br>(32) 11.02.2019<br>(33) Italy                                                                                         | (51) D06P 1/94<br>C14C 15/00<br>C14C 9/02<br>C14C 3/08<br>C14C 3/04                                                                                                                         | (54) METHOD OF GRINDING A PAPER WEB CARRYING SURFACE OF A TRANSFER BELT                                                                      |
| (51) D06F 39/12<br>D06F 37/26                                                                                                              |                                                                                                                                                                                             | (73) Voith Patent GmbH<br>(72) XIE, Wilson<br>LI, Lucas                                                                                      |
| (11) EP3754091<br>(21) EP19751048.0<br>(47) 18.12.2024<br>(87) CN2019074143<br>15.08.2019<br>(22) 31.01.2019                               |                                                                                                                                                                                             | (31) 202210355315                                                                                                                            |
| (54) LAUNDRY TREATMENT APPARATUS                                                                                                           |                                                                                                                                                                                             |                                                                                                                                              |

|                                       |                                     |                                    |
|---------------------------------------|-------------------------------------|------------------------------------|
| (32) 06.04.2022                       | (73) Joseph Vögele AG               | (11) EP4288605                     |
| (33) China                            | (72) PAWLIK, Dr. Christian          | (21) EP22703913.8                  |
| (51) D21H 17/06                       | (51) E01C 19/48                     | (47) 18.12.2024                    |
| A47G 19/03                            | B60Q 1/02                           | (87) EP2022052120                  |
| B65D 65/46                            | F21S 41/00                          | 11.08.2022                         |
| D21H 17/15                            | (11) EP3832018                      | (22) 28.01.2022                    |
| D21H 21/16                            | (21) EP19844096.8                   | (54) SYSTEM FOR REMOTELY OPERATED  |
| D21H 21/18                            | (47) 18.12.2024                     | SUBSURFACE MEASUREMENTS            |
| D21H 27/10                            | (87) JP2019030410                   | (73) FNV IP B.V.                   |
| D21H 27/30                            | 06.02.2020                          | (72) ROACH, Paul                   |
| (11) EP4281616                        | (22) 02.08.2019                     | (31) 2027477                       |
| (21) EP22709338.2                     | (54) ASPHALT FINISHER               | (32) 02.02.2021                    |
| (47) 18.12.2024                       | (73) Sumitomo (S.H.I.) Construction | (33) Netherlands                   |
| (87) FI2022050047                     | Machinery Co., Ltd.                 | (51) E02D 13/00                    |
| 28.07.2022                            | (72) SAKAKIBARA, Akira              | E02D 15/08                         |
| (22) 24.01.2022                       | (31) 2018146897                     | E02D 5/38                          |
| (54) HIGH DURABILITY CARDBOARD        | (32) 03.08.2018                     | E02D 5/66                          |
| PRODUCT AND METHOD FOR THE            | (33) Japan                          | E02D 7/28                          |
| MANUFACTURING THEREOF                 | (51) E01F 9/669                     | E02D 15/06                         |
| (73) Fiberdom Oy                      | (11) EP4087979                      | B66C 1/56                          |
| (72) MAYES, Duncan                    | (21) EP21701169.1                   | B66C 13/14                         |
| (31) 20215083                         | (47) 18.12.2024                     | (11) EP4339378                     |
| (32) 25.01.2021                       | (87) IB2021050153                   | (21) EP22196152.7                  |
| (33) Finland                          | 15.07.2021                          | (47) 18.12.2024                    |
| (51) D21J 3/00                        | (22) 11.01.2021                     | (22) 16.09.2022                    |
| A24F 47/00                            | (54) A SUPPORT SYSTEM FOR           | (54) HANDLING DEVICE AND METHOD    |
| (11) EP3783150                        | EMERGENCY ROAD SIGNS, WITH          | FOR GRIPPING AND INSERTING A       |
| (21) EP20190587.4                     | SELF-LOCKING SUPPORT BRACKETS       | PIPE PILE INTO A BOREHOLE          |
| (47) 18.12.2024                       | (73) White Star S.r.l.              | (73) BAUER Maschinen GmbH          |
| (22) 11.08.2020                       | (72) CECCARELLI, Stefano            | (72) Wiedenmann, Ulli              |
| (54) CONSISTENTLY-AUTOMATED           | COSTANTINI, Paolo                   | (51) E02D 17/13                    |
| PRODUCTION MACHINES AND               | (31) 202000000352                   | E02F 3/20                          |
| METHOD FOR PREPARING DRIED            | (32) 10.01.2020                     | E02F 3/24                          |
| PAPER ARTICLE                         | (33) Italy                          | (11) EP4239130                     |
| (73) Golden Arrow Printing Technology | (51) E01F 15/08                     | (21) EP22159510.1                  |
| (Kunshan) Co., Ltd.                   | (11) EP3551803                      | (47) 18.12.2024                    |
| (72) HUANG, Chun-Huang                | (21) EP17816523.9                   | (22) 01.03.2022                    |
| KUO, Chien-Kuan                       | (47) 18.12.2024                     | (54) SLURRY WALL CUTTER AND METHOD |
| (31) 201910744226                     | (87) EP2017080537                   | FOR CREATING A CUT IN THE          |
| (32) 13.08.2019                       | 14.06.2018                          | GROUND                             |
| (33) China                            | (22) 27.11.2017                     | (73) BAUER Maschinen GmbH          |
| (51) E01C 9/00                        | (54) REINFORCING ELEMENT            | (72) SOIER, Sebastian              |
| E01C 13/08                            | (73) DELTABLOC International GmbH   | HERRMANN, Christian                |
| E01C 9/08                             | (72) EDL, Thomas                    | VOHS, Thomas                       |
| (11) EP4284975                        | SPITZER, Franz                      | (51) E02D 29/14                    |
| (21) EP21865328.5                     | (31) 511182016                      | E05B 5/00                          |
| (47) 18.12.2024                       | (32) 07.12.2016                     | (11) EP3812513                     |
| (87) RU2021050456                     | (33) Austria                        | (21) EP20203062.3                  |
| 04.08.2022                            | (51) E01H 1/08                      | (47) 18.12.2024                    |
| (22) 28.12.2021                       | (11) EP4144917                      | (22) 21.10.2020                    |
| (54) GRASS PAVER PANELS               | (21) EP21194243.8                   | (54) A LOCKING ASSEMBLY            |
| (73) Franko, Oleg Mikhailovich        | (47) 18.12.2024                     | (73) Aqseptence Group Pty Ltd      |
| Dutko, Oleg Romanovich                | (22) 01.09.2021                     | (72) Christopher, Aaron Robert     |
| (72) Dutko, Oleg Romanovich           | (54) STREET SWEEPER WITH AN         | White, Andrew Raymond              |
| Franko, Oleg Mikhailovich             | AUTOMATIC CLEANING SYSTEM FOR       | Visser, Denys                      |
| (31) 2021102183                       | CLEANING A RECYCLING SYSTEM         | (31) 2019253846                    |
| (32) 29.01.2021                       | (73) Marcel Boschung AG             | (32) 23.10.2019                    |
| (33) Russian Federation               | (72) Neuhaus, Didier                | (33) Australia                     |
| (51) E01C 19/00                       | Sturny, Benedikt                    | (51) E02F 3/18                     |
| E01C 19/28                            | (51) E02D 1/02                      | E02F 5/08                          |
| E01C 19/48                            | E21B 7/02                           | E01C 23/088                        |
| (11) EP3896223                        | E21B 15/00                          | E01C 23/09                         |
| (21) EP20169883.4                     | E21B 15/04                          | (11) EP4269701                     |
| (47) 18.12.2024                       | E21B 17/20                          | (21) EP23150679.1                  |
| (22) 16.04.2020                       | E21B 19/08                          | (47) 18.12.2024                    |
| (54) METHOD FOR MANUFACTURING A       | E21B 19/22                          | (22) 09.01.2023                    |
| ROAD PAVING, ASPHALTING SYSTEM        | E02D 7/02                           | (54) SELF-LEVELLING EQUIPMENT FOR  |
| AND COMPACTOR                         |                                     | MANIPULATING SOLID SURFACES        |

|                                               |                                      |                                         |
|-----------------------------------------------|--------------------------------------|-----------------------------------------|
| (73) FAE Group S.p.A.                         | (11) EP3770339                       | (32) 29.09.2020                         |
| (72) Scanzoni, Diego                          | (21) EP19770666.6                    | (33) Germany                            |
| (31) 202200008207                             | (47) 18.12.2024                      | (51) E04B 1/41                          |
| (32) 26.04.2022                               | (87) JP2019012147                    | (11) EP4151811                          |
| (33) Italy                                    | 26.09.2019                           | (21) EP22196637.7                       |
| (51) E02F 3/43                                | (22) 22.03.2019                      | (47) 18.12.2024                         |
| E02F 9/22                                     | (54) EXCAVATOR                       | (22) 20.09.2022                         |
| (11) EP4036318                                | (73) Sumitomo Heavy Industries, Ltd. | (54) RETROFIT BRICK TIE                 |
| (21) EP20868167.6                             | (72) OKADA, Junichi                  | (73) Koester, John H.                   |
| (47) 18.12.2024                               | (31) 2018054806                      | (72) Koester, John H.                   |
| (87) JP2020035871                             | (32) 22.03.2018                      | (31) 202217945287                       |
| 01.04.2021                                    | (33) Japan                           | 202163246393 P                          |
| (22) 23.09.2020                               | (51) E03B 3/24                       | (32) 15.09.2022                         |
| (54) WORK MACHINE                             | E03B 3/12                            | 21.09.2021                              |
| (73) Hitachi Construction Machinery Co., Ltd. | E03B 3/18                            | (33) United States of America           |
| (72) SUZUKI Yusuke                            | E03B 3/26                            | United States of America                |
| TANAKA Hiroaki                                | E21B 43/08                           | (51) E04B 1/86                          |
| NAKANO Hisami                                 | E03B 9/20                            | E04C 2/26                               |
| (31) 2019173087                               | E21B 43/04                           | E04B 1/74                               |
| (32) 24.09.2019                               | E03B 9/04                            | B29B 17/00                              |
| (33) Japan                                    | E03C 1/05                            | (11) EP3455428                          |
| (51) E02F 3/88                                | E03B 7/07                            | (21) EP17814078.6                       |
| E02F 3/92                                     | E21B 43/10                           | (47) 18.12.2024                         |
| (11) EP4232639                                | (11) EP3688237                       | (87) US2017037648                       |
| (21) EP21805677.8                             | (21) EP18863498.4                    | 21.12.2017                              |
| (47) 18.12.2024                               | (47) 18.12.2024                      | (22) 15.06.2017                         |
| (87) NO2021050214                             | (87) SE2018050972                    | (54) PELLETIZATION OF RECYCLED          |
| 28.04.2022                                    | 04.04.2019                           | CEILING MATERIALS                       |
| (22) 15.10.2021                               | (22) 25.09.2018                      | (73) Armstrong World Industries, Inc.   |
| (54) SUCTION GENERATION DEVICE                | (54) WELL AND METHOD FOR             | (72) KRICK, Charles G.                  |
| (73) Kontorveien 1 AS                         | CONSTRUCTING A WELL                  | HULTGREN, Tawnya R.                     |
| (72) STORVIK, Kjell                           | (73) Good Sweden AB                  | (31) 201662351523 P                     |
| (31) 20201145                                 | (72) WESTERLIND, Martin              | (32) 17.06.2016                         |
| (32) 22.10.2020                               | ALLÉN, Staffan                       | (33) United States of America           |
| (33) Norway                                   | (31) 1751195                         | (51) E04D 13/03                         |
| (51) E02F 3/92                                | (32) 26.09.2017                      | E04D 13/035                             |
| (11) EP4111001                                | (33) Sweden                          | F21S 11/00                              |
| (21) EP20710631.1                             | (51) E03C 1/04                       | (11) EP4310269                          |
| (47) 18.12.2024                               | (11) EP4234823                       | (21) EP23183965.5                       |
| (87) NL2020050132                             | (21) EP23177303.7                    | (47) 18.12.2024                         |
| 02.09.2021                                    | (47) 18.12.2024                      | (22) 06.07.2023                         |
| (22) 28.02.2020                               | (22) 11.01.2017                      | (54) BIOCLIMATIC MODULE FOR BUILDING    |
| (54) A CUTTER HEAD FOR A DRILL                | (54) SYSTEM FOR DISPENSING WATER     | (73) L.E Design Production Services     |
| CUTTER WITH SUCTION FUNCTION                  | (73) Quooker International B.V.      | (72) ESTEBE, Laurent                    |
| (73) Dredge Yard DMCC                         | (72) PETERI, Niels Theodoor          | (31) 2207564                            |
| (72) YOUSEF, Basel                            | (31) 2016083                         | (32) 22.07.2022                         |
| (51) E02F 9/22                                | (32) 11.01.2016                      | (33) France                             |
| (11) EP4159933                                | (33) Netherlands                     | (51) E04F 11/18                         |
| (21) EP21812756.1                             | (51) E03D 11/14                      | F16B 7/04                               |
| (47) 18.12.2024                               | (11) EP4223946                       | E04F 13/08                              |
| (87) JP2021020303                             | (21) EP22154756.5                    | (11) EP4105405                          |
| 02.12.2021                                    | (47) 18.12.2024                      | (21) EP22162515.5                       |
| (22) 27.05.2021                               | (22) 02.02.2022                      | (47) 18.12.2024                         |
| (54) CONSTRUCTION ASSISTING SYSTEM            | (54) ASSEMBLY SYSTEM FOR SANITARY    | (22) 16.03.2022                         |
| FOR SHOVEL                                    | ITEMS                                | (54) A BATTEN FIXING CLIP AND A         |
| (73) Sumitomo Heavy Industries, Ltd.          | (73) Geberit International AG        | METHOD OF FIXING THE CLIP               |
| (72) WU, Chunnan                              | (72) GUBELMANN, Silvan               | (73) Woodform Architectural Pty Ltd t/a |
| (31) 2020092622                               | LECHNER, Manuel                      | Sculptform                              |
| (32) 27.05.2020                               | (51) E03F 5/042                      | (72) Wright, Alasdair                   |
| (33) Japan                                    | E03F 5/04                            | Napier, Jeremy                          |
| (51) E02F 9/22                                | (11) EP3974591                       | Scott, David                            |
| E02F 3/43                                     | (21) EP21199391.0                    | Campbell, George                        |
| E02F 9/26                                     | (47) 18.12.2024                      | Eden, Tim                               |
| F15B 11/02                                    | (22) 28.09.2021                      | Schwartz, Bradley                       |
| F15B 11/00                                    | (54) DRAINAGE SECURING DEVICE        | (31) 2021901197                         |
| F15B 19/00                                    | (73) Scherzer Umwelttechnik GmbH     | (32) 22.04.2021                         |
| F15B 20/00                                    | (72) PRAMSCHÜFER, Alexander          | (33) Australia                          |
|                                               | (31) 102020125378                    |                                         |

|                                                                                 |                                                                                                                       |                                                                                            |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| (51) E04F 13/08<br>E04B 1/04                                                    | (33) United States of America                                                                                         | (87) EP2021075676<br>31.03.2022                                                            |
| (11) EP4314434                                                                  | (51) E04G 11/38                                                                                                       | (22) 17.09.2021                                                                            |
| (21) EP22715659.3                                                               | B66B 9/16                                                                                                             | (54) METHOD AND APPARATUS TO RESET<br>A FLOOR                                              |
| (47) 18.12.2024                                                                 | E04F 21/18                                                                                                            | (73) Hydro Inject ApS                                                                      |
| (87) GB2022050790                                                               | E04G 19/00                                                                                                            | (72) MIKKELSEN, Anders Peter                                                               |
| 06.10.2022                                                                      | (11) EP4293176                                                                                                        | (31) PA202100357                                                                           |
| (22) 30.03.2022                                                                 | (21) EP23178835.7                                                                                                     | PA202001073                                                                                |
| (54) BUILDING REINFORCEMENT<br>WITH ADJUSTABLE CLADDING<br>SUPPORTING FRAMEWORK | (47) 18.12.2024                                                                                                       | (32) 09.04.2021                                                                            |
| (73) Edsger, William George                                                     | (22) 13.06.2023                                                                                                       | 23.09.2020                                                                                 |
| (72) EDSCER, William George                                                     | (54) APPARATUS FOR DISPLACING A<br>FORMWORK                                                                           | (33) Denmark                                                                               |
| MARSHALL, John Grahame                                                          | (73) DOKA GmbH                                                                                                        | Denmark                                                                                    |
| (31) 202110102                                                                  | (72) AUGUSTIN, Alexander                                                                                              |                                                                                            |
| 202107935                                                                       | (31) 102022205964                                                                                                     | (51) E04H 4/12                                                                             |
| 202104675                                                                       | (32) 13.06.2022                                                                                                       | E04H 4/14                                                                                  |
| (32) 13.07.2021                                                                 | (33) Germany                                                                                                          | (11) EP4111019                                                                             |
| 03.06.2021                                                                      | (51) E04G 21/04                                                                                                       | (21) EP21713745.4                                                                          |
| 31.03.2021                                                                      | B33Y 30/00                                                                                                            | (47) 18.12.2024                                                                            |
| (33) United Kingdom                                                             | B66C 17/06                                                                                                            | (87) IB2021051622                                                                          |
| United Kingdom                                                                  | B66C 23/18                                                                                                            | 02.09.2021                                                                                 |
| United Kingdom                                                                  | B66C 23/26                                                                                                            | (22) 26.02.2021                                                                            |
|                                                                                 | B33Y 10/00                                                                                                            | (54) SWIMMING POOL STRUCTURE WITH<br>WATER DRAWING, FILTERING AND<br>RECIRCULATING CIRCUIT |
| (51) E04F 15/02                                                                 | B33Y 70/00                                                                                                            | (73) Ma.Mi. International S.r.l.                                                           |
| E04F 15/10                                                                      | B66C 13/48                                                                                                            | (72) MASSA, Marco                                                                          |
| (11) EP3918150                                                                  | B66C 23/30                                                                                                            | (31) 202000004114                                                                          |
| (21) EP19829694.9                                                               | (11) EP4239144                                                                                                        | (32) 27.02.2020                                                                            |
| (47) 18.12.2024                                                                 | (21) EP23169116.3                                                                                                     | (33) Italy                                                                                 |
| (87) NL2019050055                                                               | (47) 18.12.2024                                                                                                       |                                                                                            |
| 06.08.2020                                                                      | (22) 02.04.2020                                                                                                       | (51) E04H 12/08                                                                            |
| (22) 30.01.2019                                                                 | (54) BUILDING AND/OR MATERIAL<br>HANDLING MACHINE                                                                     | F03D 13/20                                                                                 |
| (54) PANEL AND FLOOR COVERING<br>COMPRISING SUCH PANELS                         | (73) Liebherr-Werk Biberach GmbH                                                                                      | (11) EP4112845                                                                             |
| (73) I4F LICENSING NV                                                           | (72) BRAMBERGER, Robert                                                                                               | (21) EP21183011.2                                                                          |
| (72) PERRA, Antonio Giuseppe                                                    | KÖGL, Martin                                                                                                          | (47) 18.12.2024                                                                            |
|                                                                                 | (31) 102019109019                                                                                                     | (22) 01.07.2021                                                                            |
| (51) E04F 19/08                                                                 | (32) 05.04.2019                                                                                                       | (54) WIND ENERGY SYSTEM AND<br>METHOD FOR PRODUCING A WIND<br>ENERGY TOWER                 |
| E05C 17/04                                                                      | (33) Germany                                                                                                          | (73) Wobben Properties GmbH                                                                |
| E05C 17/54                                                                      | (51) E04G 21/24                                                                                                       | (72) Kersten, Roy                                                                          |
| (11) EP4317630                                                                  | E04G 21/28                                                                                                            |                                                                                            |
| (21) EP23189112.8                                                               | E04G 1/15                                                                                                             | (51) E05B 9/04                                                                             |
| (47) 18.12.2024                                                                 | E04G 21/32                                                                                                            | E05B 17/20                                                                                 |
| (22) 02.08.2023                                                                 | E04G 3/22                                                                                                             | E05B 27/00                                                                                 |
| (54) TRAPDOOR-INSERT ASSEMBLY<br>COMPRISING AN INSERT HOOKED TO<br>THE TRAPDOOR | E04G 5/00                                                                                                             | E05B 15/16                                                                                 |
| (73) AKIFIX S.P.A.                                                              | E04B 7/14                                                                                                             | (11) EP3802997                                                                             |
| (72) RAGGETTI, Tommaso                                                          | E04D 15/00                                                                                                            | (21) EP18921076.8                                                                          |
| CASCIA, Danilo                                                                  | E04G 3/26                                                                                                             | (47) 18.12.2024                                                                            |
| MARINELLI, Andrea                                                               | E04C 3/08                                                                                                             | (87) TR2018050272                                                                          |
| (31) 202200016497                                                               | (11) EP3650616                                                                                                        | 05.12.2019                                                                                 |
| (32) 03.08.2022                                                                 | (21) EP19205308.0                                                                                                     | (22) 28.05.2018                                                                            |
| (33) Italy                                                                      | (47) 18.12.2024                                                                                                       | (54) A CYLINDER LOCK WITH ENHANCED<br>SECURITY AGAINST BREAK-IN<br>ATTEMPTS                |
| (51) E04G 1/34                                                                  | (22) 25.10.2019                                                                                                       | (73) Kale Kilit ve Kalip Sanayi Anonim Sirketi                                             |
| E06C 1/39                                                                       | (54) WEATHER PROTECTION ROOF MADE<br>OF SPANNEED ROOF TARPAULIN<br>WITH SCAFFOLD BOARDS MOUNTED<br>OVER THE TARPAULIN | (72) CAN, Izzet                                                                            |
| E04G 1/15                                                                       | (73) ALFIX GmbH                                                                                                       |                                                                                            |
| E04G 1/30                                                                       | (72) Weiß, Johannes                                                                                                   | (51) E05B 15/00                                                                            |
| (11) EP4053357                                                                  | (31) 102018128081                                                                                                     | E05B 77/26                                                                                 |
| (21) EP22159262.9                                                               | (32) 09.11.2018                                                                                                       | E05B 15/04                                                                                 |
| (47) 18.12.2024                                                                 | (33) Germany                                                                                                          | (11) EP3999701                                                                             |
| (22) 28.02.2022                                                                 | (51) E04G 23/02                                                                                                       | (21) EP20739845.4                                                                          |
| (54) INTERLOCKING WORK PLATFORM<br>SYSTEM AND METHOD                            | C09J 4/00                                                                                                             | (47) 18.12.2024                                                                            |
| (73) WERNER CO.                                                                 | C09J 11/00                                                                                                            | (87) DE2020100567                                                                          |
| (72) CHEN, Fang                                                                 | B65D 83/00                                                                                                            | 21.01.2021                                                                                 |
| ZHU, Ling                                                                       | B05C 17/005                                                                                                           | (22) 30.06.2020                                                                            |
| HE, Liang                                                                       | (11) EP4217553                                                                                                        | (54) MOTOR VEHICLE LOCKING DEVICE                                                          |
| (31) 202163155722 P                                                             | (21) EP21778431.3                                                                                                     | (73) Kiekert Aktiengesellschaft                                                            |
| (32) 02.03.2021                                                                 | (47) 18.12.2024                                                                                                       | (72) WALDMANN, Thomas                                                                      |
|                                                                                 |                                                                                                                       | (31) 102019119256                                                                          |

|                                        |                                     |                                           |
|----------------------------------------|-------------------------------------|-------------------------------------------|
| (32) 16.07.2019                        | (33) Germany                        | (47) 18.12.2024                           |
| (33) Germany                           | (51) E05F 3/22                      | (87) EP2021056150                         |
| (51) E05B 81/14                        | E05F 3/10                           | 16.09.2021                                |
| E05B 81/20                             | F04B 1/146                          | (22) 11.03.2021                           |
| E05B 81/34                             | E05F 15/53                          | (54) A DOOR OPERATION SYSTEM              |
| E05B 81/38                             | (11) EP4279696                      | (73) ASSA ABLOY Entrance Systems AB       |
| E05B 81/06                             | (21) EP23172518.5                   | (72) FREDE, Friedhelm                     |
| (11) EP4284992                         | (47) 18.12.2024                     | (31) 2030076                              |
| (21) EP22705077.0                      | (22) 10.05.2023                     | (32) 12.03.2020                           |
| (47) 18.12.2024                        | (54) DRIVE FOR A DOOR OR WINDOW     | (33) Sweden                               |
| (87) FR2022050151                      | (73) GEZE GmbH                      | (51) E06B 9/24                            |
| 04.08.2022                             | (72) Wörner, Benjamin               | B32B 7/12                                 |
| (22) 27.01.2022                        | (31) 102022205040                   | B32B 17/06                                |
| (54) IMPROVED MECHANISM FOR            | (32) 20.05.2022                     | E06B 3/67                                 |
| OPENING/CLOSING A LOCK FOR A           | (33) Germany                        | E06B 9/264                                |
| MOTOR VEHICLE LEAF                     | (51) E05F 15/40                     | (11) EP4100610                            |
| (73) Minebea AccessSolutions France    | E05F 15/73                          | (21) EP21708373.2                         |
| (72) PAUMELLE, Jérémy                  | (11) EP3907367                      | (47) 18.12.2024                           |
| DEBROUCKE, François                    | (21) EP21169088.8                   | (87) IB2021050870                         |
| DURIEZ, Laurent                        | (47) 18.12.2024                     | 12.08.2021                                |
| (31) 2100755                           | (22) 19.04.2021                     | (22) 03.02.2021                           |
| (32) 27.01.2021                        | (54) AUTOMATIC WINDOW INSTALLATION  | (54) ELECTRIC POTENTIALLY-DRIVEN          |
| (33) France                            | (73) GEZE GmbH                      | SHADE WITH ELECTROSTATIC SHADE            |
| (51) E05D 11/06                        | (72) Hahn, Erhard                   | RETRACTION, AND/OR ASSOCIATED             |
| E05D 15/52                             | Palminteri, Daniel                  | METHODS                                   |
| (11) EP4411095                         | Hucker, Matthias                    | (73) Guardian Glass, LLC                  |
| (21) EP23154576.5                      | (31) 102020205810                   | (72) KOSKULICS, Jeffrey                   |
| (47) 18.12.2024                        | (32) 08.05.2020                     | (31) 202016779927                         |
| (22) 02.02.2023                        | (33) Germany                        | (32) 03.02.2020                           |
| (54) FITTING ARRANGEMENT AND DOOR      | (51) E05F 15/643                    | (33) United States of America             |
| OR WINDOW ARRANGEMENT FOR              | (11) EP4162137                      | (51) E06B 9/302                           |
| SUCH A FITTING ARRANGEMENT             | (21) EP21731432.7                   | E06B 9/322                                |
| (73) Gretsche-Unitas GmbH Baubeschlüge | (47) 18.12.2024                     | E06B 9/325                                |
| (72) Beißwenger, Frank                 | (87) EP2021064904                   | E06B 9/327                                |
| (51) E05D 15/06                        | 09.12.2021                          | E06B 9/388                                |
| (11) EP4284993                         | (22) 03.06.2021                     | (11) EP4134511                            |
| (21) EP22708731.9                      | (54) A BELT TENSIONING SYSTEM       | (21) EP21190861.1                         |
| (47) 18.12.2024                        | (73) ASSA ABLOY Entrance Systems AB | (47) 18.12.2024                           |
| (87) DE2022000002                      | (72) DREYER, Roger                  | (22) 11.08.2021                           |
| 04.08.2022                             | ÖNNERED, Simon                      | (54) VENETIAN BLIND                       |
| (22) 18.01.2022                        | (31) 2030186                        | (73) Griesser Holding AG                  |
| (54) GUIDE RAIL FITTING FOR SLIDING    | (32) 04.06.2020                     | (72) Lang, Stefan                         |
| DOORS AND RACEWAY SYSTEM               | (33) Sweden                         | Sege, Christof                            |
| (73) Zimmer, Günther                   | (51) E06B 5/11                      | (51) E21B 19/16                           |
| Zimmer, Martin                         | E06B 7/215                          | (11) EP3841276                            |
| (72) Zimmer, Martin                    | E05C 19/00                          | (21) EP19769274.2                         |
| Zimmer, Günther                        | (11) EP3818233                      | (47) 18.12.2024                           |
| (31) 202021000337 U                    | (21) EP19734094.6                   | (87) US2019047323                         |
| (32) 29.01.2021                        | (47) 18.12.2024                     | 27.02.2020                                |
| (33) Germany                           | (87) EP2019067580                   | (22) 20.08.2019                           |
| (51) E05F 1/10                         | 09.01.2020                          | (54) SENSOR SYSTEM FOR TONG               |
| E05F 15/611                            | (22) 01.07.2019                     | ASSEMBLY                                  |
| E05F 15/616                            | (54) BURGLARY PROTECTION DEVICE     | (73) Weatherford Technology Holdings, LLC |
| E05F 15/622                            | FOR A DOOR                          | (72) ROTHE, Jan                           |
| E05F 15/627                            | (73) ASSA ABLOY (Schweiz) AG        | HELMS, Martin                             |
| E05B 81/20                             | (72) BRÄNDLE, Andreas               | (31) 201816109414                         |
| (11) EP4097321                         | DINTHEER, Andreas                   | (32) 22.08.2018                           |
| (21) EP21701647.6                      | (31) 18181086                       | (33) United States of America             |
| (47) 18.12.2024                        | 18181089                            | (51) E21B 34/08                           |
| (87) DE2021100034                      | (32) 02.07.2018                     | E21B 43/12                                |
| 05.08.2021                             | 02.07.2018                          | (11) EP4051866                            |
| (22) 13.01.2021                        | (33) European Patent Office (EPO)   | (21) EP20882095.1                         |
| (54) OPENING DEVICE FOR A MOTOR        | European Patent Office (EPO)        | (47) 18.12.2024                           |
| VEHICLE DOOR                           | (51) E06B 9/06                      | (87) US2020057474                         |
| (73) Kiekert AG                        | E06B 9/68                           | 06.05.2021                                |
| (72) REDDMANN, Uwe                     | (11) EP4118287                      | (22) 27.10.2020                           |
| (31) 102020101806                      | (21) EP21712098.9                   | (54) SELECTIVE CONNECTION OF              |
| (32) 27.01.2020                        |                                     | DOWNHOLE REGIONS                          |

|                                            |                                          |                                       |
|--------------------------------------------|------------------------------------------|---------------------------------------|
| (73) Baker Hughes Oilfield Operations, LLC | (31) 201916402331                        | (32) 06.02.2020                       |
| (72) SIMPSON, Graeme David                 | (32) 03.05.2019                          | (33) European Patent Office (EPO)     |
| (31) 201915764                             | (33) United States of America            | (51) F01D 25/16                       |
| (32) 30.10.2019                            | (51) F01D 15/10                          | F16C 27/04                            |
| (33) United Kingdom                        | F01D 25/12                               | (11) EP3994341                        |
| (51) E21B 43/12                            | F01D 25/30                               | (21) EP20742344.3                     |
| G01F 1/34                                  | F01D 5/02                                | (47) 18.12.2024                       |
| G01F 1/50                                  | (11) EP4074943                           | (87) FR2020051030                     |
| F04D 13/16                                 | (21) EP22165401.5                        | 07.01.2021                            |
| F04D 15/00                                 | (47) 18.12.2024                          | (22) 16.06.2020                       |
| (11) EP3882433                             | (22) 30.03.2022                          | (54) DEVICE FOR DAMPING A ROLLING     |
| (21) EP21162586.8                          | (54) TURBINE LOAD COUPLING COOLING       | BEARING, COMPRISING A RIGID           |
| (47) 18.12.2024                            | SYSTEM                                   | SUPPORT PASSING THROUGH A             |
| (22) 15.03.2021                            | (73) General Electric Technology GmbH    | FLEXIBLE CAGE                         |
| (54) PUMPING MECHANISM WITH                | (72) YERRAM, Ravinder                    | (73) SAFRAN AIRCRAFT ENGINES          |
| INTEGRATED FLOW METER                      | PLATA, Gerardo                           | (72) PLONA, Daniel Georges            |
| (73) Lutz Pumpen GmbH                      | ROCHIN MACHADO, Jorge Mario              | (31) 1907306                          |
| (72) Getze, Andrej                         | NGUYEN, Tho Vankhanh                     | (32) 02.07.2019                       |
| (31) 102020107486                          | PONNURAJ, Balakrishnan                   | (33) France                           |
| (32) 18.03.2020                            | (31) 202117228794                        | (51) F01D 25/28                       |
| (33) Germany                               | (32) 13.04.2021                          | (11) EP4123129                        |
| (51) E21B 47/12                            | (33) United States of America            | (21) EP22181776.0                     |
| G01V 3/34                                  | (51) F01D 25/16                          | (47) 18.12.2024                       |
| G01V 13/00                                 | F01D 25/18                               | (22) 29.06.2022                       |
| G01V 3/30                                  | F02C 6/12                                | (54) SYSTEM AND METHOD FOR            |
| (11) EP3464817                             | F16C 27/04                               | INSTALLATION OR REMOVAL OF ONE        |
| (21) EP17807228.6                          | F16C 33/64                               | OR MORE COMBUSTION CANS               |
| (47) 18.12.2024                            | F16C 33/66                               | (73) General Electric Technology GmbH |
| (87) US2017033455                          | (11) EP3872305                           | (72) SANCHEZ MORENO, Humberto         |
| 07.12.2017                                 | (21) EP21150663.9                        | SCIPIO, Alston Ilford                 |
| (22) 19.05.2017                            | (47) 18.12.2024                          | AGUILAR CUÉLLAR, Artemio Josue        |
| (54) SYSTEM AND METHOD TO                  | (22) 08.01.2021                          | (31) 202117379052                     |
| DETERMINE COMMUNICATION LINE               | (54) TURBOCHARGER ASSEMBLY               | (32) 19.07.2021                       |
| PROPAGATION DELAY                          | (73) Garrett Transportation I Inc.       | (33) United States of America         |
| (73) Baker Hughes Holdings LLC             | (72) Theiss, Nathan, Edward              | (51) F01K 7/32                        |
| (72) KRAFT, Kersten                        | Sawant, Mrunal                           | F01K 25/10                            |
| (31) 201615168746                          | Guadiana Cerrillo, Juan, Gabriel         | F01K 25/08                            |
| (32) 31.05.2016                            | Jung, Shane, Fong                        | F02G 1/044                            |
| (33) United States of America              | Hussey, Colin, Joseph                    | (11) EP4308802                        |
| (51) F01D 5/02                             | (31) 202016805743                        | (21) EP22715581.9                     |
| G01M 1/22                                  | (32) 29.02.2020                          | (47) 18.12.2024                       |
| G01M 1/32                                  | (33) United States of America            | (87) EP2022056723                     |
| (11) EP3791046                             | (51) F01D 25/16                          | 22.09.2022                            |
| (21) EP19723021.2                          | F01D 25/28                               | (22) 15.03.2022                       |
| (47) 18.12.2024                            | F01K 23/16                               | (54) CARTRIDGE FOR A HEAT ENGINE      |
| (87) EP2019060100                          | F02C 7/06                                | HAVING A THERMODYNAMIC CYCLE          |
| 14.11.2019                                 | F02C 7/20                                | AND ASSOCIATED HEAT ENGINE            |
| (22) 18.04.2019                            | F16C 25/02                               | (73) Cixten                           |
| (54) ROTOR BALANCING METHOD                | F16C 39/04                               | (72) BERTHELEMY, Pierre-Yves          |
| (73) Siemens Energy Global GmbH & Co. KG   | F16C 17/04                               | (31) 2102658                          |
| (72) MENG, Zhiqiang                        | F16C 35/02                               | (32) 17.03.2021                       |
| (31) 18171624                              | (11) EP4069949                           | (33) France                           |
| (32) 09.05.2018                            | (21) EP20718156.1                        | (51) F01L 1/02                        |
| (33) European Patent Office (EPO)          | (47) 18.12.2024                          | (11) EP3649327                        |
| (51) F01D 9/04                             | (87) EP2020057950                        | (21) EP18743277.8                     |
| F01D 25/24                                 | 12.08.2021                               | (47) 18.12.2024                       |
| (11) EP3734017                             | (22) 23.03.2020                          | (87) US2018039989                     |
| (21) EP20170918.5                          | (54) METHOD FOR MODIFYING A SINGLE       | 10.01.2019                            |
| (47) 18.12.2024                            | SHAFT COMBINED CYCLE POWER               | (22) 28.06.2018                       |
| (22) 22.04.2020                            | PLANT                                    | (54) SYNCHRONOUS BELT DRIVE SYSTEM    |
| (54) GAS TURBINE ENGINE WITH FAN           | (73) Siemens Energy Global GmbH & Co. KG | (73) Gates Corporation                |
| CASE HAVING INTEGRATED STATOR              | (72) KURSCH, Michael                     | (72) LACY, William Fraser             |
| VANES                                      | WÖSTMANN, Kai                            | (31) 201715642041                     |
| (73) RTX Corporation                       | SPIELMANN, Till                          | (32) 05.07.2017                       |
| (72) BELL, Kevin M.                        | WALK, Oliver Tobias                      | (33) United States of America         |
| PAQUIN, Bradley L.                         | JANSSEN, Stefan                          | (51) F01L 13/06                       |
| RIEHL, John D.                             | STACH, Johann                            | F01L 1/24                             |
| SALISBURY, George Alan                     | (31) 20155823                            |                                       |

|                                      |                                   |                                  |
|--------------------------------------|-----------------------------------|----------------------------------|
| F01L 1/26                            | United States of America          | (51) F02D 41/26                  |
| F01L 1/18                            | (51) F02C 3/22                    | F02D 41/22                       |
| (11) EP3821114                       | F01D 11/24                        | F02D 11/10                       |
| (21) EP19834097.8                    | F02C 3/24                         | F02D 41/20                       |
| (47) 18.12.2024                      | F02C 6/08                         | (11) EP2961973                   |
| (87) US2019041649                    | F02C 9/28                         | (21) EP14701921.0                |
| 16.01.2020                           | F02C 9/40                         | (47) 18.12.2024                  |
| (22) 12.07.2019                      | (11) EP4227507                    | (87) EP2014000254                |
| (54) BALANCED BRIDGE BLEEDER BRAKE   | (21) EP23153266.4                 | 07.08.2014                       |
| WITH HLA                             | (47) 18.12.2024                   | (22) 30.01.2014                  |
| (73) Eaton Intelligent Power Limited | (22) 25.01.2023                   | (54) METHOD AND ARRANGEMENT      |
| (72) VANWINGERDEN, Mark              | (54) ENGINE SYSTEM AND METHOD OF  | FOR CONTROLLING AN INTERNAL      |
| LEE, Andrew                          | OPERATING THE SAME                | COMBUSTION ENGINE WITH AT        |
| (31) 201862697119 P                  | (73) Rolls-Royce plc              | LEAST TWO CONTROL UNITS          |
| (32) 12.07.2018                      | (72) Swan, Peter                  | (73) Rolls-Royce Solutions GmbH  |
| (33) United States of America        | (31) 202201986                    | (72) ELZE, Roger                 |
| (51) F01N 3/20                       | (32) 15.02.2022                   | MEHR, Andreas                    |
| (11) EP4285009                       | (33) United Kingdom               | HIRSCHLE, Christoph              |
| (21) EP21844536.9                    | (51) F02C 7/32                    | HENKER, Jan                      |
| (47) 18.12.2024                      | F02C 7/236                        | (31) 102013201702                |
| (87) US2021064297                    | (11) EP3712410                    | (32) 01.02.2013                  |
| 04.08.2022                           | (21) EP20163495.3                 | (33) Germany                     |
| (22) 20.12.2021                      | (47) 18.12.2024                   | (51) F02F 1/24                   |
| (54) REDUCTANT DOSING CONTROL        | (22) 17.03.2020                   | (11) EP4314522                   |
| SYSTEM                               | (54) MECHANICAL DEMAND FUEL       | (21) EP21716623.0                |
| (73) Caterpillar Inc.                | PUMPING SYSTEM                    | (47) 18.12.2024                  |
| (72) SCHONERT, Kent A.               | (73) RTX Corporation              | (87) EP2021057917                |
| BIERLE, Austin                       | (72) TURNEY, Joseph               | 29.09.2022                       |
| CHARBONNEL, Sylvain J.               | (31) 201962821055 P               | (22) 26.03.2021                  |
| (31) 202117161983                    | (32) 20.03.2019                   | (54) A CYLINDER HEAD FOR A LEAN- |
| (32) 29.01.2021                      | (33) United States of America     | BURN GASOLINE ENGINE             |
| (33) United States of America        | (51) F02D 21/08                   | (73) Jaguar Land Rover Limited   |
| (51) F01N 3/32                       | F02D 41/00                        | (72) MCWILLIAM, Lyn              |
| F01N 5/04                            | (11) EP4325039                    | JOHNSON, Jack                    |
| F01N 3/20                            | (21) EP21843862.0                 | (51) F02F 3/02                   |
| F01N 9/00                            | (47) 18.12.2024                   | (11) EP3334918                   |
| (11) EP4273375                       | (87) JP2021015531                 | (21) EP16757179.3                |
| (21) EP23163441.1                    | 20.10.2022                        | (47) 18.12.2024                  |
| (47) 18.12.2024                      | (22) 15.04.2021                   | (87) EP2016069170                |
| (22) 22.03.2023                      | (54) CONTROL METHOD AND CONTROL   | 16.02.2017                       |
| (54) METHOD FOR CONTROLLING AN E-    | DEVICE FOR INTERNAL COMBUSTION    | (22) 11.08.2016                  |
| COMPRESSOR AND AN E-CATALYST         | ENGINE                            | (54) PISTON FOR AN INTERNAL      |
| TO REDUCE EMISSIONS FROM AN          | (73) NISSAN MOTOR CO., LTD.       | COMBUSTION ENGINE                |
| INTERNAL COMBUSTION ENGINE           | (72) KODAMA, Takayoshi            | (73) KS Kolbenschmidt GmbH       |
| (73) Garrett Transportation I Inc.   | IWABUCHI, Yoshihiko               | (72) LORMES, Klaus               |
| (72) Maniar, Malay                   | (51) F02D 41/00                   | (31) 102015215313                |
| Yadla, Surya                         | F02D 19/06                        | (32) 11.08.2015                  |
| Keuler, Jens                         | F02D 19/08                        | (33) Germany                     |
| (31) 202217661865                    | F02D 41/14                        | (51) F02K 9/10                   |
| (32) 03.05.2022                      | F02M 21/02                        | F02K 9/80                        |
| (33) United States of America        | F02D 19/02                        | F42B 15/00                       |
| (51) F02B 63/04                      | F02D 35/02                        | F02K 9/76                        |
| H02J 7/00                            | (11) EP2990631                    | F02K 9/88                        |
| (11) EP4105459                       | (21) EP15001319.1                 | F02K 9/97                        |
| (21) EP22173751.3                    | (47) 18.12.2024                   | (11) EP4295026                   |
| (47) 18.12.2024                      | (22) 04.05.2015                   | (21) EP21810767.0                |
| (22) 17.05.2022                      | (54) COMBUSTION ENGINE AND METHOD | (47) 18.12.2024                  |
| (54) HYBRID GENERATOR WITH           | FOR OPERATING THE SAME            | (87) US2021038387                |
| DETACHABLE POWER UNIT AND            | (73) Innio Jenbacher GmbH & Co OG | 25.08.2022                       |
| PANEL INTEGRATION, METHOD            | (72) Kopecek, Herbert             | (22) 22.06.2021                  |
| (73) Discovery Energy, LLC           | Spyra, Nikolaus                   | (54) RING-SHAPED BOOSTER ROCKET  |
| (72) CHIU, Harrison                  | Schaumberger, Herbert             | (73) Raytheon Company            |
| MAROTZ, Benjamin                     | Arnold, Georg                     | (72) STARKEY, Ryan               |
| (31) 202217741893                    | Amplatz, Erwin                    | ALTAMIRANO, Dario N.             |
| 202163192424 P                       | (31) 3452014                      | (31) 202117181158                |
| (32) 11.05.2022                      | (32) 09.05.2014                   | (32) 22.02.2021                  |
| 24.05.2021                           | (33) Austria                      | (33) United States of America    |
| (33) United States of America        |                                   | (51) F02M 25/00                  |



|                                  |                                     |                                          |
|----------------------------------|-------------------------------------|------------------------------------------|
| F02D 19/06                       | F02M 59/46                          | (33) Australia                           |
| F02D 41/00                       | (11) EP3786442                      | Australia                                |
| F02D 19/10                       | (21) EP19791822.0                   | (51) F03C 1/047                          |
| F02D 41/34                       | (47) 18.12.2024                     | F04B 1/10                                |
| F02B 17/00                       | (87) JP2019004953                   | F04B 1/1071                              |
| F02M 21/02                       | 31.10.2019                          | (11) EP4134542                           |
| (11) EP3936713                   | (22) 13.02.2019                     | (21) EP22186418.4                        |
| (21) EP19918579.4                | (54) FUEL SUPPLY PUMP AND METHOD    | (47) 18.12.2024                          |
| (47) 18.12.2024                  | FOR MANUFACTURING FUEL SUPPLY       | (22) 22.07.2022                          |
| (87) JP2019009315                | PUMP                                | (54) RADIAL PISTON HYDRAULIC MOTOR       |
| 17.09.2020                       | (73) Hitachi Astemo, Ltd.           | COMPRISING HOLLOW ROTATING               |
| (22) 08.03.2019                  | (72) ARITOMI Shunsuke               | SHAFT INSIDE THE MOTOR                   |
| (54) DIESEL ENGINE               | SUGANAMI, Masayuki                  | (73) Black Bruin Oy                      |
| (73) JFE Engineering Corporation | (31) 2018086044                     | (72) Ylä-Mononen, Tero                   |
| (72) SHIMIZU, Akira              | (32) 27.04.2018                     | Albert, Laurent Eugène                   |
| KUWAHARA, Takaaki                | (33) Japan                          | (31) 20215849                            |
| (51) F02M 25/022                 | (51) F02N 11/00                     | (32) 12.08.2021                          |
| F02B 33/22                       | F02N 11/08                          | (33) Finland                             |
| F02B 33/30                       | F02N 15/06                          | (51) F03D 1/06                           |
| F02M 43/00                       | F02D 41/28                          | (11) EP3421783                           |
| F02B 29/04                       | (11) EP3722591                      | (21) EP18180274.5                        |
| F02B 47/02                       | (21) EP20167701.0                   | (47) 18.12.2024                          |
| F02B 47/04                       | (47) 18.12.2024                     | (22) 28.06.2018                          |
| F02M 25/03                       | (22) 02.04.2020                     | (54) AERODYNAMIC STRUCTURE               |
| B01D 29/50                       | (54) PARALLEL STARTING SYSTEM FOR   | (73) Hochschule Rhein-Waal               |
| B01D 29/52                       | STARTING A COMBUSTION ENGINE        | (72) Gebel, Joachim                      |
| B01D 35/12                       | (73) SEG Automotive Germany GmbH    | (31) 102017114414                        |
| B01D 35/18                       | (72) Stöcklein, Henning             | (32) 28.06.2017                          |
| (11) EP3929425                   | Kubelka, Kevin                      | (33) Germany                             |
| (21) EP21190219.2                | (31) 102019109496                   | (51) F03D 7/02                           |
| (47) 18.12.2024                  | (32) 10.04.2019                     | (11) EP4033091                           |
| (22) 13.03.2018                  | (33) Germany                        | (21) EP22151015.9                        |
| (54) FILTER APPARATUS FOR SPLIT  | (51) F03B 13/00                     | (47) 18.12.2024                          |
| CYCLE INTERNAL COMBUSTION        | (11) EP4071346                      | (22) 11.01.2022                          |
| ENGINE                           | (21) EP22166390.9                   | (54) SYSTEM FOR OPERATING A WIND         |
| (73) Dolphin N2 Limited          | (47) 18.12.2024                     | TURBINE USING CUMULATIVE LOAD            |
| (72) ATKINS, Andrew              | (22) 01.04.2022                     | HISTOGRAMS BASED ON ACTUAL               |
| MORGAN, Robert                   | (54) ENERGY TRANSFER SYSTEM AND     | OPERATION THEREOF                        |
| (31) 201705046                   | INSTALLATION WITH SUCH AN           | (73) General Electric Renovables España, |
| (32) 29.03.2017                  | ENERGY TRANSFER SYSTEM              | S.L.                                     |
| (33) United Kingdom              | (73) Viega Technology GmbH & Co. KG | (72) Wheeler, Frederick Wilson           |
| (51) F02M 26/34                  | (72) KNUPFER, Thomas                | Deshpande, Ameet Shridhar                |
| F02M 26/07                       | OBRIST, Roland                      | Dalakos, George Theodore                 |
| F02B 37/18                       | TRIET, Philipp                      | Huang, Dayu                              |
| F01N 5/02                        | KNUPFER, Daniel                     | Liu, Su                                  |
| F02B 37/007                      | CATHOMAS, Patric                    | (31) 202117152869                        |
| F02D 29/04                       | (31) 3642021                        | (32) 20.01.2021                          |
| F02G 5/02                        | (32) 09.04.2021                     | (33) United States of America            |
| F02M 21/04                       | (33) Switzerland                    | (51) F03D 7/04                           |
| F24F 1/44                        | (51) F03B 13/14                     | F03D 9/00                                |
| F25B 30/00                       | F03B 13/24                          | F03D 9/11                                |
| F02D 41/00                       | F03B 13/26                          | H02J 3/32                                |
| F02D 41/14                       | F03D 9/00                           | H02J 3/38                                |
| F02B 33/40                       | E02B 9/08                           | (11) EP3821127                           |
| F25B 27/00                       | (11) EP3526467                      | (21) EP19734688.5                        |
| (11) EP3957848                   | (21) EP17861855.9                   | (47) 18.12.2024                          |
| (21) EP21192071.5                | (47) 18.12.2024                     | (87) DK2019050202                        |
| (47) 18.12.2024                  | (87) AU2017051122                   | 16.01.2020                               |
| (22) 19.08.2021                  | 26.04.2018                          | (22) 24.06.2019                          |
| (54) GAS ENGINE HEAT PUMP        | (22) 17.10.2017                     | (54) A HYBRID POWER PLANT AND A          |
| (73) LG Electronics Inc.         | (54) APPARATUS AND METHOD FOR       | METHOD FOR CONTROLLING A                 |
| (72) JEONG, Hojong               | EXTRACTING ENERGY FROM A FLUID      | HYBRID POWER PLANT                       |
| JANG, Heejoong                   | (73) Wave Swell Energy Limited      | (73) VESTAS WIND SYSTEMS A/S             |
| (31) 20200104638                 | (72) DENNISS, Thomas                | (72) VALCAN, Dumitru-Mihai               |
| (32) 20.08.2020                  | (31) 2017903451                     | (31) PA201870476                         |
| (33) Korea (Republic)            | 2016904200                          | (32) 09.07.2018                          |
| (51) F02M 63/00                  | (32) 26.08.2017                     | (33) Denmark                             |
| F02M 63/02                       | 17.10.2016                          |                                          |

|                                                                                                                                                         |                                                                 |                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------|
| (51) F03D 13/10<br>B66C 23/18<br>F03D 80/80<br>B66C 1/10<br>B66C 23/20<br>F03D 80/50                                                                    | (73) Siemens Gamesa Renewable Energy A/<br>S                    | (54) REFRIGERANT COMPRESSOR<br>ASSEMBLY                      |
| (11) EP3765737                                                                                                                                          | (72) MOESKJAER, Martin                                          | (73) BITZER Kühlmaschinenbau GmbH                            |
| (21) EP19800561.3                                                                                                                                       | (31) 102017102135                                               | (72) Mannewitz, Jens                                         |
| (47) 18.12.2024                                                                                                                                         | (32) 03.02.2017                                                 | Javerschek, Oliver                                           |
| (87) CA2019050568                                                                                                                                       | (33) Germany                                                    | Fuhrer, Tobias                                               |
| 14.11.2019                                                                                                                                              | (51) F03D 80/70                                                 | (31) 102021117724                                            |
| (22) 01.05.2019                                                                                                                                         | F16H 57/021                                                     | (32) 08.07.2021                                              |
| (54) NACELLE MOUNTABLE LIFT SYSTEM<br>FOR A WIND TURBINE                                                                                                | F16H 57/031                                                     | (33) Germany                                                 |
| (73) LiftWerx Solutions Inc.                                                                                                                            | F16H 57/023                                                     | (51) F04C 2/10                                               |
| (72) AITKEN, Glen D.                                                                                                                                    | F16H 57/038                                                     | F04C 14/00                                                   |
| BAKKER, Ruud                                                                                                                                            | F16C 19/38                                                      | (11) EP4187094                                               |
| (31) 201862775687 P                                                                                                                                     | F16H 57/022                                                     | (21) EP22203056.1                                            |
| 201862667458 P                                                                                                                                          | F16C 35/063                                                     | (47) 18.12.2024                                              |
| (32) 05.12.2018                                                                                                                                         | F16C 35/067                                                     | (22) 21.10.2022                                              |
| 05.05.2018                                                                                                                                              | (11) EP4232711                                                  | (54) FLUID DEVICE                                            |
| (33) United States of America                                                                                                                           | (21) EP21787403.1                                               | (73) Nabtesco Corporation                                    |
| United States of America                                                                                                                                | (47) 18.12.2024                                                 | (72) Komori, Etsuro                                          |
| (51) F03D 13/10                                                                                                                                         | (87) EP2021077462                                               | Sato, Masataka                                               |
| F03D 80/50                                                                                                                                              | 28.04.2022                                                      | (31) 2021193133                                              |
| (11) EP3574211                                                                                                                                          | (22) 05.10.2021                                                 | (32) 29.11.2021                                              |
| (21) EP17787323.9                                                                                                                                       | (54) GEARING HAVING A HOUSING AND A<br>SHAFT UNIT               | (33) Japan                                                   |
| (47) 18.12.2024                                                                                                                                         | (73) Sew-Eurodrive GmbH & Co. KG                                | (51) F04C 18/02                                              |
| (87) DK2017050301                                                                                                                                       | (72) RUPPNER, Christoph                                         | F04C 27/00                                                   |
| 29.03.2018                                                                                                                                              | STRAUSS, Dietmar                                                | F04C 29/00                                                   |
| (22) 20.09.2017                                                                                                                                         | SAAR, Steffen                                                   | (11) EP4240974                                               |
| (54) ROTOR BLADE REPLACEMENT<br>SYSTEM                                                                                                                  | (31) 102020006453                                               | (21) EP21807224.7                                            |
| (73) Liftra IP ApS                                                                                                                                      | (32) 20.10.2020                                                 | (47) 18.12.2024                                              |
| (72) FENGER, Per Eske                                                                                                                                   | (33) Germany                                                    | (87) GB2021052799                                            |
| (51) F03D 13/20                                                                                                                                         | (51) F03G 7/06                                                  | 12.05.2022                                                   |
| F03D 13/40                                                                                                                                              | H01J 7/18                                                       | (22) 28.10.2021                                              |
| (11) EP3710694                                                                                                                                          | (11) EP4269788                                                  | (54) SCROLL PUMP                                             |
| (21) EP18799518.8                                                                                                                                       | (21) EP23168121.4                                               | (73) Edwards Limited                                         |
| (47) 18.12.2024                                                                                                                                         | (47) 18.12.2024                                                 | (72) BEDWELL, David                                          |
| (87) EP2018080268                                                                                                                                       | (22) 14.04.2023                                                 | SCHOFIELD, Nigel Paul                                        |
| 23.05.2019                                                                                                                                              | (54) SHAPE MEMORY ALLOY ENCLOSURE<br>FOR NON-EVAPORABLE GETTERS | HOLBROOK, Alan Ernest Kinnaird                               |
| (22) 06.11.2018                                                                                                                                         | (73) Honeywell International Inc.                               | (31) 202017511                                               |
| (54) FLANGE FRAME AND ASSEMBLY<br>SET FOR PRE-ASSEMBLING AND/<br>OR TRANSPORTING AND/OR<br>ASSEMBLING A TOWER SEGMENT<br>FOR A WIND TURBINE, AND METHOD | (72) DOWNS, John                                                | (32) 05.11.2020                                              |
| (73) Wobben Properties GmbH                                                                                                                             | JADIDIAN, Bahram                                                | (33) United Kingdom                                          |
| (72) MEYER, Wolfgang                                                                                                                                    | MOHAJERI, Mahdi                                                 | (51) F04C 18/16                                              |
| BEECKMANN, Sascha                                                                                                                                       | (31) 202217732295                                               | F04C 28/12                                                   |
| SACHS, Julia                                                                                                                                            | (32) 28.04.2022                                                 | (11) EP4088032                                               |
| KÜPKER, Stephan                                                                                                                                         | (33) United States of America                                   | (21) EP21703099.8                                            |
| FLESSNER, Günter                                                                                                                                        | (51) F04B 35/04                                                 | (47) 18.12.2024                                              |
| (31) 102017127035                                                                                                                                       | F04B 39/00                                                      | (87) US2021012451                                            |
| (32) 16.11.2017                                                                                                                                         | F04B 39/12                                                      | 15.07.2021                                                   |
| (33) Germany                                                                                                                                            | (11) EP4198308                                                  | (22) 07.01.2021                                              |
| (51) F03D 80/70                                                                                                                                         | (21) EP22190940.1                                               | (54) VOLUME RATIO CONTROL SYSTEM<br>FOR A COMPRESSOR         |
| (11) EP3559460                                                                                                                                          | (47) 18.12.2024                                                 | (73) Johnson Controls Tyco IP Holdings LLP                   |
| (21) EP18708046.0                                                                                                                                       | (22) 18.08.2022                                                 | (72) COMSTOCK, Angela, Marie                                 |
| (47) 18.12.2024                                                                                                                                         | (54) LINEAR COMPRESSOR                                          | CAMPBELL, Colin                                              |
| (87) EP2018050631                                                                                                                                       | (73) LG Electronics Inc.                                        | NEMIT, JR., Paul                                             |
| 09.08.2018                                                                                                                                              | (72) NOH, Kiwon                                                 | MONTEJO, Franklin, Aaron                                     |
| (22) 11.01.2018                                                                                                                                         | (31) 20210183053                                                | (31) 202062958204 P                                          |
| (54) WIND TURBINE WITH A TUBULAR<br>SUPPORT STRUCTURE AND A<br>BEARING ASSEMBLY                                                                         | (32) 20.12.2021                                                 | (32) 07.01.2020                                              |
|                                                                                                                                                         | (33) Korea (Republic)                                           | (33) United States of America                                |
|                                                                                                                                                         | (51) F04B 41/06                                                 | (51) F04D 13/06                                              |
|                                                                                                                                                         | F04B 49/03                                                      | F04D 15/00                                                   |
|                                                                                                                                                         | F04B 49/06                                                      | (11) EP4019776                                               |
|                                                                                                                                                         | F04B 49/20                                                      | (21) EP20020651.4                                            |
|                                                                                                                                                         | F25B 31/02                                                      | (47) 18.12.2024                                              |
|                                                                                                                                                         | F25B 49/02                                                      | (22) 23.12.2020                                              |
|                                                                                                                                                         | (11) EP4116586                                                  | (54) MOUNTING MECHANISM FOR AN<br>EXTENSION MODULE OF A PUMP |
|                                                                                                                                                         | (21) EP22182862.7                                               | (73) WILO SE                                                 |
|                                                                                                                                                         | (47) 18.12.2024                                                 | (72) Terrien, Franck                                         |
|                                                                                                                                                         | (22) 04.07.2022                                                 |                                                              |

|                                  |                                   |                                    |
|----------------------------------|-----------------------------------|------------------------------------|
| Bouilly, Hervé                   | (33) Germany                      | (47) 18.12.2024                    |
| (51) F04D 17/02                  | (51) F04D 25/06                   | (87) US2016042046                  |
| F04D 29/42                       | F04D 29/62                        | 02.03.2017                         |
| F04D 29/58                       | (11) EP4074979                    | (22) 13.07.2016                    |
| F28D 1/02                        | (21) EP21169027.6                 | (54) CENTRIFUGAL PUMP WITH         |
| F24T 10/30                       | (47) 18.12.2024                   | SERRATED IMPELLER                  |
| F24F 1/0022                      | (22) 16.04.2021                   | (73) Woodward, Inc.                |
| F24F 12/00                       | (54) SEALING ASSEMBLY FOR A SHAFT | (72) BARYSHNIKOV, Dmitriy          |
| F24V 50/00                       | PASSAGE OPENING FOR A FAN         | (31) 201514833936                  |
| (11) EP4127481                   | (73) Pittway Sarl                 | (32) 24.08.2015                    |
| (21) EP21716107.4                | (72) KOELKER, Martin              | (33) United States of America      |
| (47) 18.12.2024                  | WASCHER, Gerrit                   | (51) F15B 13/04                    |
| (87) EP2021057787                | PETERSMANN, Martin                | F15B 13/043                        |
| 30.09.2021                       | JARYSEK, Kay                      | F15B 13/00                         |
| (22) 25.03.2021                  | (51) F04D 27/02                   | F16K 11/07                         |
| (54) HEAT EXCHANGER ARRANGEMENT  | F25B 1/053                        | E02F 9/22                          |
| (73) Envola GmbH                 | (11) EP3757397                    | (11) EP4001669                     |
| (72) IHLE, Gerhard               | (21) EP20182442.2                 | (21) EP21199724.2                  |
| SCHECHNER, Alexander             | (47) 18.12.2024                   | (47) 18.12.2024                    |
| (31) 102020125030                | (22) 26.06.2020                   | (22) 29.09.2021                    |
| 102020108377                     | (54) SYSTEM AND METHOD FOR        | (54) PROPORTIONAL VALVE SPOOL WITH |
| (32) 25.09.2020                  | UNLOADING A MULTI-STAGE           | LINEAR FLOW GAIN                   |
| 26.03.2020                       | COMPRESSOR                        | (73) Parker-Hannifin Corporation   |
| (33) Germany                     | (73) Trane International Inc.     | (72) BROECKMANN, Michael           |
| Germany                          | (72) SIBIK, Lee L                 | KASHID, Bipin G                    |
| (51) F04D 19/04                  | (31) 201916454317                 | EICHLER, Mitchell P                |
| F16C 32/04                       | (32) 27.06.2019                   | (31) 202163134219 P                |
| H01F 7/06                        | (33) United States of America     | 202063114032 P                     |
| F04D 29/058                      | (51) F04D 29/051                  | (32) 06.01.2021                    |
| (11) EP3626970                   | F16B 21/18                        | 16.11.2020                         |
| (21) EP18802404.6                | F16C 32/04                        | (33) United States of America      |
| (47) 18.12.2024                  | F16C 35/063                       | United States of America           |
| (87) JP2018016366                | F16C 35/073                       | (51) F15B 15/14                    |
| 22.11.2018                       | F16D 1/076                        | (11) EP3947982                     |
| (22) 20.04.2018                  | F16D 1/08                         | (21) EP20720357.1                  |
| (54) VACUUM PUMP WITH MAGNETIC   | (11) EP4168682                    | (47) 18.12.2024                    |
| BEARING DEVICE COMPRISING        | (21) EP21737817.3                 | (87) EP2020059134                  |
| ANNULARLY-ARRANGED               | (47) 18.12.2024                   | 08.10.2020                         |
| ELECTROMAGNETS                   | (87) JP2021023214                 | (22) 31.03.2020                    |
| (73) Edwards Japan Limited       | 23.12.2021                        | (54) PISTON ROD UNIT, HYDRAULIC    |
| (72) MIWATA, Tooru               | (22) 18.06.2021                   | CYLINDER AND ARTICULATED MAST      |
| SHI, Yongwei                     | (54) SYSTEM AND METHOD FOR        | (73) Schwing GmbH                  |
| SAKAGUCHI, Yoshiyuki             | MAGNETIC BEARINGS                 | (72) OLEKSYUK, Mykola              |
| (31) 2017099451                  | (73) Daikin Industries, Ltd.      | WILLING, Dirk                      |
| (32) 19.05.2017                  | (72) MORGAN, Jeff A.              | (31) 102019108451                  |
| (33) Japan                       | (31) 202016906797                 | (32) 01.04.2019                    |
| (51) F04D 23/00                  | (32) 19.06.2020                   | (33) Germany                       |
| F04D 25/04                       | (33) United States of America     | (51) F15B 21/00                    |
| F04D 25/06                       | (51) F04D 29/22                   | F15B 15/18                         |
| H01M 8/04082                     | (11) EP4034771                    | F15B 15/20                         |
| H01M 8/04089                     | (21) EP20776091.9                 | F15B 13/00                         |
| F04D 29/58                       | (47) 18.12.2024                   | (11) EP3990790                     |
| (11) EP4348056                   | (87) EP2020075808                 | (21) EP20734677.6                  |
| (21) EP22726059.3                | 01.04.2021                        | (47) 18.12.2024                    |
| (47) 18.12.2024                  | (22) 16.09.2020                   | (87) EP2020067071                  |
| (87) EP2022061235                | (54) SINGLE-VANE IMPELLER         | 30.12.2020                         |
| 08.12.2022                       | (73) KSB SE & Co. KGaA            | (22) 19.06.2020                    |
| (22) 27.04.2022                  | (72) CHRIST, Alexander            | (54) CONSTRUCTION KIT WITH         |
| (54) CONVEYING DEVICE FOR A FUEL | WITZEL, Rolf                      | HYDRAULIC CONTROL BLOCK AND        |
| CELL SYSTEM FOR CONVEYING AND/   | JÄGER, Christoph                  | HYDRAULIC AXLE                     |
| OR RECIRCULATING A GASEOUS       | (31) 102019006665                 | (73) Robert Bosch GmbH             |
| MEDIUM, IN PARTICULAR HYDROGEN   | (32) 23.09.2019                   | (72) JUNKER, Markus                |
| (73) Robert Bosch GmbH           | (33) Germany                      | RUMPEL, Manuel                     |
| (72) WESSNER, Jochen             | (51) F04D 29/22                   | (31) 102019210622                  |
| KATZ, Martin                     | F04D 1/06                         | 102019209328                       |
| LEIBSSLE, Benedikt               | (11) EP3341613                    | (32) 18.07.2019                    |
| (31) 102021205685                | (21) EP16744618.6                 | 27.06.2019                         |
| (32) 04.06.2021                  |                                   | (33) Germany                       |

|                                  |                                      |                                       |
|----------------------------------|--------------------------------------|---------------------------------------|
| Germany                          | HIRSCHLE, Tobias                     | 24.08.2017                            |
| (51) F16B 2/12                   | HACKER, Oliver                       | (22) 06.02.2017                       |
| F16B 5/06                        | WÄLDER, Jonas                        | (54) CYLINDER ASSEMBLY OF AN ORC      |
| F16B 5/12                        | BOHNET, Hartmut                      | ENGINE                                |
| (11) EP4295056                   | GANTKE, Reinhard                     | (73) DeVeTec GmbH                     |
| (21) EP22705801.3                | KIRN, Regina                         | (72) SCHNUR, Rainer                   |
| (47) 18.12.2024                  | (31) 102021121605                    | HORBACH, Joscha                       |
| (87) EP2022053683                | 102020131152                         | (31) 102016102649                     |
| 25.08.2022                       | (32) 20.08.2021                      | (32) 16.02.2016                       |
| (22) 15.02.2022                  | 25.11.2020                           | (33) Germany                          |
| (54) A CLAMP UNIT FOR SECURING   | (33) Germany                         | (51) F16C 19/26                       |
| TOGETHER UNIVERSAL BEAMS AND     | Germany                              | F16C 33/58                            |
| A BEAMS ASSEMBLY OF UNIVERSAL    | (51) F16B 33/00                      | F16C 33/62                            |
| BEAMS                            | F16B 37/04                           | F16C 33/64                            |
| (73) TMR Lock ApS                | (11) EP3951191                       | (11) EP4043745                        |
| (72) MEISLER, Tim                | (21) EP21189124.7                    | (21) EP21156521.3                     |
| VESTERGAARD, Jørn Eiler          | (47) 18.12.2024                      | (47) 18.12.2024                       |
| PEDERSEN, Verner                 | (22) 02.08.2021                      | (22) 11.02.2021                       |
| (31) PA202170075                 | (54) FITTING PART                    | (54) COMPONENT FOR PROVIDING A        |
| (32) 18.02.2021                  | (73) SACS Aerospace GmbH             | ROLLER BEARING AND METHOD OF          |
| (33) Denmark                     | (72) Blank, Eugen                    | MANUFACTURING THE SAME                |
| (51) F16B 5/02                   | Rapp, Andreas                        | (73) RHEIN-RUHR Beschichtungs-Service |
| F16B 37/00                       | Moser, Roland                        | GmbH                                  |
| (11) EP3827175                   | (31) 102021205352                    | (72) Pischek, Tim                     |
| (21) EP19749607.8                | 102020209729                         | Paul, Stephen                         |
| (47) 18.12.2024                  | (32) 26.05.2021                      | (51) F16C 33/10                       |
| (87) EP2019069727                | 03.08.2020                           | F16J 15/34                            |
| 30.01.2020                       | (33) Germany                         | F16C 17/02                            |
| (22) 23.07.2019                  | Germany                              | F16C 17/04                            |
| (54) COMPONENT                   | (51) F16C 3/02                       | F16C 17/10                            |
| (73) AUDI AG                     | (11) EP4273412                       | F16C 33/04                            |
| (72) SZABÓ, Bence                | (21) EP23171667.1                    | (11) EP4253779                        |
| SZÉKELY, Béla                    | (47) 18.12.2024                      | (21) EP23191029.0                     |
| BOLDT, Arne                      | (22) 04.05.2023                      | (47) 18.12.2024                       |
| (31) 102018212363                | (54) CENTRIFUGAL FORCE ACTUATED      | (22) 31.01.2020                       |
| (32) 25.07.2018                  | DAMPER                               | (54) SLIDING COMPONENT AND METHOD     |
| (33) Germany                     | (73) Hamilton Sundstrand Corporation | FOR MANUFACTURING SLIDING             |
| (51) F16B 13/06                  | (72) BEHLING, David S.               | COMPONENT                             |
| (11) EP4244490                   | LEMMERS, Jr., Glenn C.               | (73) Eagle Industry Co., Ltd.         |
| (21) EP21805457.5                | COOLING, Aaron                       | (72) TAKIGAHIRA, Yoshiaki             |
| (47) 18.12.2024                  | (31) 202217736151                    | HASHIMOTO, Hiroyuki                   |
| (87) EP2021080294                | (32) 04.05.2022                      | (31) 2019018307                       |
| 19.05.2022                       | (33) United States of America        | (32) 04.02.2019                       |
| (22) 02.11.2021                  | (51) F16C 7/06                       | (33) Japan                            |
| (54) EXPANSION ANCHOR AND METHOD | (11) EP4242479                       | (51) F16C 33/36                       |
| FOR ANCHORING SAME               | (21) EP23159850.9                    | F16C 33/58                            |
| (73) fischerwerke GmbH & Co. KG  | (47) 18.12.2024                      | (11) EP4151873                        |
| (72) HACKER, Oliver              | (22) 03.03.2023                      | (21) EP22175637.2                     |
| SEEGER, Wolfgang                 | (54) LONGITUDINALLY ADJUSTABLE       | (47) 18.12.2024                       |
| LINKA, Martin                    | CONNECTING ROD COMPRISING            | (22) 20.04.2018                       |
| ECHLE, Benjamin                  | AN ANTI-ROTATION SYSTEM              | (54) NON-ELLIPTICAL CONTACT PROFILE   |
| WÄLDER, Jonas                    | COOPERATING WITH A SYSTEM FOR        | FOR CYLINDRICAL ROLLER BEARING        |
| (31) 102020129959                | CONNECTING THE CONNECTING            | (73) The Timken Company               |
| (32) 13.11.2020                  | ROD, AIRCRAFT COMPRISING AT          | (72) Rhodes, Jerry                    |
| (33) Germany                     | LEAST ONE SUCH CONNECTING ROD        | Ai, Xiaolan                           |
| (51) F16B 13/06                  | (73) AIRBUS OPERATIONS (S.A.S.)      | (31) 201762519464 P                   |
| F16B 13/08                       | (72) BERGERET, Christian             | 201762490392 P                        |
| (11) EP4251891                   | (31) 2202049                         | (32) 14.06.2017                       |
| (21) EP21805463.3                | (32) 09.03.2022                      | 26.04.2017                            |
| (47) 18.12.2024                  | (33) France                          | (33) United States of America         |
| (87) EP2021080319                | (51) F16C 9/04                       | United States of America              |
| 02.06.2022                       | F16C 11/04                           | (51) F16C 33/36                       |
| (22) 02.11.2021                  | F01B 9/02                            | F16C 33/58                            |
| (54) EXPANSION ANCHOR AND METHOD | F16C 5/00                            | F16C 33/64                            |
| FOR EXPANDING THE EXPANSION      | (11) EP3417151                       | (11) EP4151872                        |
| ANCHOR                           | (21) EP17710113.6                    | (21) EP22175634.9                     |
| (73) fischerwerke GmbH & Co. KG  | (47) 18.12.2024                      | (47) 18.12.2024                       |
| (72) HORNBERGER, Marco           | (87) DE2017100085                    | (22) 20.04.2018                       |

|                                                                               |                                                                            |                                                                               |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| (54) NON-ELLIPTICAL CONTACT PROFILE FOR CYLINDRICAL ROLLER BEARING            | (51) F16D 63/00                                                            | (31) 201900018479                                                             |
| (73) The Timken Company                                                       | (11) EP3850993                                                             | (32) 10.10.2019                                                               |
| (72) Ai, Xiaolan                                                              | (21) EP20217173.2                                                          | (33) Italy                                                                    |
| (72) Rhodes, Jerry                                                            | (47) 18.12.2024                                                            |                                                                               |
| (31) 201762519464 P                                                           | (22) 23.12.2020                                                            | (51) F16G 5/20                                                                |
| 201762490392 P                                                                | (54) LOCKING MECHANISM FOR A PRODUCT-DISPENSING DEVICE                     | C08K 3/22                                                                     |
| (32) 14.06.2017                                                               | (73) Fasteners for Retail, Inc.                                            | C08K 5/098                                                                    |
| 26.04.2017                                                                    | (72) LIEDTKE, Michael Eric                                                 | C08L 23/16                                                                    |
| (33) United States of America                                                 | HUA, Yun                                                                   | (11) EP3587859                                                                |
| United States of America                                                      | (31) 202016743687                                                          | (21) EP18758077.4                                                             |
| (51) F16D 3/10                                                                | (32) 15.01.2020                                                            | (47) 18.12.2024                                                               |
| F16D 35/00                                                                    | (33) United States of America                                              | (87) JP2018007368                                                             |
| F16D 47/02                                                                    | (51) F16D 65/847                                                           | 30.08.2018                                                                    |
| F16D 47/06                                                                    | F16D 55/36                                                                 | (22) 27.02.2018                                                               |
| F16D 33/00                                                                    | (11) EP3954922                                                             | (54) TRANSMISSION BELT                                                        |
| (11) EP4206484                                                                | (21) EP21190553.4                                                          | (73) Mitsubishi Belting Ltd.                                                  |
| (21) EP22000267.9                                                             | (47) 18.12.2024                                                            | (72) HINENO, Yorifumi                                                         |
| (47) 18.12.2024                                                               | (22) 10.08.2021                                                            | KAGEYAMA, Mikio                                                               |
| (22) 23.12.2022                                                               | (54) SYSTEM AND METHOD FOR REDUCING TEMPERATURE OF A BRAKING ASSEMBLY      | OZAKI, Toshiaki                                                               |
| (54) A MULTI-STAGE FLEXIBLE BALL COUPLING, PARTICULARLY FOR REVERSIBLE DRIVES | (73) Goodrich Corporation                                                  | (31) 2018012694                                                               |
| (73) Politechnika Slaska                                                      | (72) JAIN, Bhuwan                                                          | 2017035198                                                                    |
| (72) Kuczaj, Mariusz                                                          | BODKI, Basavaraj                                                           | (32) 29.01.2018                                                               |
| Filipowicz, Krzysztof                                                         | NAGARAJA, Hemanth                                                          | 27.02.2017                                                                    |
| Mikula, Stanislaw                                                             | (31) 202041034291                                                          | (33) Japan                                                                    |
| Mikula, Jaroslaw                                                              | 202017123971                                                               | Japan                                                                         |
| (31) 44002521                                                                 | (32) 10.08.2020                                                            |                                                                               |
| (32) 28.12.2021                                                               | 16.12.2020                                                                 | (51) F16H 1/36                                                                |
| (33) Poland                                                                   | (33) India                                                                 | F16H 57/04                                                                    |
| (51) F16D 13/64                                                               | United States of America                                                   | F16H 57/08                                                                    |
| F16D 13/60                                                                    | (51) F16F 7/10                                                             | (11) EP4242489                                                                |
| F16D 13/68                                                                    | G10K 9/13                                                                  | (21) EP23159300.5                                                             |
| F16D 43/12                                                                    | G10K 9/20                                                                  | (47) 18.12.2024                                                               |
| F16D 43/18                                                                    | H04R 1/28                                                                  | (22) 01.03.2023                                                               |
| (11) EP3740691                                                                | B60R 11/02                                                                 | (54) MECHANICAL REDUCTION GEAR FOR AN AIRCRAFT TURBINE ENGINE                 |
| (21) EP19741314.9                                                             | (11) EP3610478                                                             | (73) Safran Transmission Systems                                              |
| (47) 18.12.2024                                                               | (21) EP18716949.5                                                          | (72) JARROUX, Clément                                                         |
| (87) US2019014634                                                             | (47) 18.12.2024                                                            | MEDECIN, Pierre Gilbert Claude                                                |
| 25.07.2019                                                                    | (87) EP2018058084                                                          | PAP, Bálint                                                                   |
| (22) 22.01.2019                                                               | 18.10.2018                                                                 | MOULY, Guillaume Pierre                                                       |
| (54) IMPROVED CLUTCH HUB ASSEMBLY                                             | (22) 29.03.2018                                                            | (31) 2202118                                                                  |
| (73) Rekluse Racing, LLC                                                      | (54) STRUCTURE-BORNE SOUND ACTUATOR FOR A MOTOR VEHICLE, AND MOTOR VEHICLE | (32) 10.03.2022                                                               |
| (72) BROWN, Calvin                                                            | (73) Continental Automotive Technologies GmbH                              | (33) France                                                                   |
| YOUNGWERTH, Albert, James                                                     | (72) GALLNER, Thomas                                                       | (51) F16H 3/093                                                               |
| JENSEN, Karl E.                                                               | KERKMANN, Johannes                                                         | F16H 3/095                                                                    |
| BROWN, Sean                                                                   | BOCK, Roland                                                               | F16H 3/097                                                                    |
| SOUTHERLAND, Gabriel                                                          | PATSOURAS, Dimitrios                                                       | B60K 1/00                                                                     |
| HAIGHT, Sarah                                                                 | JOEST, Robert                                                              | B60B 35/12                                                                    |
| KONRAD, Dayne                                                                 | FRIEDRICH, Jens                                                            | B60B 35/14                                                                    |
| KRUEGER, Logan, P.                                                            | (31) 102017206079                                                          | F16H 57/02                                                                    |
| (31) 201862619114 P                                                           | (32) 10.04.2017                                                            | F16H 57/037                                                                   |
| (32) 19.01.2018                                                               | (33) Germany                                                               | (11) EP4047241                                                                |
| (33) United States of America                                                 | (51) F16F 15/30                                                            | (21) EP22156376.0                                                             |
| (51) F16D 55/40                                                               | A01F 15/08                                                                 | (47) 18.12.2024                                                               |
| F16D 65/12                                                                    | (11) EP3805600                                                             | (22) 11.02.2022                                                               |
| (11) EP4283153                                                                | (21) EP20200706.8                                                          | (54) AXLE ASSEMBLY HAVING A GEAR REDUCTION MODULE WITH COUNTERSHAFT GEAR SETS |
| (21) EP23174950.8                                                             | (47) 18.12.2024                                                            | (73) ArvinMeritor Technology, LLC                                             |
| (22) 23.05.2023                                                               | (22) 08.10.2020                                                            | (72) Martin, Robert                                                           |
| (54) REDUCED DRAG STATOR CLIP                                                 | (54) AUTOMATIC STARTING FLYWHEEL                                           | Hayes, Brian                                                                  |
| (73) Goodrich Corporation                                                     | (73) Lusetti, Lea                                                          | Bofferding, Nick                                                              |
| (72) O'NEIL, Matthew R.                                                       | Bondioli, Carlo                                                            | LaMothe, Eric                                                                 |
| BONIFAS, Alan M.                                                              | Bondioli, Claudio                                                          | Zueski, David                                                                 |
| (31) 202217752686                                                             | (72) BONDIOLI, Edi                                                         | Keeney, Christopher                                                           |
| (32) 24.05.2022                                                               |                                                                            | Cradit, Jeremy                                                                |
| (33) United States of America                                                 |                                                                            | (31) 202117178508                                                             |
|                                                                               |                                                                            | (32) 18.02.2021                                                               |
|                                                                               |                                                                            | (33) United States of America                                                 |
|                                                                               |                                                                            | (51) F16H 3/093                                                               |

|                                   |                                  |                                      |
|-----------------------------------|----------------------------------|--------------------------------------|
| F16H 3/097                        | (22) 08.03.2023                  | (33) European Patent Office (EPO)    |
| B60K 17/28                        | (54) LUBRICATING OIL DEFLECTOR,  | (51) F16J 15/08                      |
| (11) EP4098908                    | SPEED REDUCER COMPRISING         | F16J 15/48                           |
| (21) EP22172213.5                 | SUCH A DEFLECTOR AND             | (11) EP3492783                       |
| (47) 18.12.2024                   | TURBOMACHINE COMPRISING SUCH     | (21) EP17833123.7                    |
| (22) 09.05.2022                   | A SPEED REDUCER                  | (47) 18.12.2024                      |
| (54) PTO SHAFT TRANSMISSION AND   | (73) Safran Transmission Systems | (87) BR2017050197                    |
| AGRICULTURAL VEHICLE              | (72) MARCOS IZQUIERDO, Juan-Luis | 01.02.2018                           |
| (73) Deere & Company              | (31) 2202313                     | (22) 19.07.2017                      |
| (72) Buhrke, Frank                | (32) 16.03.2022                  | (54) SYSTEM COMPRISING BI-           |
| (31) 102021113560                 | (33) France                      | DIRECTIONAL FACE METAL SEALING       |
| (32) 26.05.2021                   | (51) F16H 61/02                  | SEAL THAT CAN BE SELF-POWERED        |
| (33) Germany                      | B60W 30/14                       | BY PRESSURE                          |
| (51) F16H 3/12                    | B60W 10/06                       | (73) FMC Technologies Do Brasil LTDA |
| B60K 1/02                         | B60W 10/11                       | (72) ANDUEZA, Alejandro              |
| F16H 48/24                        | B60W 10/18                       | (31) 132017014851                    |
| F16H 61/04                        | (11) EP3108157                   | 102016017296                         |
| (11) EP4155578                    | (21) EP15706742.2                | (32) 10.07.2017                      |
| (21) EP22197522.0                 | (47) 18.12.2024                  | 26.07.2016                           |
| (47) 18.12.2024                   | (87) EP2015053367                | (33) Brazil                          |
| (22) 23.09.2022                   | 27.08.2015                       | Brazil                               |
| (54) DRIVE DEVICE FOR A MOTOR     | (22) 18.02.2015                  | (51) F16J 15/10                      |
| VEHICLE DRIVE TRAIN OF AN         | (54) CONTROL SYSTEM AND METHOD   | F16L 17/067                          |
| ELECTRIC VEHICLE                  | (73) Jaguar Land Rover Limited   | F16L 23/22                           |
| (73) ZF Friedrichshafen AG        | (72) WOODLEY, Jonathan           | (11) EP4121670                       |
| (72) Pfeffer, Andreas             | JERGER, Rob                      | (21) EP21718344.1                    |
| Mühlbauer, Alexander              | (31) 201402937                   | (47) 18.12.2024                      |
| Brilka, Tobias                    | (32) 19.02.2014                  | (87) US2021023044                    |
| Reitinger, Franz                  | (33) United Kingdom              | 23.09.2021                           |
| (31) 102021210727                 | (51) F16H 63/38                  | (22) 18.03.2021                      |
| (32) 27.09.2021                   | F16H 63/06                       | (54) A GASKET                        |
| (33) Germany                      | F16H 61/04                       | (73) Flexitallic Investments, Inc.   |
| (51) F16H 9/18                    | (11) EP4098911                   | (72) LI, Yi                          |
| F16H 55/56                        | (21) EP21177748.7                | BOND, Stephen Peter                  |
| F16H 61/662                       | (47) 18.12.2024                  | (31) 202003996                       |
| (11) EP3994375                    | (22) 04.06.2021                  | (32) 19.03.2020                      |
| (21) EP20743516.5                 | (54) A TRANSMISSION OF A VEHICLE | (33) United Kingdom                  |
| (47) 18.12.2024                   | (73) VOLVO TRUCK CORPORATION     | (51) F16J 15/16                      |
| (87) US2020040442                 | (72) PERSSON, Marcus             | F16J 15/3248                         |
| 07.01.2021                        | (51) F16H 63/50                  | F16J 15/328                          |
| (22) 01.07.2020                   | F16H 61/20                       | F16J 15/3284                         |
| (54) UNIFORM CLAMP ACTUATED SHIFT | F16H 59/36                       | F16J 15/3224                         |
| INFINITELY VARIABLE TRANSMISSION  | F16H 59/44                       | F16J 15/3268                         |
| SYSTEM                            | F16H 59/48                       | F16J 15/00                           |
| (73) TEAM Industries, Inc.        | F16H 59/70                       | F16J 15/3272                         |
| (72) OKESON, Shane Clair          | (11) EP4242496                   | (11) EP4242497                       |
| BONHAM, Brandon R.                | (21) EP23156654.8                | (21) EP23158091.1                    |
| (31) 201962869181 P               | (47) 18.12.2024                  | (47) 18.12.2024                      |
| (32) 01.07.2019                   | (22) 14.02.2023                  | (22) 23.02.2023                      |
| (33) United States of America     | (54) CONTROL DEVICE OF VEHICLE   | (54) SEAL AND METHOD FOR THE         |
| (51) F16H 57/028                  | (73) Suzuki Motor Corporation    | PRODUCTION THEREOF                   |
| B60K 17/28                        | (72) SUZUKI, Kosuke              | (73) Carl Freudenberg KG             |
| B60K 25/06                        | (31) 2022035072                  | (72) Ilinseer, Albert                |
| (11) EP3916268                    | (32) 08.03.2022                  | Fink, Andrej                         |
| (21) EP21166493.3                 | (33) Japan                       | Kuhnert, Jens                        |
| (47) 18.12.2024                   | (51) F16J 9/14                   | Barillas, Gonzalo                    |
| (22) 01.04.2021                   | F16J 9/20                        | Strübing, Frank                      |
| (54) LOW NOISE POWER TAKE-OFF     | (11) EP3775630                   | Fietz, Roland                        |
| TRANSMISSION                      | (21) EP19712588.3                | (31) 102022105295                    |
| (73) Emitech Holding B.V.         | (47) 18.12.2024                  | (32) 07.03.2022                      |
| (72) HOLTSLAG, Martijn            | (87) EP2019057436                | (33) Germany                         |
| (31) 2025694                      | 03.10.2019                       | (51) F16J 15/18                      |
| (32) 28.05.2020                   | (22) 25.03.2019                  | (11) EP3526496                       |
| (33) Netherlands                  | (54) A PISTON RING               | (21) EP17790920.7                    |
| (51) F16H 57/04                   | (73) Federal-Mogul Göteborg AB   | (47) 18.12.2024                      |
| (11) EP4246018                    | (72) QVIST, Hans, Gunnar         | (87) US2017056162                    |
| (21) EP23160827.4                 | (31) 18164649                    | 19.04.2018                           |
| (47) 18.12.2024                   | (32) 28.03.2018                  | (22) 11.10.2017                      |

|                                                       |                                              |                                                    |
|-------------------------------------------------------|----------------------------------------------|----------------------------------------------------|
| (54) PUMP SHAFT PACKING GLAND AND BUSHING             | F16K 31/06                                   | (22) 12.10.2018                                    |
| (73) Viking Pump, Inc.                                | F01P 7/14                                    | (54) PE-RT PIPES AND PROCESSES FOR MAKING THE SAME |
| (72) CRAWFORD, Robert Michael                         | (11) EP3872377                               | (73) ExxonMobil Chemical Patents Inc.              |
| HALL, John                                            | (21) EP20210850.2                            | (72) WINESETT, Donald A.                           |
| WUNDERLICH, Chad                                      | (47) 18.12.2024                              | DOUFAS, Antonios K.                                |
| IEHL, Victor Christian                                | (22) 01.12.2020                              | PENG, Haiqing                                      |
| (31) 201762474217 P                                   | (54) VALVE FOR A MOTOR VEHICLE               | (31) 201762587531 P                                |
| 201662406472 P                                        | (73) MSG Mechatronic Systems GmbH            | (32) 17.11.2017                                    |
| (32) 21.03.2017                                       | (72) Schöner, Gerhard                        | (33) United States of America                      |
| 11.10.2016                                            | Lampl, Ewald                                 | (51) F16L 17/04                                    |
| (33) United States of America                         | Theußl, Daniel                               | (11) EP4191112                                     |
| United States of America                              | (31) 5003520 U                               | (21) EP23153887.7                                  |
| (51) F16J 15/34                                       | (32) 26.02.2020                              | (47) 18.12.2024                                    |
| (11) EP3748205                                        | (33) Austria                                 | (22) 19.01.2017                                    |
| (21) EP19748058.5                                     | (51) F16K 27/04                              | (54) PIPE ELEMENT HAVING WEDGING GROOVE            |
| (47) 18.12.2024                                       | F16K 31/06                                   | (73) Victaulic Company                             |
| (87) JP2019003381                                     | (11) EP4050246                               | (72) MADARA, Scott, D.                             |
| 08.08.2019                                            | (21) EP22155463.7                            | DOLE, Douglas R.                                   |
| (22) 31.01.2019                                       | (47) 18.12.2024                              | SHAH, Amit R.                                      |
| (54) SLIDING PARTS                                    | (22) 07.02.2022                              | (31) 201662287015 P                                |
| (73) Eagle Industry Co., Ltd.                         | (54) ELECTROHYDRAULIC PRESSURE CONTROL VALVE | (32) 26.01.2016                                    |
| (72) INOUE, Hideyuki                                  | (73) Thomas Magnete GmbH                     | (33) United States of America                      |
| IMURA, Tadatsugu                                      | (72) Buss, Juri                              | (51) F16L 21/03                                    |
| TOKUNAGA, Yuichiro                                    | Dr. Schneider, Jörg                          | F16L 47/10                                         |
| HASHIMOTO, Hiroyuki                                   | Dr. Krallmann, Jens                          | B29C 57/02                                         |
| (31) 2018016629                                       | Zastrau, Thomas                              | (11) EP4320375                                     |
| (32) 01.02.2018                                       | (31) 102021103382                            | (21) EP22714619.8                                  |
| (33) Japan                                            | (32) 12.02.2021                              | (47) 18.12.2024                                    |
| (51) F16J 15/34                                       | (33) Germany                                 | (87) IB2022053196                                  |
| (11) EP3217047                                        | (51) F16L 1/19                               | 13.10.2022                                         |
| (21) EP15857141.4                                     | F16L 1/20                                    | (22) 06.04.2022                                    |
| (47) 18.12.2024                                       | (11) EP4075036                               | (54) PVC-O PIPE                                    |
| (87) JP2015080218                                     | (21) EP22166848.6                            | (73) SICA S.P.A.                                   |
| 12.05.2016                                            | (47) 18.12.2024                              | (72) TABANELLI, Giorgio                            |
| (22) 27.10.2015                                       | (22) 17.08.2017                              | VECCHI, Giovanni                                   |
| (54) MECHANICAL SEAL DEVICE                           | (54) A PIPE-LAYING VESSEL                    | (31) 202100008627                                  |
| (73) EagleBurgmann Japan Co., Ltd.                    | (73) Saipem S.p.A.                           | (32) 07.04.2021                                    |
| Eagle Industry Co., Ltd.                              | (72) MOCERI, Liborio                         | (33) Italy                                         |
| (72) KITO, Masakazu                                   | COPPI, Valerio                               | (51) F16L 33/24                                    |
| TANAKA, Hiroshi                                       | HUOT, Emmanuel                               | F24F 13/02                                         |
| (31) 2014224146                                       | (31) 201614127                               | F16L 19/00                                         |
| (32) 04.11.2014                                       | (32) 18.08.2016                              | F16L 41/08                                         |
| (33) Japan                                            | (33) United Kingdom                          | F16L 25/14                                         |
| (51) F16J 15/34                                       | (51) F16L 5/04                               | F16L 37/098                                        |
| F16J 15/3284                                          | A62C 2/06                                    | F16L 33/02                                         |
| F16J 15/328                                           | A62C 2/14                                    | F16L 33/34                                         |
| C04B 35/565                                           | A62C 2/24                                    | (11) EP4118386                                     |
| C04B 35/52                                            | A62C 35/68                                   | (21) EP21766826.8                                  |
| B28B 3/04                                             | F24F 11/35                                   | (47) 18.12.2024                                    |
| B28B 11/24                                            | F24F 13/14                                   | (87) US2021021885                                  |
| (11) EP4177502                                        | (11) EP3792540                               | 16.09.2021                                         |
| (21) EP21833333.4                                     | (21) EP20158449.7                            | (22) 11.03.2021                                    |
| (47) 18.12.2024                                       | (47) 18.12.2024                              | (54) FITTING ASSEMBLY FOR A FLEXIBLE DUCT          |
| (87) KR2021008256                                     | (22) 20.02.2020                              | (73) Rheia, LLC                                    |
| 06.01.2022                                            | (54) A CEILING UNIT FOR PIPEWORK             | (72) WATTS, Nigel                                  |
| (22) 30.06.2021                                       | (73) Intumescent Systems Limited             | BEACH, Robert                                      |
| (54) SEALING MEMBER AND METHOD FOR MANUFACTURING SAME | (72) Ward, Derek                             | POERSCHKE, Andrew                                  |
| (73) Flowserve KSM Co., Ltd.                          | (31) 201913260                               | (31) 202016817065                                  |
| (72) KIM, Joo Hwan                                    | (32) 13.09.2019                              | (32) 12.03.2020                                    |
| KIM, Yun Ho                                           | (33) United Kingdom                          | (33) United States of America                      |
| (31) 20200081160                                      | (51) F16L 9/12                               | (51) F16L 37/091                                   |
| (32) 01.07.2020                                       | C08L 23/08                                   | (11) EP4102122                                     |
| (33) Korea (Republic)                                 | (11) EP3710734                               | (21) EP22178077.8                                  |
| (51) F16K 11/065                                      | (21) EP18797308.6                            | (47) 18.12.2024                                    |
| F16K 37/00                                            | (47) 18.12.2024                              | (22) 09.06.2022                                    |
| F16K 27/04                                            | (87) US2018055672                            |                                                    |
|                                                       | 23.05.2019                                   |                                                    |

|                                                                        |                                                                     |                                                               |
|------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|
| (54) CONNECTOR AND METHOD FOR CONNECTING PIPES FOR TRANSPORTING FLUIDS | 102019113301                                                        | F21V 27/02                                                    |
| (73) R.P.E. S.r.l.                                                     | (32) 03.04.2020                                                     | (11) EP4177515                                                |
| (72) SILVA, Giovanni                                                   | 20.05.2019                                                          | (21) EP22153069.4                                             |
| (31) 202100015377                                                      | (33) Germany                                                        | (47) 18.12.2024                                               |
| (32) 11.06.2021                                                        | Germany                                                             | (22) 25.01.2022                                               |
| (33) Italy                                                             | (51) F16M 11/24                                                     | (54) LUMINAIRE                                                |
| (51) F16L 55/164                                                       | (11) EP4399431                                                      | (73) Zopoise Technology (Zhuzhou) Co., Ltd.                   |
| (11) EP3953635                                                         | (21) EP22743827.2                                                   | (72) HUANG, Shichang                                          |
| (21) EP20784486.1                                                      | (47) 18.12.2024                                                     | ZHAO, Baohong                                                 |
| (47) 18.12.2024                                                        | (87) EP2022069675                                                   | PI, Bruce                                                     |
| (87) IL2020050321                                                      | 16.03.2023                                                          | (31) 202111316131                                             |
| 08.10.2020                                                             | (22) 13.07.2022                                                     | (32) 08.11.2021                                               |
| (22) 18.03.2020                                                        | (54) BRAKING SYSTEM FOR HOLDING A SCREEN                            | (33) China                                                    |
| (54) SYSTEMS FOR SEALING PIPELINES                                     | (73) Ergonomic Solutions International Limited                      | (51) F21S 8/06                                                |
| (73) Curapipe System Ltd.                                              | (72) KRABBE, Per                                                    | F21S 8/04                                                     |
| (72) GOLIGORSKY, Piter                                                 | (31) PA202170449                                                    | F21V 33/00                                                    |
| PAZ, Peter                                                             | (32) 09.09.2021                                                     | F21V 5/04                                                     |
| HERCKY, David                                                          | (33) Denmark                                                        | F21V 17/10                                                    |
| (31) 201962827870 P                                                    | (51) F17C 13/04                                                     | F21V 21/088                                                   |
| (32) 02.04.2019                                                        | (11) EP3999772                                                      | F21V 21/116                                                   |
| (33) United States of America                                          | (21) EP20736941.4                                                   | A61B 90/30                                                    |
| (51) F16L 55/34                                                        | (47) 18.12.2024                                                     | A61B 90/35                                                    |
| (11) EP4031793                                                         | (87) EP2020067798                                                   | F21W 131/205                                                  |
| (21) EP20767839.2                                                      | 21.01.2021                                                          | F21Y 115/10                                                   |
| (47) 18.12.2024                                                        | (22) 25.06.2020                                                     | F21Y 103/33                                                   |
| (87) EP2020075401                                                      | (54) TANK DEVICE FOR STORING A GASEOUS MEDIUM                       | F21Y 107/70                                                   |
| 25.03.2021                                                             | (73) Robert Bosch GmbH                                              | (11) EP3948064                                                |
| (22) 10.09.2020                                                        | (72) SCHUELKE, Armin                                                | (21) EP20722075.7                                             |
| (54) PIPE EXPLORATION ROBOT COMPRISING A BEARING MODULE                | KNEULE, Friedrich                                                   | (47) 18.12.2024                                               |
| (73) Autonomous Clean Water Appliance (ACWA) Robotics                  | (31) 102019210515                                                   | (87) US2020026271                                             |
| (72) ROSSI, Jean-François                                              | (32) 17.07.2019                                                     | 08.10.2020                                                    |
| (31) 1910179                                                           | (33) Germany                                                        | (22) 01.04.2020                                               |
| (32) 16.09.2019                                                        | (51) F17C 13/08                                                     | (54) LIGHTING ASSEMBLIES FOR MEDICAL DEVICE SUSPENSION SYSTEM |
| (33) France                                                            | B63B 25/16                                                          | (73) American Sterilizer Company                              |
| (51) F16L 59/065                                                       | (11) EP3951244                                                      | (72) MOSS, Bernard John                                       |
| F16L 59/14                                                             | (21) EP19922629.1                                                   | GROSZEK, Joseph James                                         |
| F16L 59/18                                                             | (47) 18.12.2024                                                     | BELLOWS, Lance Clark                                          |
| F17C 6/00                                                              | (87) JP2019015226                                                   | HOLLOPETER, Michael                                           |
| (11) EP3851726                                                         | 08.10.2020                                                          | (31) 201962828090 P                                           |
| (21) EP20305040.6                                                      | (22) 05.04.2019                                                     | (32) 02.04.2019                                               |
| (47) 18.12.2024                                                        | (54) LIQUEFIED GAS STORAGE STRUCTURE AND LIQUEFIED GAS CARRIER SHIP | (33) United States of America                                 |
| (22) 17.01.2020                                                        | (73) KAWASAKI JUKOGYO KABUSHIKI KAISHA                              | (51) F21S 10/04                                               |
| (54) JOHNSTON COUPLING WITH AN ADDITIONAL VACUUM COVER                 | (72) KAWAMOTO, Hideki                                               | (11) EP3901515                                                |
| (73) Nexans                                                            | SAKANO, Yoshinobu                                                   | (21) EP20197004.3                                             |
| (72) FROHNE, Christian                                                 | FUJIMURA, Ryohei                                                    | (47) 18.12.2024                                               |
| SCHULZ, Holger                                                         | TANAKA, Kazuo                                                       | (22) 18.09.2020                                               |
| (51) F16M 11/04                                                        | KOUZAKI, Daisuke                                                    | (54) LIGHTING DEVICE SIMULATING LIGHT EFFECT OF CANDLE FLAME  |
| F16M 11/10                                                             | OKUMURA, Kentaro                                                    | (73) Power Beauty Industrial Co. Ltd.                         |
| F16M 11/20                                                             | MASHIRO, Keisuke                                                    | (72) XU, Yiqun                                                |
| F16M 11/18                                                             | IMAI, Tatsuya                                                       | (31) 202020719159 U                                           |
| (11) EP3973222                                                         | NAKADO, Hiroki                                                      | 202010371218                                                  |
| (21) EP20730983.2                                                      | MURAGISHI, Osamu                                                    | 202020600662 U                                                |
| (47) 18.12.2024                                                        | (51) F21S 8/00                                                      | (32) 30.04.2020                                               |
| (87) EP2020064088                                                      | F21V 29/83                                                          | 30.04.2020                                                    |
| 26.11.2020                                                             | F21V 23/00                                                          | 20.04.2020                                                    |
| (22) 20.05.2020                                                        | F21V 31/00                                                          | (33) China                                                    |
| (54) RETAINING DEVICE FOR A CAMERA                                     | F21Y 107/30                                                         | China                                                         |
| (73) Cinetica GmbH                                                     | F21Y 115/10                                                         | China                                                         |
| (72) RIEPERT, Jan                                                      | F21Y 105/12                                                         | (51) F21S 41/20                                               |
| MÜLLER, Matthias                                                       | F21Y 113/13                                                         | F21S 41/29                                                    |
| LUKAS, Andreas                                                         | F21V 15/015                                                         | F21S 41/47                                                    |
| BIEBER, Tojan                                                          | F21V 17/10                                                          | F21S 41/148                                                   |
| (31) 202020101821 U                                                    |                                                                     | (11) EP4298375                                                |
|                                                                        |                                                                     | (21) EP22700669.9                                             |
|                                                                        |                                                                     | (47) 18.12.2024                                               |



|                                                                                                                                  |                                                                                                             |                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| (87) EP2022051478<br>01.09.2022                                                                                                  | (32) 22.03.2019<br>(33) Japan                                                                               | (54) COLUMNAR WIRE-IN ASSEMBLY FOR<br>EXPLOSION-PROOF LAMP                |
| (22) 24.01.2022                                                                                                                  | (51) F21S 45/60                                                                                             | (73) Eaton Intelligent Power Limited                                      |
| (54) METHOD FOR FIXING A LENS FOR<br>A MOTOR VEHICLE HEADLAMP<br>ON A MOTOR VEHICLE HEADLAMP<br>HOUSING                          | H01R 4/26<br>H01R 12/75<br>H05B 3/84<br>H01R 12/91<br>H01R 13/631<br>H01R 13/11                             | (72) LU, Rudong<br>WANG, Chunhuai<br>LI, Yuru                             |
| (73) ZKW Group GmbH                                                                                                              | (11) EP3789662                                                                                              | (31) 202011041332                                                         |
| (72) ARTNER, Martin                                                                                                              | (21) EP20194032.7                                                                                           | (32) 28.09.2020                                                           |
| HUBER, Markus                                                                                                                    | (47) 18.12.2024                                                                                             | (33) China                                                                |
| BEMMERL, Markus                                                                                                                  | (22) 02.09.2020                                                                                             | (51) F22B 1/00                                                            |
| (31) 21159583                                                                                                                    | (54) VEHICLE LIGHTING ASSEMBLY<br>WITH LENS HEATING DEVICE<br>AND RECEPTACLE CONNECTOR<br>ASSEMBLY FOR SAME | F01K 25/00                                                                |
| (32) 26.02.2021                                                                                                                  | (73) Aptiv Technologies AG                                                                                  | (11) EP4271937                                                            |
| (33) European Patent Office (EPO)                                                                                                | (72) ANTAYA, Stephen C.<br>MERRY, Stefanie<br>SCHERER, Jarod M.<br>FOLGER, Tyler                            | (21) EP22710557.4                                                         |
| (51) F21S 41/265                                                                                                                 | (31) 201916561327                                                                                           | (47) 18.12.2024                                                           |
| F21S 41/32                                                                                                                       | (32) 05.09.2019                                                                                             | (87) EP2022055451                                                         |
| F21S 41/148                                                                                                                      | (33) United States of America                                                                               | 22.09.2022                                                                |
| F21S 41/151                                                                                                                      | (51) F21V 5/04                                                                                              | (22) 03.03.2022                                                           |
| F21S 41/36                                                                                                                       | F21V 7/00                                                                                                   | (54) METHOD FOR GENERATING STEAM<br>WITH DEFINED STEAM PARAMETERS         |
| F21S 41/663                                                                                                                      | F21V 8/00                                                                                                   | (73) Siemens Energy Global GmbH & Co. KG                                  |
| F21W 102/13                                                                                                                      | (11) EP3410006                                                                                              | (72) DÖHRING, Jörg                                                        |
| F21W 102/135                                                                                                                     | (21) EP18175191.8                                                                                           | NICKE, Frank                                                              |
| F21Y 115/10                                                                                                                      | (47) 18.12.2024                                                                                             | BURGARD, Tobias Florian                                                   |
| (11) EP3978799                                                                                                                   | (22) 30.05.2018                                                                                             | LEIDINGER, Bernd                                                          |
| (21) EP20815055.7                                                                                                                | (54) MODULAR LIGHT GUIDE                                                                                    | STEPHAN, Ingo                                                             |
| (47) 18.12.2024                                                                                                                  | (73) Trilux GmbH & Co. KG                                                                                   | CORNAK, Frank                                                             |
| (87) JP2020020003                                                                                                                | (72) Lewers, Christoph                                                                                      | SCHULZE, Andreas                                                          |
| 03.12.2020                                                                                                                       | (31) 102017111912                                                                                           | EPPENDORFER, Jörg                                                         |
| (22) 20.05.2020                                                                                                                  | (32) 31.05.2017                                                                                             | ROLLE, Mario                                                              |
| (54) VEHICLE LIGHT                                                                                                               | (33) Germany                                                                                                | (31) 102021202617                                                         |
| (73) Ichikoh Industries, Ltd.                                                                                                    | (51) F21V 17/02                                                                                             | (32) 18.03.2021                                                           |
| (72) MUTO Takashi                                                                                                                | F21V 17/10                                                                                                  | (33) Germany                                                              |
| SUZUKI Eiji                                                                                                                      | F21V 14/06                                                                                                  | (51) F22B 35/16                                                           |
| IMAMURA Hiroya                                                                                                                   | F21V 17/00                                                                                                  | G01N 25/60                                                                |
| (31) 2019097517                                                                                                                  | F21V 5/00                                                                                                   | (11) EP4215811                                                            |
| (32) 24.05.2019                                                                                                                  | F21V 21/30                                                                                                  | (21) EP23275012.5                                                         |
| (33) Japan                                                                                                                       | F21Y 115/10                                                                                                 | (47) 18.12.2024                                                           |
| (51) F21S 43/15                                                                                                                  | (11) EP3916298                                                                                              | (22) 18.01.2023                                                           |
| F21S 43/241                                                                                                                      | (21) EP20774723.9                                                                                           | (54) APPARATUS FOR AND METHOD OF<br>DETERMINING DRYNESS LEVEL OF<br>STEAM |
| F21S 43/245                                                                                                                      | (47) 18.12.2024                                                                                             | (73) T.J.B. Systems Ltd                                                   |
| F21S 43/249                                                                                                                      | (87) CN2020080055                                                                                           | (72) BOX, Timothy John                                                    |
| B60Q 1/26                                                                                                                        | 24.09.2020                                                                                                  | (31) 202200796                                                            |
| B60Q 1/38                                                                                                                        | (22) 18.03.2020                                                                                             | (32) 21.01.2022                                                           |
| (11) EP3671018                                                                                                                   | (54) LENS, LIGHT SOURCE MODULE, AND<br>LAMP                                                                 | (33) United Kingdom                                                       |
| (21) EP19218153.5                                                                                                                | (73) Oppl Lighting Co., Ltd.<br>Suzhou Oppl Lighting Co., Ltd.                                              | (51) F23G 5/027                                                           |
| (47) 18.12.2024                                                                                                                  | (72) MA, Zicai                                                                                              | F23D 14/62                                                                |
| (22) 19.12.2019                                                                                                                  | YAN, Lei                                                                                                    | F27B 14/14                                                                |
| (54) VEHICLE WINGLET, SEQUENTIAL<br>BLINKER ASSEMBLY AND SYSTEM<br>FOR SEQUENTIALLY ILLUMINATING<br>REGIONS OF A VEHICLE WINGLET | (31) 201920350348 U                                                                                         | F23G 5/44                                                                 |
| (73) Ficos North America Corporation                                                                                             | (32) 19.03.2019                                                                                             | F23G 7/06                                                                 |
| (72) HELLIN NAVARRO, Sergio                                                                                                      | (33) China                                                                                                  | F23D 11/08                                                                |
| (31) 201816225159                                                                                                                | (51) F21V 23/00                                                                                             | F23G 5/20                                                                 |
| (32) 19.12.2018                                                                                                                  | F21V 25/12                                                                                                  | F23G 5/24                                                                 |
| (33) United States of America                                                                                                    | H01R 13/52                                                                                                  | F23H 1/08                                                                 |
| (51) F21S 43/237                                                                                                                 | (11) EP3974717                                                                                              | F23H 9/12                                                                 |
| F21S 43/239                                                                                                                      | (21) EP21199641.8                                                                                           | F23H 17/06                                                                |
| F21S 43/245                                                                                                                      | (47) 18.12.2024                                                                                             | F23G 5/16                                                                 |
| (11) EP3712493                                                                                                                   | (22) 28.09.2021                                                                                             | F23G 5/46                                                                 |
| (21) EP20164675.9                                                                                                                |                                                                                                             | (11) EP3990829                                                            |
| (47) 18.12.2024                                                                                                                  |                                                                                                             | (21) EP20832091.1                                                         |
| (22) 20.03.2020                                                                                                                  |                                                                                                             | (47) 18.12.2024                                                           |
| (54) VEHICULAR LAMP UNIT AND<br>VEHICULAR LAMP                                                                                   |                                                                                                             | (87) AU2020050663                                                         |
| (73) STANLEY ELECTRIC CO., LTD.                                                                                                  |                                                                                                             | 30.12.2020                                                                |
| (72) USHIGUSA, Keita                                                                                                             |                                                                                                             | (22) 26.06.2020                                                           |
| (31) 2019055557                                                                                                                  |                                                                                                             | (54) APPARATUS AND METHOD FOR<br>PYROLYSING AND COMBUSTING A<br>MATERIAL  |

|                                          |                                                 |                                     |
|------------------------------------------|-------------------------------------------------|-------------------------------------|
| (73) Eco-Global Energy Pty Limited       | BECK, Christian                                 | (32) 30.04.2019                     |
| (72) SPIROS, Spiro                       | (31) 20174892                                   | (33) Germany                        |
| (31) 2019902278                          | (32) 15.05.2020                                 | (51) F24D 19/00                     |
| (32) 28.06.2019                          | (33) European Patent Office (EPO)               | A47B 95/00                          |
| (33) Australia                           | (51) F24C 3/12                                  | A47B 96/06                          |
| (51) F23M 20/00                          | (11) EP4036475                                  | A47B 96/14                          |
| (11) EP3760925                           | (21) EP21217748.9                               | F24H 9/02                           |
| (21) EP19183732.7                        | (47) 18.12.2024                                 | (11) EP3757464                      |
| (47) 18.12.2024                          | (22) 24.12.2021                                 | (21) EP20180978.7                   |
| (22) 01.07.2019                          | (54) DOMESTIC APPLIANCE                         | (47) 18.12.2024                     |
| (54) COMBUSTOR ASSEMBLY OF A GAS         | (73) Renta Elektrikli Ev Aletleri Sanayi Ve Dis | (22) 19.06.2020                     |
| TURBINE ASSEMBLY COMPRISING              | Ticaret Limited Sirketi                         | (54) WALL-MOUNTED HOUSING           |
| A DAMPER AND METHOD FOR                  | (72) ANGI, Ertan                                | (73) Viessmann Climate Solutions SE |
| MANUFACTURING                            | YILMAZ, Yasin                                   | (72) Hampel, Lukas                  |
| (73) Ansaldo Energia Switzerland AG      | (31) 202101509                                  | Wolkowski, Frank                    |
| (72) BOUDY, Frédéric                     | (32) 01.02.2021                                 | (31) 102019117042                   |
| BOTHIEN, Mirko Ruben                     | (33) Türkiye                                    | (32) 25.06.2019                     |
| (51) F23R 3/28                           | (51) F24C 7/08                                  | (33) Germany                        |
| F02C 7/264                               | F24C 15/10                                      | (51) F24D 19/10                     |
| F23Q 9/00                                | H05B 6/12                                       | F16K 37/00                          |
| F23R 3/34                                | H05B 6/06                                       | (11) EP3742059                      |
| (11) EP4166848                           | (11) EP4067749                                  | (21) EP19176043.8                   |
| (21) EP22200776.7                        | (21) EP20894261.5                               | (47) 18.12.2024                     |
| (47) 18.12.2024                          | (47) 18.12.2024                                 | (22) 22.05.2019                     |
| (22) 11.10.2022                          | (87) KR2020012218                               | (54) AN ACTUATION ASSEMBLY IN A     |
| (54) FUEL INJECTORS WITH TORCH           | 03.06.2021                                      | THERMOSTATIC RADIATOR VALVE         |
| IGNITORS                                 | (22) 10.09.2020                                 | (73) Pittway Sarl                   |
| (73) Collins Engine Nozzles, Inc.        | (54) ELECTRIC RANGE                             | (72) Hurst, Andrew                  |
| (72) RYON, Jason                         | (73) LG Electronics Inc.                        | Alber, Kurt                         |
| PROCIW, Lev A.                           | (72) SON, Howon                                 | (51) F24F 11/36                     |
| WILLIAMS, Brandon Phillip                | (31) 20190155211                                | F25B 49/02                          |
| (31) 202117499527                        | (32) 28.11.2019                                 | (11) EP4040064                      |
| (32) 12.10.2021                          | (33) Korea (Republic)                           | (21) EP22153871.3                   |
| (33) United States of America            | (51) F24C 15/00                                 | (47) 18.12.2024                     |
| (51) F23R 3/28                           | F24C 15/02                                      | (22) 28.01.2022                     |
| F23R 3/50                                | A47J 37/06                                      | (54) USE FOR IDENTIFYING            |
| F23R 3/60                                | (11) EP4105560                                  | REFRIGERANT LEAKS IN A              |
| F23R 3/00                                | (21) EP22179171.8                               | REFRIGERATION CIRCUIT ARRANGED      |
| (11) EP4136386                           | (47) 18.12.2024                                 | IN A CLOSED CASING                  |
| (21) EP21726439.9                        | (22) 15.06.2022                                 | (73) Vaillant GmbH                  |
| (47) 18.12.2024                          | (54) COOKING APPLIANCE                          | (72) Former, Pascal                 |
| (87) FR2021050646                        | (73) LG Electronics Inc.                        | (31) 102021102722                   |
| 21.10.2021                               | (72) KANG, Daeyong                              | (32) 05.02.2021                     |
| (22) 13.04.2021                          | LEE, Wontaek                                    | (33) Germany                        |
| (54) GAS TURBINE PART FOR AIRCRAFT       | (31) 20210077691                                | (51) F24F 11/46                     |
| (73) SAFRAN AIRCRAFT ENGINES             | (32) 15.06.2021                                 | F24F 11/87                          |
| (72) DOUSSE, William, Louis, Rodolphe    | (33) Korea (Republic)                           | F25B 1/00                           |
| BUNEL, Jacques, Marcel, Arthur           | (51) F24C 15/20                                 | F24F 140/00                         |
| VILLENAVE, Benjamin, Frantz, Karl        | (11) EP3963266                                  | F24F 140/12                         |
| JOORY, Dan-Ranjiv                        | (21) EP20707638.1                               | F24F 140/20                         |
| (31) 2003878                             | (47) 18.12.2024                                 | (11) EP4242545                      |
| (32) 17.04.2020                          | (87) EP2020055315                               | (21) EP23184375.6                   |
| (33) France                              | 05.11.2020                                      | (47) 18.12.2024                     |
| (51) F23R 3/34                           | (22) 28.02.2020                                 | (22) 03.06.2020                     |
| F23R 3/28                                | (54) STEAM EXTRACTOR DEVICE,                    | (54) MANAGEMENT APPARATUS AND       |
| (11) EP4121696                           | KITCHEN APPLIANCE HAVING A HOB                  | HEAT SOURCE SYSTEM                  |
| (21) EP21711744.9                        | SECTION AND A STEAM EXTRACTOR                   | (73) Daikin Industries, Ltd.        |
| (47) 18.12.2024                          | DEVICE, AND METHOD FOR                          | (72) NAKAHARA, Takayuki             |
| (87) EP2021054508                        | OPERATING A STEAM EXTRACTOR                     | MANABE, Tomoki                      |
| 18.11.2021                               | DEVICE                                          | (31) 2019226702                     |
| (22) 24.02.2021                          | (73) BSH Hausgeräte GmbH                        | 2019103862                          |
| (54) PILOT CONE COOLING                  | (72) NEUMANN, Ulmar                             | 2019103863                          |
| (73) Siemens Energy Global GmbH & Co. KG | MAURER, Eugen                                   | (32) 16.12.2019                     |
| (72) REICH, Stefan                       | WOLTERS, Michael                                | 03.06.2019                          |
| MEISL, Jürgen                            | SCHWEINEBART, Carsten                           | 03.06.2019                          |
| WITZEL, Benjamin                         | SCHABINGER, Stefan                              | (33) Japan                          |
| SIEBELIST, Sabrina Isolde                | FIEGER, Daniel                                  | Japan                               |
| GRANDT, Christopher                      | (31) 102019206240                               |                                     |

|                                      |                                         |                                      |
|--------------------------------------|-----------------------------------------|--------------------------------------|
| Japan                                | (51) F24S 10/50                         | F25B 1/10                            |
| (51) F24F 11/62                      | F24S 20/60                              | F25B 1/02                            |
| F24F 11/63                           | F24S 20/69                              | F25B 31/00                           |
| F24F 11/80                           | F24S 70/16                              | F04B 25/00                           |
| F24F 11/30                           | F24S 80/30                              | F04B 27/053                          |
| F24F 11/89                           | (11) EP4242549                          | F04B 35/01                           |
| G05B 19/048                          | (21) EP21888728.9                       | F04B 35/04                           |
| (11) EP3190348                       | (47) 18.12.2024                         | F04B 39/06                           |
| (21) EP14901086.0                    | (87) ES2021070701                       | (11) EP3775716                       |
| (47) 18.12.2024                      | 12.05.2022                              | (21) EP18716155.9                    |
| (87) JP2014072919                    | (22) 28.09.2021                         | (47) 18.12.2024                      |
| 10.03.2016                           | (54) CLADDING PANEL THAT COLLECTS       | (87) EP2018057773                    |
| (22) 01.09.2014                      | AND/OR EMITS THERMAL ENERGY             | 03.10.2019                           |
| (54) AIR CONDITIONING SYSTEM         | (73) Neolith Distribution, SL           | (22) 27.03.2018                      |
| CONTROL DEVICE AND AIR               | Universitat Internacional De Catalunya, | (54) REFRIGERATION SYSTEM            |
| CONDITIONING SYSTEM CONTROL          | Fundació Privada                        | (73) BITZER Kühlmaschinenbau GmbH    |
| METHOD                               | (72) SARRABLO MORENO, Vicente           | (72) FRIEDRICH, Axel                 |
| (73) Mitsubishi Electric Corporation | ROVIRAS MIÑANA, Jordi                   | BECKER, Andreas                      |
| (72) UNO, Yoshitaka                  | (31) 202031114                          | (51) F25B 21/02                      |
| MAEKAWA, Kiyoshi                     | (32) 05.11.2020                         | F25D 23/02                           |
| NAKAI, Takahiro                      | (33) Spain                              | (11) EP4206560                       |
| YAMAMOTO, Takaya                     | (51) F24S 25/30                         | (21) EP21868418.1                    |
| (51) F24F 11/86                      | F24S 25/636                             | (47) 18.12.2024                      |
| F24F 11/64                           | F24S 25/70                              | (87) CN2021114766                    |
| (11) EP3748250                       | (11) EP4286766                          | 24.03.2022                           |
| (21) EP19916538.2                    | (21) EP22176988.8                       | (22) 26.08.2021                      |
| (47) 18.12.2024                      | (47) 18.12.2024                         | (54) REFRIGERATOR                    |
| (87) CN2019100152                    | (22) 02.06.2022                         | (73) Haier Smart Home Co., Ltd.      |
| 17.09.2020                           | (54) CLAMP FOR MODULES                  | Qingdao Haier Refrigerator Co., Ltd. |
| (22) 12.08.2019                      | (73) B & K Solare Zukunft GmbH          | CHONGQING HAIER REFRIGERATION        |
| (54) CONTROL METHOD FOR AIR          | (72) BEHNKE, Patrick                    | ELECTRIC APPLIANCE CO., LTD.         |
| CONDITIONER                          | KISIEL, Martin                          | (72) Ji, Lisheng                     |
| (73) Haier Smart Home Co., Ltd.      | (51) F24S 25/613                        | LV, Peng                             |
| Qingdao Haier Air-Conditioning       | F24S 25/70                              | CUI, Zhanpeng                        |
| Electronic Co., Ltd                  | H02S 20/23                              | LI, Jiaming                          |
| (72) ZHANG, Ruigang                  | (11) EP4075077                          | (31) 202010970307                    |
| WANG, Jun                            | (21) EP22165050.0                       | (32) 15.09.2020                      |
| CHENG, Shaojiang                     | (47) 18.12.2024                         | (33) China                           |
| SHI, Bin                             | (22) 29.03.2022                         | (51) F25B 30/02                      |
| LI, Xiuge                            | (54) SOLAR MODULE MOUNTING SYSTEM       | F25B 1/00                            |
| ZHUO, Baitian                        | (73) Renusol Europe GmbH                | F25B 31/00                           |
| (31) 201910181740                    | (72) Rossbach, Nils                     | F25B 39/04                           |
| (32) 11.03.2019                      | (31) 102021109552                       | F28D 7/02                            |
| (33) China                           | (32) 15.04.2021                         | (11) EP3760948                       |
| (51) F24H 1/18                       | (33) Germany                            | (21) EP18908186.2                    |
| A61M 16/16                           | (51) F24T 10/20                         | (47) 18.12.2024                      |
| A61M 16/00                           | F24T 50/00                              | (87) JP2018007312                    |
| F24H 1/00                            | (11) EP4320394                          | 06.09.2019                           |
| F24H 9/20                            | (21) EP22715695.7                       | (22) 27.02.2018                      |
| H05B 1/02                            | (47) 18.12.2024                         | (54) HEAT PUMP APPARATUS             |
| H05B 3/68                            | (87) IB2022000131                       | (73) Mitsubishi Electric Corporation |
| G05D 22/02                           | 13.10.2022                              | (72) YAMAUCHI, Toshiya               |
| (11) EP3980697                       | (22) 11.03.2022                         | TONEGAWA, Toru                       |
| (21) EP19931775.1                    | (54) GEOTHERMAL PLANT FOR               | (51) F25B 31/02                      |
| (47) 18.12.2024                      | EXTRACTING ENERGY FROM A                | F25B 40/00                           |
| (87) CN2019090386                    | GEOTHERMAL RESERVOIR LOCATED            | D06F 58/20                           |
| 10.12.2020                           | BELOW THE OCEAN BOTTOM                  | F25B 1/02                            |
| (22) 06.06.2019                      | (73) CGG Services SAS                   | F04C 18/00                           |
| (54) AN IMPROVED HEATER PLATE        | (72) DRUMM, Elisha                      | F25B 31/00                           |
| (73) Vincent Medical (Dong Guan)     | HARDMAN, Jonathon                       | (11) EP4086538                       |
| Technology Co., Ltd                  | BOLTON, Rebecca                         | (21) EP22168854.2                    |
| Vincent Medical (Dong Guan)          | CROSSLEY, Robert                        | (47) 18.12.2024                      |
| Manufacturing Co., Ltd.              | WILLIAMS, Mark                          | (22) 19.04.2022                      |
| (72) YU, Haibin                      | NASSIR, Mohammad                        | (54) COMPRESSOR MODULE HAVING        |
| ZHAO, Jun                            | (31) 202163171169 P                     | MEANS FOR COOLING AND                |
| HU, Zhenxiang                        | (32) 06.04.2021                         | HOUSEHOLD APPLIANCE INCLUDING        |
| XU, Jiebing                          | (33) United States of America           | SUCH                                 |
| LEI, Yu                              | (51) F25B 9/00                          | (73) BSH Hausgeräte GmbH             |

|                                                |                                    |                                     |
|------------------------------------------------|------------------------------------|-------------------------------------|
| (72) Ruiz Bermejo, Jose Antonio                | (47) 18.12.2024                    | (72) Nilsson, Rickard               |
| (31) 21382397                                  | (87) US2019031968                  | (31) 102018111346                   |
| (32) 03.05.2021                                | 26.12.2019                         | 102018108231                        |
| (33) European Patent Office (EPO)              | (22) 13.05.2019                    | 102018103318                        |
| (51) F25B 39/02                                | (54) REFRIGERATED CONTAINER        | 102017113873                        |
| H01M 10/6556                                   | PROVIDED WITH VENTILATION          | (32) 12.05.2018                     |
| F28F 9/02                                      | SYSTEM                             | 06.04.2018                          |
| (11) EP3705814                                 | (73) Carrier Corporation           | 14.02.2018                          |
| (21) EP18872916.4                              | (72) HANDLEY, Kurt                 | 22.06.2017                          |
| (47) 18.12.2024                                | SCARCELLA, Jason D.                | (33) Germany                        |
| (87) CN2018112516                              | (31) 201862687960 P                | Germany                             |
| 09.05.2019                                     | (32) 21.06.2018                    | Germany                             |
| (22) 30.10.2018                                | (33) United States of America      | Germany                             |
| (54) HEAT EXCHANGE ASSEMBLY,                   | (51) F25D 11/00                    | (51) F25D 23/06                     |
| BATTERY ASSEMBLY AND BATTERY                   | F25D 29/00                         | F25D 13/06                          |
| HEAT EXCHANGE SYSTEM                           | F25D 23/00                         | F25D 27/00                          |
| (73) Zhejiang Sanhua Intelligent Controls Co., | (11) EP4151931                     | (11) EP3728969                      |
| Ltd.                                           | (21) EP21832001.8                  | (21) EP17935617.5                   |
| (72) ZHANG, Rongrong                           | (47) 18.12.2024                    | (47) 18.12.2024                     |
| ZHU, Zhenshan                                  | (87) JP2021023942                  | (87) US2017067025                   |
| (31) 201711042882                              | 06.01.2022                         | 27.06.2019                          |
| 201711041264                                   | (22) 24.06.2021                    | (22) 18.12.2017                     |
| 201711032644                                   | (54) AIR COMPOSITION ADJUSTMENT    | (54) REFRIGERATOR WITH A WALL PANEL |
| (32) 30.10.2017                                | DEVICE, REFRIGERATION              | (73) Whirlpool Corporation          |
| 30.10.2017                                     | APPARATUS FOR TRANSPORTATION,      | (72) CHOW, Daniel                   |
| 30.10.2017                                     | AND TRANSPORT CONTAINER            | SCHULZ, Mark W.                     |
| (33) China                                     | (73) Daikin Industries, Ltd.       | CLEMENTS, Daniel V.                 |
| China                                          | (72) IKEMIYA, Makoto               | BURKE, Julia B.                     |
| China                                          | (31) 2020111977                    | GOESLING, Rebecca M.                |
| (51) F25B 39/04                                | (32) 29.06.2020                    | (51) F25D 23/06                     |
| F25D 23/00                                     | (33) Japan                         | F25D 25/02                          |
| F28F 9/18                                      | (51) F25D 11/02                    | (11) EP3978847                      |
| F28D 1/02                                      | F25D 17/06                         | (21) EP21193687.7                   |
| F28D 1/047                                     | F25C 5/20                          | (47) 18.12.2024                     |
| F28D 1/053                                     | F25D 21/08                         | (22) 30.08.2021                     |
| F28F 9/02                                      | F25D 23/00                         | (54) HANGING DEVICE FOR A FOOD      |
| F28D 21/00                                     | (11) EP3708932                     | STORAGE CONTAINER                   |
| (11) EP3929504                                 | (21) EP19889619.3                  | (73) BSH Hausgeräte GmbH            |
| (21) EP21175214.2                              | (47) 18.12.2024                    | (72) Briem, Robert                  |
| (47) 18.12.2024                                | (87) CN2019072061                  | Deissler, Stefan                    |
| (22) 21.05.2021                                | 04.06.2020                         | Staud, Ralph                        |
| (54) REFRIGERATOR                              | (22) 17.01.2019                    | Reitwiessner, Marco                 |
| (73) LG Electronics Inc.                       | (54) REFRIGERATOR                  | Tischer, Thomas                     |
| (72) YOO, Jeongwon                             | (73) Hefei Hualing Co., Ltd.       | (31) 102020211570                   |
| (31) 20200078304                               | Hefei Midea Refrigerator Co., Ltd. | (32) 15.09.2020                     |
| (32) 26.06.2020                                | Midea Group Co., Ltd.              | (33) Germany                        |
| (33) Korea (Republic)                          | (72) LU, Fei                       | (51) F25D 27/00                     |
| (51) F25B 47/02                                | SI, Zengqiang                      | (11) EP4242566                      |
| F25B 1/00                                      | LI, Yu                             | (21) EP23168163.6                   |
| F25B 13/00                                     | ZHENG, Xuezai                      | (47) 18.12.2024                     |
| F25B 45/00                                     | LIU, Dongxian                      | (22) 13.07.2018                     |
| (11) EP3343133                                 | WEI, Deming                        | (54) REFRIGERATOR                   |
| (21) EP15902897.6                              | JIA, Ying                          | (73) LG Electronics Inc.            |
| (47) 18.12.2024                                | (31) 201811436035                  | (72) CHOI, Changbong                |
| (87) JP2015074365                              | (32) 28.11.2018                    | JUNG, Hyesun                        |
| 09.03.2017                                     | (33) China                         | (31) 20170089518                    |
| (22) 28.08.2015                                | (51) F25D 17/00                    | (32) 14.07.2017                     |
| (54) REFRIGERATION CYCLE DEVICE                | F25D 17/06                         | (33) Korea (Republic)               |
| (73) Mitsubishi Electric Corporation           | A47F 3/04                          | (51) F25D 29/00                     |
| (72) ITO, Masahiro                             | (11) EP3642544                     | G06Q 30/0645                        |
| ITO, Takuya                                    | (21) EP18737798.1                  | G06Q 20/14                          |
| ISHIDA, Kazuyuki                               | (47) 18.12.2024                    | G06Q 20/30                          |
| OKOSHI, Yasushi                                | (87) DE2018100575                  | G06Q 20/38                          |
| TANAKA, Kosuke                                 | 27.12.2018                         | (11) EP4036504                      |
| (51) F25D 11/00                                | (22) 20.06.2018                    | (21) EP22154821.7                   |
| B60P 3/20                                      | (54) COLD ROOM FOR THE             | (47) 18.12.2024                     |
| (11) EP3811008                                 | PRESENTATION OF CHILLED GOODS      | (22) 02.02.2022                     |
| (21) EP19726288.4                              | (73) Nilsson, Rickard              |                                     |

|                                                                                                                                                                                                                  |                                                                                                                                                                                     |                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) REFRIGERATION APPLIANCE FOR USE UNDER AN APPLIANCE LEASING AGREEMENT AND SYSTEM FOR MANAGING LEASED REFRIGERATION APPLIANCES                                                                                | AGOU, Shouta<br>MATSUMOTO, Yoshiyuki<br>INOUE, Satoshi<br>YOSHIOKA, Shun                                                                                                            | (51) F41A 23/24<br>F41A 27/18<br>F41A 27/30<br>(11) EP3926288<br>(21) EP21178000.2<br>(47) 18.12.2024<br>(22) 07.06.2021                                                        |
| (73) True Manufacturing Company, Inc.                                                                                                                                                                            | (31) 2018007622<br>(32) 19.01.2018<br>(33) Japan                                                                                                                                    | (54) TURRET SYSTEM WITH A WEAPON SYSTEM                                                                                                                                         |
| (31) 202163144781 P<br>(32) 02.02.2021<br>(33) United States of America                                                                                                                                          | (51) F28F 3/04<br>(11) EP4293308<br>(21) EP22461573.2<br>(47) 18.12.2024<br>(22) 14.06.2022                                                                                         | (73) Rheinmetall Waffe Munition GmbH<br>(72) SCHWIEGER, Florian<br>(31) 102020115723<br>(32) 15.06.2020<br>(33) Germany                                                         |
| (51) F28D 1/03<br>(11) EP4036507<br>(21) EP21203587.7<br>(47) 18.12.2024<br>(22) 20.10.2021                                                                                                                      | (54) HEAT EXCHANGER CORE LAYER<br>(73) Hamilton Sundstrand Corporation<br>(72) KA U A, Przemysław<br>SIUDZI SKI, Hubert<br>MECZKOWSKI, Tomasz                                       | (51) F41A 33/00<br>F42B 5/155<br>(11) EP4063781<br>(21) EP22161755.8<br>(47) 18.12.2024<br>(22) 14.03.2022                                                                      |
| (54) PLATE-FIN HEAT EXCHANGER AND REFRIGERATION SYSTEM USING SAME                                                                                                                                                | (51) F28F 3/04<br>F24F 7/08<br>F28D 9/00                                                                                                                                            | (54) REPRODUCTION OF A EJECTABLE BODY                                                                                                                                           |
| (73) Panasonic Intellectual Property Management Co., Ltd.                                                                                                                                                        | (11) EP4202344<br>(21) EP20950327.5<br>(47) 18.12.2024<br>(87) JP2020031579<br>24.02.2022<br>(22) 21.08.2020                                                                        | (73) KNDS Deutschland GmbH & Co. KG<br>(72) Fröhlich, Stefan<br>Bayer, Michael<br>Büsemaker, Philipp<br>Gundlach, Marco<br>(31) 102021107186<br>(32) 23.03.2021<br>(33) Germany |
| (72) HASEGAWA, Hiroshi<br>OKUMURA, Takuya<br>NAGOSHI, Kenji<br>(31) 2021014067<br>(32) 01.02.2021<br>(33) Japan                                                                                                  | (54) HEAT EXCHANGE ELEMENT AND HEAT EXCHANGE VENTILATION DEVICE                                                                                                                     | (51) F41F 3/055<br>F42B 15/04<br>F41F 3/07<br>F42B 15/20<br>(11) EP4343266<br>(21) EP23198467.5<br>(47) 18.12.2024<br>(22) 20.09.2023                                           |
| (51) F28D 7/00<br>F28F 9/02<br>(11) EP3842723<br>(21) EP19461620.7<br>(47) 18.12.2024<br>(22) 23.12.2019                                                                                                         | (73) MITSUBISHI ELECTRIC CORPORATION<br>(72) SOTOKAWA, Hajime<br>TSUBOUCHI, Tsuyoshi<br>HAZUMI, Kimikazu<br>WATANABE, Tomoya<br>OKAWA, Shunsaburo                                   | (54) COIL UNIT FOR A GUIDED MISSILE<br>(73) Diehl Defence GmbH & Co. KG<br>(72) Trapp, Sascha<br>Bohacek, Radomir<br>(31) 102022003485<br>(32) 21.09.2022<br>(33) Germany       |
| (54) TWO-STAGE FRACTAL HEAT EXCHANGER                                                                                                                                                                            | (51) F41A 17/56<br>F41A 7/06<br>(11) EP3916339<br>(21) EP19861265.7<br>(47) 18.12.2024<br>(87) ES2019070774<br>30.07.2020<br>(22) 12.11.2019                                        | (51) F41H 5/08<br>F41H 5/04<br>F41H 5/013<br>(11) EP3587992<br>(21) EP19182679.1<br>(47) 18.12.2024<br>(22) 26.06.2019                                                          |
| (73) Hamilton Sundstrand Corporation<br>(72) Horoszczak, Adam<br>Sawicki, Piotr                                                                                                                                  | (54) DEVICE AND METHOD FOR SECURING A GUN<br>(73) Rade Tecnologías, S. L.<br>(72) LORENTE ALGORA, Diego<br>PUÉRTOLAS SANZ, David<br>DELGADO ACARRETA, Raúl<br>ATRIÁN BLASCO, Javier | (54) SHIELD SYSTEM<br>(73) Tyr Tactical, LLC<br>(72) BECK, Jason<br>(31) 201816018052<br>(32) 26.06.2018<br>(33) United States of America                                       |
| (51) F28D 9/00<br>(11) EP4300025<br>(21) EP23020316.8<br>(47) 18.12.2024<br>(22) 29.06.2023                                                                                                                      | (31) 19382041<br>(32) 21.01.2019<br>(33) European Patent Office (EPO)                                                                                                               | (51) G01B 11/06<br>(11) EP3786574<br>(21) EP19193596.4<br>(47) 18.12.2024<br>(22) 26.08.2019                                                                                    |
| (54) PLATE HEAT EXCHANGER AND METHOD                                                                                                                                                                             | (51) F41A 23/20<br>F41H 13/00<br>(11) EP4372306<br>(21) EP23208298.2<br>(47) 18.12.2024<br>(22) 07.11.2023                                                                          | (54) SENSOR DEVICE<br>(73) Sturm Maschinen- & Anlagenbau GmbH<br>(72) ULLRICH, Wolfgang<br>(51) G01B 11/06                                                                      |
| (73) Linde GmbH<br>(72) Lehmacher, Axel<br>Wanke, Rudolf<br>Turcey, Cecile<br>(31) 22020309<br>(32) 30.06.2022<br>(33) European Patent Office (EPO)                                                              | (54) HPEM PROTECTED VEHICLE WITH HIDDEN ANTENNA<br>(73) Diehl Defence GmbH & Co. KG<br>(72) Schoos, Stefan<br>(31) 102022004232<br>(32) 16.11.2022<br>(33) Germany                  |                                                                                                                                                                                 |
| (51) F28F 1/12<br>F25B 39/02<br>F25B 39/04<br>F28D 1/04<br>F28D 1/047<br>F28F 9/02<br>F28D 1/053<br>(11) EP3742081<br>(21) EP18901332.9<br>(47) 18.12.2024<br>(87) JP2018047572<br>25.07.2019<br>(22) 25.12.2018 |                                                                                                                                                                                     |                                                                                                                                                                                 |
| (54) HEAT EXCHANGER AND AIR CONDITIONING DEVICE                                                                                                                                                                  |                                                                                                                                                                                     |                                                                                                                                                                                 |
| (73) DAIKIN INDUSTRIES, LTD.<br>(72) HIROKAWA, Tomoki                                                                                                                                                            |                                                                                                                                                                                     |                                                                                                                                                                                 |

|                                                                                                          |                                                                                                           |                                                                                                          |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| C03B 9/40                                                                                                | 16.02.2022                                                                                                | (33) Japan                                                                                               |
| G01B 21/08                                                                                               | (33) Japan                                                                                                | (51) G01C 21/34                                                                                          |
| G01N 25/72                                                                                               | Japan                                                                                                     | H04W 4/44                                                                                                |
| (11) EP4244575                                                                                           | (51) G01C 15/00                                                                                           | G08G 1/00                                                                                                |
| (21) EP21806425.1                                                                                        | G01S 19/42                                                                                                | (11) EP4016000                                                                                           |
| (47) 18.12.2024                                                                                          | (11) EP3228985                                                                                            | (21) EP20880732.1                                                                                        |
| (87) NL2021050696                                                                                        | (21) EP16202709.8                                                                                         | (47) 18.12.2024                                                                                          |
| 19.05.2022                                                                                               | (47) 18.12.2024                                                                                           | (87) CN2020123493                                                                                        |
| (22) 11.11.2021                                                                                          | (22) 05.05.2014                                                                                           | 06.05.2021                                                                                               |
| (54) METHOD FOR INSPECTING HOLLOW GLASS PRODUCTS OF GLASS PRODUCT MATERIAL                               | (54) SURVEYING SYSTEM                                                                                     | (22) 26.10.2020                                                                                          |
| (73) Centrum Voor Technische Informatica B.V.                                                            | (73) Hexagon Technology Center GmbH                                                                       | (54) ELECTRONIC DEVICE, WIRELESS COMMUNICATION METHOD AND COMPUTER-READABLE STORAGE MEDIUM               |
| (72) DALSTRA, Joop                                                                                       | (72) SIERCKS, Knut                                                                                        | (73) Sony Group Corporation                                                                              |
| (31) 2026864                                                                                             | PARYS, Roman                                                                                              | (72) LU, Rui                                                                                             |
| (32) 11.11.2020                                                                                          | METZLER, Bernhard                                                                                         | SUN, Chen                                                                                                |
| (33) Netherlands                                                                                         | VELIZHEV, Alexander                                                                                       | CUI, Tao                                                                                                 |
|                                                                                                          | SCHEJA, Jochen                                                                                            | LIU, Yi                                                                                                  |
|                                                                                                          | VAN DER ZWAN, Elmar Vincent                                                                               | (31) 201911059871                                                                                        |
|                                                                                                          | FIDLER, Thomas                                                                                            | (32) 01.11.2019                                                                                          |
| (51) G01C 5/06                                                                                           | (51) G01C 19/72                                                                                           | (33) China                                                                                               |
| G01C 21/32                                                                                               | (11) EP4296616                                                                                            | (51) G01C 21/36                                                                                          |
| G01C 21/00                                                                                               | (21) EP23166231.3                                                                                         | (11) EP3673240                                                                                           |
| G01C 21/20                                                                                               | (47) 18.12.2024                                                                                           | (21) EP18786169.5                                                                                        |
| (11) EP3803270                                                                                           | (22) 31.03.2023                                                                                           | (47) 18.12.2024                                                                                          |
| (21) EP18729066.3                                                                                        | (54) MODULATION METHODS AND SYSTEMS FOR NON-RECIPROCAL KERR REDUCTION IN RESONATOR FIBER OPTIC GYROSCOPES | (87) US2018052642                                                                                        |
| (47) 18.12.2024                                                                                          | (73) Honeywell International Inc.                                                                         | 04.04.2019                                                                                               |
| (87) EP2018063936                                                                                        | (72) SANDERS, Glen A.                                                                                     | (22) 25.09.2018                                                                                          |
| 05.12.2019                                                                                               | WU, Jianfeng                                                                                              | (54) SPATIAL AUDIO NAVIGATION                                                                            |
| (22) 28.05.2018                                                                                          | (31) 202217846914                                                                                         | (73) Apple Inc.                                                                                          |
| (54) MULTILEVEL ALTITUDE MAPS                                                                            | (32) 22.06.2022                                                                                           | (72) SOMMER, Bruno M.                                                                                    |
| (73) HERE Global B.V.                                                                                    | (33) United States of America                                                                             | ANGERMANN, Frank                                                                                         |
| (72) WIROLA, Lauri Aarne Johannes NURMINEN, Henri Jaakko Julius IVANOV, Pavel                            | (51) G01C 21/00                                                                                           | PINTO, Stephen E.                                                                                        |
|                                                                                                          | G01C 21/32                                                                                                | JONSSON, Lilli Ing-Marie                                                                                 |
| (51) G01C 9/28                                                                                           | (11) EP3671126                                                                                            | NAIR, Rahul                                                                                              |
| (11) EP3748288                                                                                           | (21) EP19218164.2                                                                                         | BAR-ZEEV, Avi                                                                                            |
| (21) EP20181637.8                                                                                        | (47) 18.12.2024                                                                                           | (31) 201762564197 P                                                                                      |
| (47) 18.12.2024                                                                                          | (22) 19.12.2019                                                                                           | (32) 27.09.2017                                                                                          |
| (22) 19.09.2016                                                                                          | (54) METHOD, APPARATUS, AND SYSTEM FOR PROVIDING ROAD CLOSURE GRAPH INCONSISTENCY RESOLUTION              | (33) United States of America                                                                            |
| (54) LEVEL WITH MAGNETIC COUPLING                                                                        | (73) HERE Global B.V.                                                                                     | (51) G01D 5/14                                                                                           |
| (73) Milwaukee Electric Tool Corporation                                                                 | (72) MUBAREK, Omer                                                                                        | G01D 3/08                                                                                                |
| (72) RESNICK, Adam Christopher LASOTA, Richard J. SCHULTZ, Timothy Allen BOEHME, Christopher Frederick   | (31) 201816228093                                                                                         | (11) EP4113067                                                                                           |
| (31) 201662293595 P                                                                                      | (32) 20.12.2018                                                                                           | (21) EP22168908.6                                                                                        |
| 201562221257 P                                                                                           | (33) United States of America                                                                             | (47) 18.12.2024                                                                                          |
| (32) 10.02.2016                                                                                          | (51) G01C 21/20                                                                                           | (22) 19.04.2022                                                                                          |
| 21.09.2015                                                                                               | G01C 21/36                                                                                                | (54) USE OF CHANNEL INFORMATION TO GENERATE REDUNDANT ANGLE MEASUREMENTS ON SAFETY CRITICAL APPLICATIONS |
| (33) United States of America                                                                            | G06T 11/00                                                                                                | (73) Allegro MicroSystems, LLC                                                                           |
| United States of America                                                                                 | G06V 20/10                                                                                                | (72) Foletto, Andrea                                                                                     |
| (51) G01C 15/00                                                                                          | G08G 1/005                                                                                                | Cesaretti, Juan Manuel                                                                                   |
| G01S 1/00                                                                                                | (11) EP3012587                                                                                            | (31) 202117363732                                                                                        |
| G01S 7/486                                                                                               | (21) EP14813032.1                                                                                         | (32) 30.06.2021                                                                                          |
| G01S 17/42                                                                                               | (47) 18.12.2024                                                                                           | (33) United States of America                                                                            |
| (11) EP4230955                                                                                           | (87) JP2014059809                                                                                         | (51) G01D 5/14                                                                                           |
| (21) EP23153477.7                                                                                        | 24.12.2014                                                                                                | G01D 11/30                                                                                               |
| (47) 18.12.2024                                                                                          | (22) 03.04.2014                                                                                           | G01P 1/02                                                                                                |
| (22) 26.01.2023                                                                                          | (54) IMAGE PROCESSING DEVICE, IMAGE PROCESSING METHOD, AND PROGRAM                                        | G01P 3/487                                                                                               |
| (54) LASER SCANNING CONTROL DEVICE, LASER SCANNING APPARATUS, LASER SCANNING CONTROL METHOD, AND PROGRAM | (73) Sony Group Corporation                                                                               | (11) EP3779367                                                                                           |
| (73) TOPCON CORPORATION                                                                                  | (72) TAWARA, Tetsuo                                                                                       | (21) EP20189289.0                                                                                        |
| (72) MORITA, Hideki SUGIMOTO, Hiroaki                                                                    | SHIONOZAKI, Atsushi                                                                                       | (47) 18.12.2024                                                                                          |
| (31) 2022112957                                                                                          | (31) 2013126617                                                                                           | (22) 04.08.2020                                                                                          |
| 2022022221                                                                                               | (32) 17.06.2013                                                                                           | (54) DEVICE FOR MEASURING THE INCLINATION OF A SHAFT                                                     |
| (32) 14.07.2022                                                                                          |                                                                                                           | (73) Infineon Technologies AG                                                                            |
|                                                                                                          |                                                                                                           | (72) SLAMA, Peter                                                                                        |

|                                         |                                    |                                              |
|-----------------------------------------|------------------------------------|----------------------------------------------|
| (31) 102019122046                       | (72) FERRARO, Franco               | G01D 4/00                                    |
| (32) 16.08.2019                         | SCHMIDT, Robert                    | G08C 19/00                                   |
| (33) Germany                            | (31) 102019126381                  | G01F 1/00                                    |
| (51) G01D 9/00                          | (32) 30.09.2019                    | G01K 13/02                                   |
| G05B 23/02                              | (33) Germany                       | G01K 7/16                                    |
| G05B 19/042                             | (51) G01F 23/263                   | (11) EP4170306                               |
| (11) EP4279876                          | G01F 23/80                         | (21) EP21203547.1                            |
| (21) EP23172189.5                       | F17C 13/02                         | (47) 18.12.2024                              |
| (47) 18.12.2024                         | (11) EP4200554                     | (22) 19.10.2021                              |
| (22) 09.05.2023                         | (21) EP21765645.3                  | (54) SEPARABLE COMPONENT OF A                |
| (54) DATA RECORDING APPARATUS, DATA     | (47) 18.12.2024                    | THERMAL ENERGY METER AND                     |
| RECORDING METHOD, AND DATA              | (87) EP2021073093                  | METHOD FOR DETERMINING A                     |
| RECORDING PROGRAM                       | 24.02.2022                         | CONSUMPTION OF THERMAL                       |
| (73) Yokogawa Electric Corporation      | (22) 19.08.2021                    | ENERGY                                       |
| (72) EMA, Nobuaki                       | (54) SYSTEM AND METHOD FOR         | (73) Kamstrup A/S                            |
| YOSHIDA, Yoshitaka                      | DIGITALLY MONITORING A             | (72) Jensen, Mads Erik Lund                  |
| (31) 2022080799                         | PRESSURE VESSEL                    | Jensen, Allan                                |
| (32) 17.05.2022                         | (73) Hexagon Ragasco AS            | (51) G01L 1/04                               |
| (33) Japan                              | (72) JENSRUD, Vegard               | A61B 18/12                                   |
| (51) G01F 1/58                          | (31) 20191894                      | A61B 18/00                                   |
| A61M 1/16                               | (32) 20.08.2020                    | A61M 25/00                                   |
| A61M 1/36                               | (33) European Patent Office (EPO)  | G01L 1/22                                    |
| G01F 15/02                              | (51) G01J 1/42                     | A61B 5/0215                                  |
| (11) EP4097426                          | H01S 3/00                          | A61B 5/00                                    |
| (21) EP21702268.0                       | G01J 1/02                          | A61B 18/14                                   |
| (47) 18.12.2024                         | G01J 1/04                          | A61B 9/00                                    |
| (87) EP2021052027                       | (11) EP3824259                     | A61B 90/00                                   |
| 05.08.2021                              | (21) EP19838228.5                  | (11) EP3751247                               |
| (22) 28.01.2021                         | (47) 18.12.2024                    | (21) EP19751623.0                            |
| (54) FLOW SENSOR AND METHOD FOR         | (87) US2019040891                  | (47) 18.12.2024                              |
| MEASURING A FLOW                        | 23.01.2020                         | (87) CN2019074760                            |
| (73) Fresenius Medical Care Deutschland | (22) 08.07.2019                    | 15.08.2019                                   |
| GmbH                                    | (54) METHOD AND APPARATUS FOR      | (22) 11.02.2019                              |
| (72) NIKOLIC, Dejan                     | FOCUS CORRECTION OF MULTI-         | (54) FORCE SENSOR, AND                       |
| HEIDE, Alexander                        | IMAGE LASER BEAM QUALITY           | ELECTROPHYSIOLOGY CATHETER                   |
| (31) 102020102485                       | MEASUREMENTS                       | (73) Shanghai Microport Ep Medtech Co., Ltd. |
| (32) 31.01.2020                         | (73) Ophir Optonics Solutions Ltd. | (72) LIANG, Bo                               |
| (33) Germany                            | (72) SIMMONS, Jed                  | SHEN, Lei                                    |
| (51) G01F 1/84                          | BROWN, Jeff                        | MIAO, Tao                                    |
| G01F 15/02                              | BROWN, Fon Ray                     | WANG, Hui                                    |
| G01F 25/10                              | (31) 201862701244 P                | WANG, Mei                                    |
| (11) EP4103914                          | (32) 20.07.2018                    | (31) 201810142142                            |
| (21) EP20711373.9                       | (33) United States of America      | (32) 11.02.2018                              |
| (47) 18.12.2024                         | (51) G01K 13/20                    | (33) China                                   |
| (87) US2020017529                       | G01K 7/42                          | (51) G01L 1/10                               |
| 19.08.2021                              | A61B 5/01                          | G01L 1/16                                    |
| (22) 10.02.2020                         | A61B 5/00                          | G01L 5/04                                    |
| (54) APPARATUS FOR APPLYING A           | (11) EP4300062                     | (11) EP3583394                               |
| TEMPERATURE FLOW COEFFICIENT            | (21) EP23159075.3                  | (21) EP18707843.1                            |
| IN A VIBRATING FLOWMETER AND            | (47) 18.12.2024                    | (47) 18.12.2024                              |
| RELATED METHOD                          | (22) 28.02.2023                    | (87) CH2018050007                            |
| (73) Micro Motion Inc.                  | (54) ELECTRONIC DEVICE AND         | 23.08.2018                                   |
| (72) PANKRATZ, Anthony William          | METHOD OF ESTIMATING BODY          | (22) 12.02.2018                              |
| LANHAM, Gregory Treat                   | TEMPERATURE USING THE SAME         | (54) VIBRATING WIRE SENSOR AND               |
| (51) G01F 23/00                         | (73) Samsung Electronics Co., Ltd. | VIBRATING WIRE FOR A VIBRATING               |
| G01D 11/30                              | (72) Kwon, Bok Soon                | WIRE SENSOR                                  |
| F16B 37/12                              | Lee, So Young                      | (73) DIGI SENS Holding AG                    |
| F16B 37/14                              | Kim, Sang Kyu                      | (72) LUSTENBERGER, Martin                    |
| F16B 43/00                              | Kim, Sung Ho                       | (31) 1752017                                 |
| (11) EP4038352                          | Rhee, Hong Soon                    | (32) 15.02.2017                              |
| (21) EP20760452.1                       | Lee, Ho Taik                       | (33) Switzerland                             |
| (47) 18.12.2024                         | (31) 20230016885                   | (51) G01L 1/14                               |
| (87) EP2020073417                       | 20220078932                        | (11) EP3729034                               |
| 08.04.2021                              | (32) 08.02.2023                    | (21) EP18785336.1                            |
| (22) 20.08.2020                         | 28.06.2022                         | (47) 18.12.2024                              |
| (54) HYGIENIC ADAPTER FOR FIELD         | (33) Korea (Republic)              | (87) EP2018077374                            |
| INSTRUMENT                              | Korea (Republic)                   | 27.06.2019                                   |
| (73) Endress+Hauser SE+Co. KG           | (51) G01K 17/10                    | (22) 09.10.2018                              |

|                                            |                                     |                                          |
|--------------------------------------------|-------------------------------------|------------------------------------------|
| (54) ELASTIC BEARING ELEMENT               | (31) 2021048866                     | (54) OPTICAL FIBER ENDFACE               |
| (73) ContiTech Vibration Control GmbH      | (32) 23.03.2021                     | INSPECTION MICROSCOPE HAVING A           |
| (72) GARBERS, Norbert                      | (33) Japan                          | DUAL ILLUMINATION SOURCE                 |
| NARBERHAUS, Stefan                         | (51) G01L 19/00                     | (73) EXFO Inc.                           |
| TYROLLER, Tobias                           | G01L 19/14                          | (72) CARON, Nicolas                      |
| (31) 102017223195                          | G01L 9/00                           | COTE, Olivier                            |
| (32) 19.12.2017                            | (11) EP4036545                      | L'HEUREUX, Mario                         |
| (33) Germany                               | (21) EP22151310.4                   | (31) 202163260581 P                      |
| (51) G01L 1/14                             | (47) 18.12.2024                     | 202063118776 P                           |
| G01L 21/00                                 | (22) 13.01.2022                     | (32) 26.08.2021                          |
| H01F 27/28                                 | (54) COMBINED TEMPERATURE AND       | 27.11.2020                               |
| G01L 9/00                                  | PRESSURE SENSING DEVICE             | (33) United States of America            |
| G01L 9/12                                  | (73) Honeywell International Inc.   | United States of America                 |
| (11) EP3969865                             | (72) THANIGACHALAM, Palani          | (51) G01M 13/02                          |
| (21) EP20805361.1                          | HJ, Nirmala                         | B60L 3/00                                |
| (47) 18.12.2024                            | S, Vijayakumar                      | F16H 61/12                               |
| (87) US2020029487                          | (31) 202117248660                   | G01M 17/007                              |
| 19.11.2020                                 | (32) 02.02.2021                     | B60W 50/02                               |
| (22) 23.04.2020                            | (33) United States of America       | B60W 50/14                               |
| (54) BRIDGE VOLTAGE INVERSION              | (51) G01L 27/00                     | B60W 50/029                              |
| CIRCUIT FOR VACUUM GAUGE AND               | H04W 4/029                          | (11) EP4314757                           |
| PRESSURE GAUGE SENSOR HAVING               | G01C 5/06                           | (21) EP22709693.0                        |
| THE VOLTAGE INVERSION CIRCUIT              | G01C 25/00                          | (47) 18.12.2024                          |
| (73) Sumitomo (Shi) Cryogenics of America, | (11) EP4239305                      | (87) EP2022055072                        |
| Inc.                                       | (21) EP23157007.8                   | 06.10.2022                               |
| (72) TANG, Howard H.                       | (47) 18.12.2024                     | (22) 01.03.2022                          |
| HARRIS, Scott Michael                      | (22) 16.02.2023                     | (54) METHOD FOR DETERMINING A            |
| (31) 201962848326 P                        | (54) METHOD FOR DETERMINING         | DEFECT STATE OF A DRIVE TRAIN OF         |
| (32) 15.05.2019                            | CALIBRATED VALUES OF                | A VEHICLE, MONITORING UNIT AND           |
| (33) United States of America              | ATMOSPHERIC PRESSURE AND            | VEHICLE                                  |
| (51) G01L 5/00                             | RELATED ELECTRONIC APPARATUS        | (73) ZF CV Systems Global GmbH           |
| G01M 99/00                                 | (73) STMicroelectronics S.r.l.      | (72) SCHAPER, Mark                       |
| H01R 43/26                                 | (72) FEDELI, Patrick                | HILLBRING, Dirk                          |
| (11) EP4235129                             | DUQI, Enri                          | (31) 102021108222                        |
| (21) EP23151975.2                          | MANCA, Nicolò                       | (32) 31.03.2021                          |
| (47) 18.12.2024                            | ADORNO, Silvia                      | (33) Germany                             |
| (22) 17.01.2023                            | (31) 202200003803                   | (51) G01M 13/021                         |
| (54) PLUGGING FORCE TEST APPARATUS         | (32) 01.03.2022                     | G01M 13/022                              |
| (73) Aptiv Technologies AG                 | (33) Italy                          | F03D 17/00                               |
| (72) MANTERY, Marek                        | (51) G01M 7/08                      | (11) EP3480576                           |
| GODLEWSKI, Jakub Marcin                    | A62C 3/06                           | (21) EP18203855.4                        |
| (31) 202202762                             | G06F 30/13                          | (47) 18.12.2024                          |
| (32) 28.02.2022                            | G06Q 10/06                          | (22) 31.10.2018                          |
| (33) United Kingdom                        | G06Q 10/04                          | (54) SYSTEM AND METHOD FOR               |
| (51) G01L 15/00                            | (11) EP4308897                      | MONITORING WEAR ON A GEARBOX             |
| G01L 27/00                                 | (21) EP22772883.9                   | OF A WIND TURBINE                        |
| G01L 11/02                                 | (47) 18.12.2024                     | (73) General Electric Renovables España, |
| G01L 19/00                                 | (87) EP2022074247                   | S.L.                                     |
| (11) EP4336160                             | 09.03.2023                          | (72) ZHU, Farong                         |
| (21) EP23179707.7                          | (22) 31.08.2022                     | PATEL, Priyangu Chunilal                 |
| (47) 18.12.2024                            | (54) MAXIMUM IMPACT MEASURING       | CENCULA, James Edward                    |
| (22) 16.06.2023                            | AND FORECAST SYSTEM FOR             | HASAN, Raed Zuhair                       |
| (54) DYNAMIC RECALIBRATION OF              | EXPLOSIONS IN OPEN STEEL AND/       | McGRATH, Edward Lee                      |
| OPTICAL AIR DATA SYSTEM                    | OR CONCRETE STRUCTURES AND          | TALIAFERRO, Lawrence Keith               |
| (73) Honeywell International s.r.o         | METHOD THEREOF                      | (31) 201715801436                        |
| (72) POPELKA, Jan                          | (73) Swiss Reinsurance Company Ltd. | (32) 02.11.2017                          |
| PETERSON, Timothy A.                       | (72) BACON, Roger                   | (33) United States of America            |
| (31) 202217903721                          | KOCHER, Thomas                      | (51) G01M 15/04                          |
| (32) 06.09.2022                            | (31) 0702202021                     | F02D 41/00                               |
| (33) United States of America              | (32) 31.08.2021                     | F02D 31/00                               |
| (51) G01L 19/00                            | (33) Switzerland                    | (11) EP4095506                           |
| (11) EP4063822                             | (51) G01M 11/00                     | (21) EP22175150.6                        |
| (21) EP22162905.8                          | G02B 6/38                           | (47) 18.12.2024                          |
| (47) 18.12.2024                            | (11) EP4006519                      | (22) 24.05.2022                          |
| (22) 18.03.2022                            | (21) EP21210604.1                   | (54) TEST KIT FOR TESTING AN INTERNAL    |
| (54) PRESSURE DETECTION DEVICE             | (47) 18.12.2024                     | COMBUSTION ENGINE                        |
| (73) Surpass Industry Co., Ltd.            | (22) 25.11.2021                     | (73) DAF Trucks N.V.                     |
| (72) IMAI, Hiroshi                         |                                     | (72) AKKERMANS, Luc Henricus Maria       |



|                                            |                                      |                                      |
|--------------------------------------------|--------------------------------------|--------------------------------------|
| STREEFKERK, Remco                          | (32) 10.02.2020                      | (21) EP21808066.1                    |
| (31) 2028289                               | (33) China                           | (47) 18.12.2024                      |
| (32) 26.05.2021                            | (51) G01N 13/00                      | (87) JP2021014702                    |
| (33) Netherlands                           | G01N 33/543                          | 25.11.2021                           |
| (51) G01N 1/22                             | G01N 33/58                           | (22) 07.04.2021                      |
| G01N 1/38                                  | G01N 1/40                            | (54) DEVICE FOR DETERMINING A ROAD   |
| (11) EP4121734                             | (11) EP4291867                       | SURFACE CONDITION                    |
| (21) EP21714324.7                          | (21) EP22704574.7                    | (73) DENSO CORPORATION               |
| (47) 18.12.2024                            | (47) 18.12.2024                      | (72) KAWANO, Takayuki                |
| (87) FI2021050187                          | (87) GB2022050375                    | LIU, Haibo                           |
| 23.09.2021                                 | 18.08.2022                           | (31) 2020087903                      |
| (22) 16.03.2021                            | (22) 11.02.2022                      | (32) 20.05.2020                      |
| (54) APPARATUS AND METHOD FOR              | (54) IMPROVEMENTS IN OR RELATING     | (33) Japan                           |
| PROVIDING A REGULATED FILTERED             | TO A METHOD OF ANALYSING A           | (51) G01N 21/03                      |
| SAMPLE FLOW TO A SENSOR                    | COMPONENT IN A SAMPLE                | G01N 21/05                           |
| ELEMENT                                    | (73) Cambridge Enterprise Limited    | G01N 21/31                           |
| (73) Olfactomics Oy                        | (72) KNOWLES, Tuomas Pertti Jonathan | G01N 21/39                           |
| (72) OKSALA, Niku                          | JACQUAT, Raphael Philippe Bernard    | G01N 21/3577                         |
| ANTTALAINEN, Osmo                          | MUELLER, Thomas                      | G01N 21/27                           |
| ROINE, Antti                               | PETER, Quentin                       | G01N 30/74                           |
| KONTUNEN, Anton                            | (31) 202101979                       | (11) EP4097451                       |
| KARJALAINEN, Markus                        | (32) 12.02.2021                      | (21) EP21706144.9                    |
| (31) 202062989915 P                        | (33) United Kingdom                  | (47) 18.12.2024                      |
| (32) 16.03.2020                            | (51) G01N 15/02                      | (87) US2021015451                    |
| (33) United States of America              | G01N 15/14                           | 05.08.2021                           |
| (51) G01N 1/30                             | B01D 45/08                           | (22) 28.01.2021                      |
| (11) EP4042134                             | G01N 1/22                            | (54) FLUID ANALYZER WITH REMOVABLE   |
| (21) EP20799914.5                          | G01N 15/00                           | TEST CELL FOR DETECTION AND          |
| (47) 18.12.2024                            | (11) EP4151983                       | QUANTITATION OF COMPOUNDS IN         |
| (87) US2020054791                          | (21) EP21198077.6                    | LIQUIDS                              |
| 15.04.2021                                 | (47) 18.12.2024                      | (73) Daylight Solutions Inc.         |
| (22) 08.10.2020                            | (22) 21.09.2021                      | (72) ARNONE, David Francis           |
| (54) METHOD AND COMPOSITION FOR            | (54) INERTIAL PARTICLE IMPACTOR      | ROWLETTE, Jeremy                     |
| STAINING AND SAMPLE PROCESSING             | (73) Saxocon A/S                     | (31) 202062966729 P                  |
| (73) Beckman Coulter, Inc.                 | (72) FRIIS-MIKKELSEN                 | (32) 28.01.2020                      |
| (72) QUON, Carol                           | KLING, Kirsten Inga                  | (33) United States of America        |
| (31) 201962914117 P                        | (51) G01N 15/0227                    | (51) G01N 21/15                      |
| (32) 11.10.2019                            | G01N 15/0205                         | G01N 21/53                           |
| (33) United States of America              | G01N 15/14                           | G08B 17/10                           |
| (51) G01N 1/34                             | G01N 15/00                           | (11) EP3889579                       |
| G01N 1/36                                  | G06V 10/141                          | (21) EP20382246.5                    |
| G01N 1/31                                  | G06V 10/143                          | (47) 18.12.2024                      |
| (11) EP4063823                             | G06V 10/56                           | (22) 30.03.2020                      |
| (21) EP21216762.1                          | G06V 10/764                          | (54) CLEANING SYSTEM FOR A SMOKE     |
| (47) 18.12.2024                            | G06V 10/20                           | DETECTOR                             |
| (22) 22.12.2021                            | (11) EP3786612                       | (73) Carrier Corporation             |
| (54) HARD TISSUE SLICE ANTI-FALLING        | (21) EP19811925.7                    | (72) RODRIGUEZ MOLPECERES, Sergio    |
| PRETREATMENT DEVICE AND ANTI-              | (47) 18.12.2024                      | CORDOBA GALERA, Andrés               |
| FALLING PRETREATMENT METHOD                | (87) JP2019020835                    | (51) G01N 21/47                      |
| (73) Digital Path(Shanghai)Micro Co., Ltd. | 05.12.2019                           | G01N 21/84                           |
| (72) YIN, Junhui                           | (22) 27.05.2019                      | G01N 21/892                          |
| ZHANG, Changqing                           | (54) PARTICLE SIZE DISTRIBUTION      | G01N 21/956                          |
| (31) 202110316227                          | MEASURING DEVICE AND PROGRAM         | (11) EP4386361                       |
| (32) 24.03.2021                            | FOR PARTICLE SIZE DISTRIBUTION       | (21) EP23170959.3                    |
| (33) China                                 | MEASURING DEVICE                     | (47) 18.12.2024                      |
| (51) G01N 1/36                             | (73) HORIBA, Ltd.                    | (22) 02.05.2023                      |
| (11) EP4060312                             | (72) AKIYAMA, Hisashi                | (54) BATTERY CELL APPEARANCE         |
| (21) EP21752995.7                          | NAGAOKA, Eiichi                      | DEFECT DETECTION APPARATUS           |
| (47) 18.12.2024                            | MORI, Tetsuya                        | AND DETECTION DEVICE                 |
| (87) CN2021073771                          | (31) 2018106011                      | (73) Contemporary Amperex Technology |
| 19.08.2021                                 | (32) 01.06.2018                      | (Hong Kong) Limited                  |
| (22) 26.01.2021                            | (33) Japan                           | (72) WANG, Pengju                    |
| (54) SPECIAL VERTICAL EMBEDDING BOX        | (51) G01N 19/02                      | MA, Lin                              |
| FOR FAULT PLASTICIZATION                   | G01W 1/00                            | WANG, Zhenhui                        |
| (73) Dalian Medical University             | B60W 40/068                          | HUANG, Yunlong                       |
| (72) ZHANG, Jianfei                        | G01M 17/02                           | (31) 202223328043 U                  |
| SUI, Hongjin                               | B60T 8/172                           | (32) 13.12.2022                      |
| (31) 202010084586                          | (11) EP4155714                       | (33) China                           |

|                                             |                                       |                                         |
|---------------------------------------------|---------------------------------------|-----------------------------------------|
| (51) G01N 21/53                             | 202007997                             | (11) EP3523639                          |
| G01N 21/94                                  | 202004488                             | (21) EP17858856.2                       |
| G01N 15/06                                  | (32) 19.10.2020                       | (47) 18.12.2024                         |
| G01N 33/00                                  | 28.05.2020                            | (87) US2017047048                       |
| G01N 21/47                                  | 27.03.2020                            | 12.04.2018                              |
| G01N 15/00                                  | (33) United Kingdom                   | (22) 16.08.2017                         |
| (11) EP3472598                              | United Kingdom                        | (54) DETECTION REAGENTS AND             |
| (21) EP17813498.7                           | United Kingdom                        | ELECTRODE ARRANGEMENTS FOR              |
| (47) 18.12.2024                             | (51) G01N 21/89                       | MULTI-ANALYTE DIAGNOSTIC TEST           |
| (87) KR2017005587                           | G01B 11/02                            | ELEMENTS, AS WELL AS METHODS            |
| 21.12.2017                                  | G01B 11/04                            | OF USING THE SAME                       |
| (22) 29.05.2017                             | G01N 21/93                            | (73) Roche Diabetes Care GmbH           |
| (54) APPARATUS AND METHOD FOR               | (11) EP4239319                        | (72) BEATY, Terry, A.                   |
| MEASURING DUST                              | (21) EP22160135.4                     | DUVALL, Stacy, Hunt                     |
| (73) LG Electronics Inc.                    | (47) 18.12.2024                       | BUCK, Harvey                            |
| (72) JEONG, Pilwon                          | (22) 04.03.2022                       | (31) 201662404258 P                     |
| LEE, Sangkeun                               | (54) EDGE DETECTOR FOR SHEETS OF      | (32) 05.10.2016                         |
| CHO, Yongho                                 | MATERIAL                              | (33) United States of America           |
| KIM, Bolam                                  | (73) BST GmbH                         | (51) G01N 27/327                        |
| PARK, Seonghong                             | (72) Stach, Ingo                      | (11) EP3553510                          |
| (31) 20160075344                            | (51) G01N 27/02                       | (21) EP19177674.9                       |
| (32) 16.06.2016                             | A23K 20/10                            | (47) 18.12.2024                         |
| (33) Korea (Republic)                       | A23K 20/111                           | (22) 02.05.2007                         |
| (51) G01N 21/65                             | A23K 20/121                           | (54) UNDERFILL DETECTION SYSTEM FOR     |
| B22F 1/054                                  | A23K 20/142                           | A BIOSENSOR                             |
| G01N 33/493                                 | A23K 20/163                           | (73) Ascensia Diabetes Care Holdings AG |
| G01N 33/574                                 | A23K 20/174                           | (72) NELSON, Christine, D.              |
| G01N 1/40                                   | A23K 20/189                           | WU, Huan-ping                           |
| B82Y 5/00                                   | A23K 20/22                            | (31) 797128 P                           |
| B82Y 15/00                                  | A23K 20/24                            | (32) 03.05.2006                         |
| B82Y 30/00                                  | A23K 50/75                            | (33) United States of America           |
| B82Y 20/00                                  | A23K 10/18                            | (51) G01N 27/404                        |
| (11) EP4113105                              | A23K 20/20                            | G01N 27/416                             |
| (21) EP21760238.2                           | (11) EP3673259                        | (11) EP3712604                          |
| (47) 18.12.2024                             | (21) EP18865709.2                     | (21) EP19163539.0                       |
| (87) KR2021002473                           | (47) 18.12.2024                       | (47) 18.12.2024                         |
| 02.09.2021                                  | (87) IB2018001490                     | (22) 18.03.2019                         |
| (22) 26.02.2021                             | 18.04.2019                            | (54) SYSTEM AND METHOD FOR              |
| (54) A METHOD FOR FABRICATION OF            | (22) 22.08.2018                       | MEASURING ELECTROLYTE                   |
| A SURFACE-ENHANCED RAMAN                    | (54) POULTRY FEED AND POULTRY FEED    | CONTENT IN AN ELECTROCHEMICAL           |
| SCATTERING SUBSTRATE                        | ADDITIVE FOR USE IN REDUCING          | GAS SENSOR                              |
| (73) Samsung Life Public Welfare Foundation | THE INCIDENCE OF PECTORAL             | (73) Honeywell International Inc.       |
| (72) WOO, A Young                           | MYOPATHY                              | (72) PRATT, Keith Francis Edwin         |
| CHOI, Dong Il                               | (73) CAN Technologies, Inc.           | (51) G01N 27/622                        |
| PHYQ, Jung Bin                              | (72) MIRANDA, Daniel, Jose, Antoniol  | H01J 49/06                              |
| YU, Ho Jae                                  | DUBOIS, Alvaro, Medina                | (11) EP4095525                          |
| LEE, Min Young                              | BELUCIO, Alessandro, Augusto, Plenter | (21) EP21176300.8                       |
| (31) 20210025150                            | (31) 102017018191                     | (47) 18.12.2024                         |
| 20200023553                                 | (32) 24.08.2017                       | (22) 27.05.2021                         |
| (32) 24.02.2021                             | (33) Brazil                           | (54) METHOD AND ION GUIDE ASSEMBLY      |
| 26.02.2020                                  | (51) G01N 27/22                       | FOR MODULATING A STREAM OF              |
| (33) Korea (Republic)                       | G01N 33/24                            | IONS                                    |
| Korea (Republic)                            | (11) EP3779423                        | (73) Tofwerk AG                         |
| (51) G01N 21/78                             | (21) EP19785412.8                     | (72) Graf, Stephan                      |
| G01N 21/84                                  | (47) 18.12.2024                       | Gerber, Sebastian                       |
| G01N 21/77                                  | (87) KR2019004249                     | Kamrath, Michael                        |
| (11) EP4127681                              | 17.10.2019                            | (51) G01N 27/72                         |
| (21) EP21713037.6                           | (22) 10.04.2019                       | (11) EP3869189                          |
| (47) 18.12.2024                             | (54) DEVICE FOR MEASURING MOISTURE    | (21) EP18937229.5                       |
| (87) EP2021057405                           | CONTENT IN SOIL                       | (47) 18.12.2024                         |
| 30.09.2021                                  | (73) TELOFARM, INC.                   | (87) JP2018038457                       |
| (22) 23.03.2021                             | (72) KIM, Woo Joong                   | 23.04.2020                              |
| (54) OPTICAL MODULE                         | (31) 20180042830                      | (22) 16.10.2018                         |
| (73) AMS-OSRAM AG                           | (32) 12.04.2018                       | (54) MAGNETIC BODY MANAGEMENT           |
| (72) JAN LOUS, Erik                         | (33) Korea (Republic)                 | SYSTEM AND MAGNETIC BODY                |
| CHONG CHEAH, Boon                           | (51) G01N 27/26                       | MANAGEMENT METHOD                       |
| FREDERIX, Filip                             | G01N 27/327                           | (73) SHIMADZU CORPORATION               |
| (31) 202016564                              | G01N 27/416                           | (72) AKASEGAWA, Satoshi                 |

|                                        |                                        |                                   |
|----------------------------------------|----------------------------------------|-----------------------------------|
| NOJI, Taketoshi                        | G01N 29/02                             | (87) JP2020012247                 |
| TAKAMI, Yoshio                         | B60S 1/56                              | 24.09.2020                        |
| YAMASHITA, Mitsuo                      | G01N 29/036                            | (22) 19.03.2020                   |
| KODAMA, Hiroaki                        | G02B 27/00                             | (54) METHOD FOR ANALYZING         |
| (51) G01N 29/04                        | H10N 30/80                             | PYRROLOQUINOLINE QUINONE          |
| G01N 29/14                             | (11) EP3577451                         | (73) MITSUBISHI GAS CHEMICAL      |
| G01N 29/22                             | (21) EP18747814.4                      | COMPANY, INC.                     |
| G10K 11/00                             | (47) 18.12.2024                        | (72) IKEMOTO, Kazuto              |
| (11) EP3553513                         | (87) US2018016714                      | MOHAMAD ISHAK, Nur Syafiqah       |
| (21) EP19159741.8                      | 09.08.2018                             | (31) 2019053588                   |
| (47) 18.12.2024                        | (22) 02.02.2018                        | (32) 20.03.2019                   |
| (22) 29.06.2017                        | (54) CONTROL SYSTEM FOR A SENSOR       | (33) Japan                        |
| (54) ACOUSTIC EMISSION SENSOR          | ASSEMBLY                               | (51) G01N 30/08                   |
| HOLDER                                 | (73) Texas Instruments Incorporated    | G01N 30/12                        |
| (73) The Boeing Company                | (72) MAGEE, David, Patrick             | G01N 30/16                        |
| (72) SCHAEFER, Joseph D.               | FEDIGAN, Stephen John                  | G01N 1/22                         |
| EDWARDS, James W.                      | (31) 201715605463                      | G01N 1/40                         |
| GARDNER, Scott H.                      | 201762454154 P                         | G01N 30/24                        |
| MITTLEIDER, John A.                    | (32) 25.05.2017                        | (11) EP3814767                    |
| HOLMES, Tyler M.                       | 03.02.2017                             | (21) EP19759775.0                 |
| TAT, Hong H.                           | (33) United States of America          | (47) 18.12.2024                   |
| (31) 201615246654                      | United States of America               | (87) US2019044252                 |
| (32) 25.08.2016                        | (51) G01N 29/14                        | 06.02.2020                        |
| (33) United States of America          | G01N 29/24                             | (22) 30.07.2019                   |
| (51) G01N 29/04                        | G01N 29/04                             | (54) HYBRID CAPILLARY/PACKED TRAP |
| G01N 29/22                             | G01N 29/30                             | AND METHOD OF USE                 |
| (11) EP4222486                         | G01N 29/44                             | (73) Entech Instruments Inc.      |
| (21) EP21819192.2                      | (11) EP3559653                         | (72) CARDIN, Daniel B.            |
| (47) 18.12.2024                        | (21) EP17794865.0                      | (31) 201862712699 P               |
| (87) GB2021053051                      | (47) 18.12.2024                        | (32) 31.07.2018                   |
| 02.06.2022                             | (87) US2017057956                      | (33) United States of America     |
| (22) 24.11.2021                        | 28.06.2018                             | (51) G01N 30/52                   |
| (54) ULTRASOUND DEVICE AND METHOD      | (22) 24.10.2017                        | B01J 20/22                        |
| (73) Novosound Ltd                     | (54) METHODS AND APPARATUS TO          | B01J 20/24                        |
| (72) HUGHES, David                     | VERIFY OPERATION OF ACOUSTIC           | B01J 20/26                        |
| TRODDEN, Heather                       | EMISSION SENSORS                       | B01J 20/28                        |
| IRVING, Daniel                         | (73) Fisher Controls International LLC | B01J 20/30                        |
| THRING, Claire Brigid                  | (72) NORDSTROM, Richard, Allen         | B01J 20/32                        |
| (31) 202018464                         | DAHME, Bret, Anthony                   | B01J 20/286                       |
| (32) 24.11.2020                        | JELKEN, Shannon, E.                    | G01N 30/60                        |
| (33) United Kingdom                    | (31) 201615387341                      | (11) EP3117208                    |
| (51) G01N 29/07                        | (32) 21.12.2016                        | (21) EP15762208.5                 |
| G01N 29/44                             | (33) United States of America          | (47) 18.12.2024                   |
| G01N 29/24                             | (51) G01N 29/32                        | (87) US2015020365                 |
| G01N 29/34                             | G01N 29/44                             | 17.09.2015                        |
| (11) EP3896442                         | G01N 29/14                             | (22) 13.03.2015                   |
| (21) EP20740788.3                      | G01N 29/22                             | (54) PURIFICATION COLUMNS         |
| (47) 18.12.2024                        | (11) EP4367511                         | (73) Halaka, Folim G.             |
| (87) JP2020000332                      | (21) EP22740397.9                      | (72) Halaka, Folim G.             |
| 23.07.2020                             | (47) 18.12.2024                        | (31) 201414208843                 |
| (22) 08.01.2020                        | (87) EP2022068694                      | 201414208758                      |
| (54) INTERNAL STATE DETECTOR AND       | 12.01.2023                             | (32) 13.03.2014                   |
| VEHICLE                                | (22) 06.07.2022                        | 13.03.2014                        |
| (73) Yamaha Hatsudoki Kabushiki Kaisha | (54) ANALYSIS DEVICE AND METHOD        | (33) United States of America     |
| The University of Tokyo                | FOR DETERMINING AN OSCILLATION         | United States of America          |
| (72) DENG Peiwen                       | PATTERN OF A SUBSTANCE                 | (51) G01N 30/56                   |
| TEZUKA Shota                           | (73) FR-FUTURE1 FRANZISKA MICHL UND    | B01D 15/20                        |
| KONDOH Taku                            | RAIMUND HOFFMANN GBR                   | B01D 15/22                        |
| CHIBA Akihiro                          | (72) HOFFMANN, Raimund                 | G01N 30/60                        |
| SAITO Osamu                            | (31) 102021117510                      | (11) EP3400434                    |
| OKABE Yoji                             | (32) 07.07.2021                        | (21) EP17700790.3                 |
| (31) 2019004768                        | (33) Germany                           | (47) 18.12.2024                   |
| (32) 15.01.2019                        | (51) G01N 30/06                        | (87) EP2017050279                 |
| (33) Japan                             | G01N 30/26                             | 13.07.2017                        |
| (51) G01N 29/12                        | G01N 30/88                             | (22) 06.01.2017                   |
| G01D 3/00                              | (11) EP4012403                         | (54) A METHOD FOR PACKING A       |
| B08B 7/02                              | (21) EP20773943.4                      | CHROMATOGRAPHY COLUMN             |
| B06B 1/06                              | (47) 18.12.2024                        | ASSEMBLY AND CORRESPONDING        |

|                                         |                                          |                                             |
|-----------------------------------------|------------------------------------------|---------------------------------------------|
| CHROMATOGRAPHY COLUMN ASSEMBLY          | BARBER III, Arthur Peter                 | (21) EP21185369.2                           |
| (73) Cytiva BioProcess R&D AB           | DOBRINSKY, Alexander                     | (47) 18.12.2024                             |
| (72) HERMANSSON, Dan                    | SHATALOV, Maxim S.                       | (22) 13.07.2021                             |
| GEBAUER, Klaus                          | (31) 201715678456                        | (54) BIOLOGICAL NANOPARTICLE                |
| (31) 201600171                          | 201662382216 P                           | DETECTING METHOD WITH HIGH                  |
| (32) 06.01.2016                         | (32) 16.08.2017                          | SENSITIVITY                                 |
| (33) United Kingdom                     | 31.08.2016                               | (73) Nanjing Medical University             |
| (51) G01N 30/60                         | (33) United States of America            | (72) CHEN, Shan                             |
| (11) EP3561505                          | United States of America                 | FANG, Yimin                                 |
| (21) EP16924672.5                       | (51) G01N 33/24                          | YIN, Congcong                               |
| (47) 18.12.2024                         | G01V 9/00                                | JIANG, Tao                                  |
| (87) JP2016088272                       | (11) EP4267954                           | HUANG, Zongxiong                            |
| 28.06.2018                              | (21) EP21843958.6                        | (31) 202010797874                           |
| (22) 22.12.2016                         | (47) 18.12.2024                          | (32) 10.08.2020                             |
| (54) COLUMN AND EXCHANGE DEVICE         | (87) EP2021087124                        | (33) China                                  |
| (73) Hitachi High-Tech Corporation      | 30.06.2022                               | (51) G01N 33/543                            |
| (72) NAKAGAWA Hiroaki                   | (22) 21.12.2021                          | G01N 33/487                                 |
| SAKAZUME Taku                           | (54) DEVICE AND METHOD FOR               | G01N 33/68                                  |
| SHISHIKA Tsukasa                        | DETERMINING THE HYDROCARBON-             | B82Y 5/00                                   |
| ITO Shinya                              | WATER CONTACT POSITION IN                | (11) EP3826960                              |
| (51) G01N 30/60                         | HYDROCARBON RESERVOIR                    | (21) EP19842052.3                           |
| (11) EP4014036                          | (73) TOTALENERGIES ONETECH               | (47) 18.12.2024                             |
| (21) EP20761952.9                       | (72) SCOTT, James Alexander              | (87) US2019042864                           |
| (47) 18.12.2024                         | PUJOL, Magali                            | 30.01.2020                                  |
| (87) US2020045940                       | (31) 20306664                            | (22) 22.07.2019                             |
| 18.02.2021                              | (32) 22.12.2020                          | (54) SINGLE-MOLECULE ELECTRONIC             |
| (22) 12.08.2020                         | (33) European Patent Office (EPO)        | MULTIPLEX NANOPORE                          |
| (54) FITTING FOR FLUIDIC COUPLING IN A  | (51) G01N 33/50                          | IMMUNOASSAYS FOR BIOMARKER                  |
| CHROMATOGRAPHY SYSTEM                   | G01N 33/15                               | DETECTION                                   |
| (73) Waters Technologies Corporation    | A61K 49/00                               | (73) The Trustees of Columbia University in |
| (72) MOELLER, Mark W.                   | A01K 67/027                              | the City of New York                        |
| CLARK, William B.                       | (11) EP3531127                           | (72) RUSSO, James, J.                       |
| MURPHY, Charles T.                      | (21) EP17862968.9                        | KALACHIKOV, Sergey                          |
| (31) 201962886375 P                     | (47) 18.12.2024                          | LI, Xiaoxu                                  |
| (32) 14.08.2019                         | (87) CN2017107386                        | TAO, Chuanjuan                              |
| (33) United States of America           | 26.04.2018                               | KUMAR, Shiv                                 |
| (51) G01N 30/60                         | (22) 23.10.2017                          | JU, Jingyue                                 |
| G01N 30/88                              | (54) METHOD AND DEVICE FOR               | MOROZOVA, Irina                             |
| (11) EP3593127                          | SCREENING DRUG                           | (31) 201862701990 P                         |
| (21) EP18710864.2                       | (73) Shanghai Lide Biotech Co., Ltd.     | (32) 23.07.2018                             |
| (47) 18.12.2024                         | (72) WEN, Danyi                          | (33) United States of America               |
| (87) EP2018056125                       | ZHANG, Feifei                            | (51) G01N 33/543                            |
| 13.09.2018                              | (31) 201610918458                        | G01N 33/53                                  |
| (22) 12.03.2018                         | (32) 21.10.2016                          | G16H 50/80                                  |
| (54) MICROFLUIDIC DEVICE                | (33) China                               | (11) EP3584579                              |
| (73) Epigem Limited                     | (51) G01N 33/50                          | (21) EP18754791.4                           |
| (72) RYAN, Timothy George               | G01N 33/483                              | (47) 18.12.2024                             |
| ALLEN, Simon                            | G01N 33/487                              | (87) JP2018002832                           |
| BAKER, Andrew                           | G01N 33/574                              | 23.08.2018                                  |
| SUMMERSGILL, Philip                     | (11) EP4118430                           | (22) 30.01.2018                             |
| (31) 201703874                          | (21) EP21709435.8                        | (54) IMMUNOASSAY APPARATUS AND              |
| (32) 10.03.2017                         | (47) 18.12.2024                          | OPERATING METHOD THEREFOR,                  |
| (33) United Kingdom                     | (87) EP2021055858                        | INFORMATION PROCESSING                      |
| (51) G01N 33/00                         | 16.09.2021                               | APPARATUS, OPERATING METHOD                 |
| A01G 7/04                               | (22) 09.03.2021                          | AND OPERATING PROGRAM                       |
| H05B 45/20                              | (54) MEASURING THE ELECTRIC ACTIVITY     | THEREFOR, AND INFORMATION                   |
| (11) EP3503710                          | OF CELLS FOR THE EVALUATION OF           | PROCESSING SYSTEM                           |
| (21) EP17846970.6                       | METASTATIC POTENTIAL OF CANCER           | (73) FUJIFILM Corporation                   |
| (47) 18.12.2024                         | CELLS                                    | (72) ODA, Yoshinari                         |
| (87) KR2017009437                       | (73) Cellex Oncology Innovations Limited | ISHIKAWA, Shigetoshi                        |
| 08.03.2018                              | (72) DJAMGOZ, Mustafa, Bilgin, Ali       | (31) 2017025852                             |
| (22) 29.08.2017                         | (31) 20161801                            | (32) 15.02.2017                             |
| (54) CONTROLLING LIGHT EXPOSURE OF      | (32) 09.03.2020                          | (33) Japan                                  |
| A PLANT                                 | (33) European Patent Office (EPO)        | (51) G01N 33/543                            |
| (73) Sensor Electronic Technology, Inc. | (51) G01N 33/532                         | G01N 33/533                                 |
| Seoul Viosys Co., Ltd.                  | G01N 33/569                              | G01N 33/558                                 |
| (72) SHUR, Michael                      | G01N 33/58                               | (11) EP4127716                              |
|                                         | (11) EP3954996                           | (21) EP21713420.4                           |

|                                       |                                            |                                    |
|---------------------------------------|--------------------------------------------|------------------------------------|
| (47) 18.12.2024                       | BUERKI, Christine                          | (51) G01N 35/00                    |
| (87) EP2021057608                     | CRISAN, Anamaria                           | G01N 35/02                         |
| 30.09.2021                            | JENKINS, Robert, B.                        | G01N 35/04                         |
| (22) 24.03.2021                       | ERHO, Nicholas George                      | (11) EP3588093                     |
| (54) COMPOSITE PARTICLES FOR          | DAVICIONI, Elai                            | (21) EP18757416.5                  |
| BIOLOGIC ASSAY                        | VERGARA CORREA, Ismael A.                  | (47) 18.12.2024                    |
| (73) Nexdot                           | (31) 201361783124 P                        | (87) JP2018004270                  |
| (72) D'AMICO, Michele                 | 201361764365 P                             | 30.08.2018                         |
| KUNTZMANN, Alexis                     | 201261684066 P                             | (22) 07.02.2018                    |
| DUBERTRET, Benoît                     | (32) 14.03.2013                            | (54) AUTOMATED ANALYZER            |
| ALEZRA, Valérie                       | 13.02.2013                                 | (73) Hitachi High-Tech Corporation |
| YAHIA AMMAR, Akram                    | 16.08.2012                                 | (72) SAITO Yoshiaki                |
| (31) 21151045                         | (33) United States of America              | (31) 2017030700                    |
| 20165264                              | United States of America                   | (32) 22.02.2017                    |
| (32) 12.01.2021                       | United States of America                   | (33) Japan                         |
| 24.03.2020                            | (51) G01N 33/76                            | (51) G01N 35/08                    |
| (33) European Patent Office (EPO)     | G01N 21/78                                 | C12M 1/00                          |
| European Patent Office (EPO)          | G01N 21/84                                 | G01N 15/14                         |
| (51) G01N 33/543                      | G01N 21/77                                 | G01N 37/00                         |
| G01N 33/558                           | G01N 33/68                                 | (11) EP4033252                     |
| G01N 21/64                            | (11) EP3683580                             | (21) EP22161298.9                  |
| G01N 21/84                            | (21) EP18912008.2                          | (47) 18.12.2024                    |
| (11) EP4160210                        | (47) 18.12.2024                            | (22) 18.02.2011                    |
| (21) EP22204041.2                     | (87) CN2018095411                          | (54) MICROCHIP AND PARTICULATE     |
| (47) 18.12.2024                       | 03.10.2019                                 | ANALYZING DEVICE                   |
| (22) 25.06.2018                       | (22) 12.07.2018                            | (73) Sony Group Corporation        |
| (54) SANDWICH-TYPE ASSAYS USING       | (54) ELECTRONIC DETECTION PEN AND          | (72) AKIYAMA, Shoji                |
| DECREASING SIGNAL PORTIONS            | EARLY PREGNANCY WEEK NUMBER                | YAMASAKI, Takeshi                  |
| OF DOSE RESPONSE CURVE TO             | DETECTION METHOD                           | KAKUTA, Masaya                     |
| MEASURE ANALYTES, INCLUDING           | (73) Nantong Egens Biotechnology Co., Ltd. | ITO, Tatsumi                       |
| ANALYTES AT HIGH CONCENTRATION        | (72) XU, Yan                               | (31) 2010043968                    |
| (73) Becton, Dickinson and Company    | OU, Weijun                                 | (32) 01.03.2010                    |
| (72) YANG, Jian                       | SUN, Yipin                                 | (33) Japan                         |
| REN, Huimiao                          | (31) 201810253639                          | (51) G01N 35/08                    |
| (31) 201762526051 P                   | (32) 26.03.2018                            | G01N 35/10                         |
| (32) 28.06.2017                       | (33) China                                 | G01N 21/55                         |
| (33) United States of America         | (51) G01N 35/00                            | G01N 21/05                         |
| (51) G01N 33/574                      | B01L 9/00                                  | G01N 21/552                        |
| (11) EP3394619                        | (11) EP4231019                             | B01L 3/00                          |
| (21) EP16825874.7                     | (21) EP22157371.0                          | (11) EP3004897                     |
| (47) 18.12.2024                       | (47) 18.12.2024                            | (21) EP13726729.0                  |
| (87) GB2016054074                     | (22) 17.02.2022                            | (47) 18.12.2024                    |
| 29.06.2017                            | (54) LABORATORY SYSTEM                     | (87) EP2013060938                  |
| (22) 23.12.2016                       | (73) F. Hoffmann-La Roche AG               | 04.12.2014                         |
| (54) DETERMINATION OF                 | (72) Kollmer, Markus                       | (22) 28.05.2013                    |
| GLYCOSYLATION SIGNATURE               | Ali-Mahmoud, Yanis                         | (54) MEASURING SYSTEM, SUCH AS AN  |
| (73) Randox Teoranta                  | Rein, Michael                              | INTERACTION MEASURING SYSTEM       |
| Randox Laboratories Ltd.              | Vasile, Teodor-Laurentiu                   | AND A MEASURING METHOD             |
| (72) RICHARDSON, Ciaran               | (51) G01N 35/00                            | (73) Ibis Technologies BV          |
| MCCONNELL, Ivan                       | G01N 27/74                                 | (72) SCHASFOORT, Richard Bernardus |
| LAMONT, John                          | G01N 21/07                                 | Maria                              |
| FITZGERALD, Peter                     | B01L 3/00                                  | (51) G01P 3/481                    |
| (31) 201522839                        | B03C 1/033                                 | G01P 21/02                         |
| (32) 23.12.2015                       | B03C 1/28                                  | G01D 5/20                          |
| (33) United Kingdom                   | (11) EP3655782                             | G01P 3/488                         |
| (51) G01N 33/574                      | (21) EP18749079.2                          | (11) EP4109108                     |
| C12Q 1/68                             | (47) 18.12.2024                            | (21) EP22180108.7                  |
| C40B 30/04                            | (87) GB2018052054                          | (47) 18.12.2024                    |
| (11) EP4219765                        | 24.01.2019                                 | (22) 21.06.2022                    |
| (21) EP23156159.8                     | (22) 20.07.2018                            | (54) SELF-MONITORING SYSTEM        |
| (47) 18.12.2024                       | (54) APPARATUS FOR CONDUCTING AN           | FOR DETERMINING ROTATION           |
| (22) 16.08.2013                       | ASSAY, USE AND METHOD                      | FREQUENCY OF A SHAFT               |
| (54) PROSTATE CANCER PROGNOSIS        | (73) Mast Group Limited                    | (73) ROSEMOUNT AEROSPACE INC.      |
| USING BIOMARKERS                      | (72) WONG, Ken Jin                         | (72) QUY, Dennis A.                |
| (73) Veracyte SD, Inc.                | WILLIAMS, David Hugh                       | ANNAMAREDDY, Ramesh                |
| Mayo Foundation for Medical Education | (31) 201711804                             | VALLAMKONDU, Aswin Kumar           |
| and Research                          | (32) 21.07.2017                            | ESSAWY, Magdi A.                   |
| (72) GHADESSI, Mercedes               | (33) United Kingdom                        | (31) 202141027780                  |

|                                              |                                            |                                           |
|----------------------------------------------|--------------------------------------------|-------------------------------------------|
| (32) 21.06.2021                              | (32) 20.07.2020                            | G01R 27/14                                |
| (33) India                                   | (33) Korea (Republic)                      | G01R 31/00                                |
| (51) G01P 21/00                              | (51) G01R 19/04                            | G01R 31/28                                |
| G01P 15/18                                   | G01R 19/175                                | H02H 3/04                                 |
| B60L 3/10                                    | G01R 19/25                                 | (11) EP4145145                            |
| B60T 8/17                                    | (11) EP4249925                             | (21) EP22192233.9                         |
| B60L 58/27                                   | (21) EP23163840.4                          | (47) 18.12.2024                           |
| B60T 8/172                                   | (47) 18.12.2024                            | (22) 25.08.2022                           |
| (11) EP4121782                               | (22) 23.03.2023                            | (54) CIRCUIT TESTING AND DIAGNOSIS        |
| (21) EP21718647.7                            | (54) ALTERNATIVE VOLTAGE                   | (73) Hamilton Sundstrand Corporation      |
| (47) 18.12.2024                              | MEASUREMENT OVER EXTENDED                  | (72) CHAI, Huazhen                        |
| (87) IB2021052211                            | OPERATING CONDITIONS                       | (31) 202117411258                         |
| 23.09.2021                                   | (73) Hamilton Sundstrand Corporation       | (32) 25.08.2021                           |
| (22) 17.03.2021                              | (72) KALLURI, Nageswara Rao                | (33) United States of America             |
| (54) METHOD FOR ESTIMATING A                 | VALLERU, Surendra Somasekhar               | (51) G01R 31/08                           |
| LONGITUDINAL ACCELERATION OF                 | KATAKAM, Sridhar                           | G01R 31/11                                |
| AT LEAST ONE RAILWAY VEHICLE                 | ESWARAN, Pravinsharma Kaliyannan           | (11) EP4350366                            |
| (73) Faiveley Transport Italia S.r.l.        | BROOKES, David Frederick                   | (21) EP23200223.8                         |
| (72) FREA, Matteo                            | (31) 202211016944                          | (47) 18.12.2024                           |
| (31) 202000005671                            | (32) 25.03.2022                            | (22) 27.09.2023                           |
| (32) 17.03.2020                              | (33) India                                 | (54) METHOD OF EVALUATING A               |
| (33) Italy                                   | (51) G01R 19/165                           | TRANSMISSION LINE BY AUTOMATIC            |
| (51) G01Q 70/02                              | G01R 19/25                                 | REFLECTOGRAM ANALYSIS                     |
| F16M 7/00                                    | G01R 35/00                                 | (73) Commissariat à l'Energie Atomique et |
| F16M 11/04                                   | (11) EP3988946                             | aux Energies Alternatives                 |
| F16M 11/18                                   | (21) EP20203411.2                          | (72) RAVOT, Nicolas                       |
| (11) EP3164721                               | (47) 18.12.2024                            | GREGIS, Nicolas                           |
| (21) EP15738771.3                            | (22) 22.10.2020                            | NALINE, Baudouin                          |
| (47) 18.12.2024                              | (54) MEASUREMENT SYSTEM AND                | BLANCHART, Pierre                         |
| (87) NL2015050488                            | METHOD FOR DETERMINING A                   | (31) 2210081                              |
| 07.01.2016                                   | STATUS OF A POWER SYSTEM IN A              | (32) 03.10.2022                           |
| (22) 03.07.2015                              | VEHICLE USING THE MEASUREMENT              | (33) France                               |
| (54) METHOD OF POSITIONING A                 | SYSTEM                                     | (51) G01R 31/08                           |
| CARRIER ON A FLAT SURFACE,                   | (73) VOLVO TRUCK CORPORATION               | H02H 7/26                                 |
| ASSEMBLY OF A CARRIER AND                    | (72) NYSTRÖM, Mats                         | G01R 31/11                                |
| A POSITIONING MEMBER AND A                   | (51) G01R 19/165                           | H02H 1/00                                 |
| CARRIER                                      | G01R 31/00                                 | H02H 5/10                                 |
| (73) Nederlandse Organisatie voor toegepast- | G01R 31/396                                | (11) EP4052053                            |
| natuurwetenschappelijk onderzoek TNO         | G01R 31/52                                 | (21) EP20789813.1                         |
| (72) CROWCOMBE, William Edward               | (11) EP4191256                             | (47) 18.12.2024                           |
| SADEGHIAN MARNANI, Hamed                     | (21) EP22210219.6                          | (87) EP2020078666                         |
| WINTERS, Jasper                              | (47) 18.12.2024                            | 06.05.2021                                |
| KRAMER, Geerten Frans Ijsbrand               | (22) 29.11.2022                            | (22) 13.10.2020                           |
| VAN DEN DOOL, Teunis Cornelis                | (54) ELECTRIC LEAKAGE DETECTION            | (54) SYSTEM FOR MONITORING THE            |
| DEKKER, Albert                               | METHOD AND CIRCUIT                         | STATE OF A CABLE THROUGH                  |
| (31) 14175819                                | (73) Prime Planet Energy & Solutions, Inc. | DISTRIBUTED REFLECTOMETRY                 |
| (32) 04.07.2014                              | (72) FURUKAWA, Kimihiko                    | (73) Commissariat à l'Energie Atomique et |
| (33) European Patent Office (EPO)            | YANO, Junya                                | aux Energies Alternatives                 |
| (51) G01R 1/20                               | (31) 2021195289                            | (72) JACQUES, Marie-Bénédicte             |
| H01H 9/52                                    | (32) 01.12.2021                            | BEN HASSEN, Wafa                          |
| H01H 71/12                                   | (33) Japan                                 | CHASTANG, Cyril                           |
| H01H 39/00                                   | (51) G01R 27/26                            | (31) 1912139                              |
| G01R 19/165                                  | (11) EP4339628                             | (32) 29.10.2019                           |
| G01R 1/36                                    | (21) EP23194464.6                          | (33) France                               |
| B60L 3/00                                    | (47) 18.12.2024                            | (51) G01R 31/08                           |
| H01M 10/42                                   | (22) 31.08.2023                            | H02H 7/26                                 |
| H01M 10/48                                   | (54) MEASUREMENT SYSTEM, RELATED           | H02H 1/00                                 |
| H01M 50/583                                  | INTEGRATED CIRCUIT AND METHOD              | H02H 5/10                                 |
| (11) EP4148433                               | (73) STMicroelectronics S.r.l.             | (11) EP4052052                            |
| (21) EP21847084.7                            | (72) VAIANA, Michele                       | (21) EP20789603.6                         |
| (47) 18.12.2024                              | NICOLLINI, Germano                         | (47) 18.12.2024                           |
| (87) KR2021009064                            | (31) 202200019113                          | (87) EP2020078665                         |
| 27.01.2022                                   | (32) 19.09.2022                            | 06.05.2021                                |
| (22) 14.07.2021                              | (33) Italy                                 | (22) 13.10.2020                           |
| (54) CURRENT MEASUREMENT DEVICE              | (51) G01R 29/08                            | (54) SYSTEM FOR MONITORING THE            |
| (73) LG Energy Solution, Ltd.                | G01R 31/12                                 | STATE OF A CABLE THROUGH                  |
| (72) SONG, Hyeon-Jin                         | G01R 31/14                                 | DISTRIBUTED TRANSFEROMETRY                |
| (31) 20200089756                             |                                            |                                           |

|                                                                     |                                    |                                                   |
|---------------------------------------------------------------------|------------------------------------|---------------------------------------------------|
| (73) Commissariat à l'Energie Atomique et aux Energies Alternatives | (11) EP3152584                     | G01R 33/54                                        |
| (72) JACQUES, Marie-Bénédicte                                       | (21) EP15803553.5                  | (11) EP3415939                                    |
| RAVOT, Nicolas                                                      | (47) 18.12.2024                    | (21) EP17204636.9                                 |
| CHASTANG, Cyril                                                     | (87) FI2015050384                  | (47) 18.12.2024                                   |
| GIRAUD, Alain                                                       | 10.12.2015                         | (22) 30.11.2017                                   |
| (31) 1912140                                                        | (22) 03.06.2015                    | (54) SYSTEMS AND METHODS FOR                      |
| (32) 29.10.2019                                                     | (54) ACCUMULATOR STATE INDICATOR   | MAGNETIC RESONANCE SCANNING                       |
| (33) France                                                         | (73) CarDoc Oy                     | (73) Shanghai United Imaging Healthcare Co., Ltd. |
| (51) G01R 31/302                                                    | (72) JUVANI, Tapio                 | (72) Shen, Zhenhua                                |
| G01R 31/315                                                         | (31) 20145523                      | He, Qiang                                         |
| G06K 7/10                                                           | (32) 06.06.2014                    | (31) 201710456025                                 |
| (11) EP4075155                                                      | (33) Finland                       | (32) 16.06.2017                                   |
| (21) EP22020170.1                                                   | (51) G01R 31/382                   | (33) China                                        |
| (47) 18.12.2024                                                     | G01R 31/392                        | (51) G01R 33/28                                   |
| (22) 13.04.2022                                                     | G01R 31/36                         | G02B 5/08                                         |
| (54) METHOD AND MEASURING DEVICE                                    | (11) EP4090985                     | G02B 5/09                                         |
| FOR TESTING THE MATERIAL OF A                                       | (21) EP20754554.2                  | (11) EP4052060                                    |
| CARD-SHAPED DATA CARRIER                                            | (47) 18.12.2024                    | (21) EP20792426.7                                 |
| (73) Giesecke+Devrient ePayments GmbH                               | (87) US2020043662                  | (47) 18.12.2024                                   |
| (72) Baldischweiler, Michael                                        | 22.07.2021                         | (87) EP2020079415                                 |
| (31) 102021001965                                                   | (22) 27.07.2020                    | 06.05.2021                                        |
| (32) 14.04.2021                                                     | (54) MODEL-BASED CAPACITY AND      | (22) 20.10.2020                                   |
| (33) Germany                                                        | RESISTANCE CORRECTION FOR          | (54) MAGNETIC RESONANCE                           |
| (51) G01R 31/327                                                    | RECHARGEABLE BATTERY FUEL          | EXAMINATION SYSTEM WITH                           |
| H02H 7/08                                                           | GAUGING                            | MONITORING SYSTEM WITH A                          |
| H02P 27/08                                                          | (73) Medtronic, Inc.               | CAMERA AND A NON-METALLIC                         |
| (11) EP3355462                                                      | (72) JAIN, Gaurav                  | MIRROR                                            |
| (21) EP16848308.9                                                   | SCHMIDT, Craig L.                  | (73) Koninklijke Philips N.V.                     |
| (47) 18.12.2024                                                     | Ji, Gang                           | (72) WUELBERN, Jan, Hendrik                       |
| (87) JP2016004176                                                   | (31) 202016743769                  | LEUSSLER, Christoph, Günther                      |
| 30.03.2017                                                          | (32) 15.01.2020                    | SENEGAS, Julien, Thomas                           |
| (22) 14.09.2016                                                     | (33) United States of America      | WEISS, Steffen                                    |
| (54) MOTOR CONTROL DEVICE                                           | (51) G01R 31/3835                  | (31) 19205534                                     |
| (73) Panasonic Intellectual Property                                | G01R 31/385                        | (32) 28.10.2019                                   |
| Management Co., Ltd.                                                | G01R 31/389                        | (33) European Patent Office (EPO)                 |
| (72) SONODA, Daisuke                                                | G01R 31/392                        | (51) G01R 33/36                                   |
| WATABE, Ryuhei                                                      | (11) EP4139698                     | (11) EP3519841                                    |
| KISHIBE, Taro                                                       | (21) EP20722284.5                  | (21) EP17780359.0                                 |
| ICHIKAWA, Hideaki                                                   | (47) 18.12.2024                    | (47) 18.12.2024                                   |
| (31) 2015187775                                                     | (87) EP2020061445                  | (87) EP2017074629                                 |
| (32) 25.09.2015                                                     | 28.10.2021                         | 05.04.2018                                        |
| (33) Japan                                                          | (22) 24.04.2020                    | (22) 28.09.2017                                   |
| (51) G01R 31/34                                                     | (54) METHOD AND DEVICE FOR TESTING | (54) WIRELESS MAGNETIC RESONANCE                  |
| (11) EP4045924                                                      | A BATTERY STATE IN AT LEAST ONE    | ENERGY HARVESTING AND COIL                        |
| (21) EP20797676.2                                                   | BATTERY                            | DETUNING                                          |
| (47) 18.12.2024                                                     | (73) CMWTEC Technologie GmbH       | (73) Koninklijke Philips N.V.                     |
| (87) EP2020078951                                                   | (72) JACOBS, Michael               | (72) GANTI, Aasrith                               |
| 22.04.2021                                                          | ALI-OGALLI, Mohammed Radhi         | ORTIZ, Timothy                                    |
| (22) 14.10.2020                                                     | ZINGER, Erik                       | (31) 201662401326 P                               |
| (54) FAULT DETECTION IN                                             | (51) G01R 31/52                    | (32) 29.09.2016                                   |
| SYNCHRONOUS MACHINES                                                | H02M 7/487                         | (33) United States of America                     |
| (73) Norwegian University of Science and                            | G01R 31/42                         | (51) G01R 33/46                                   |
| Technology (NTNU)                                                   | H02M 7/00                          | G06N 3/04                                         |
| (72) NYSVEEN, Arne                                                  | (11) EP3602087                     | G06N 3/08                                         |
| EHYA, Hossein                                                       | (21) EP18717383.6                  | (11) EP4356153                                    |
| (31) 201914844                                                      | (47) 18.12.2024                    | (21) EP22713956.5                                 |
| (32) 14.10.2019                                                     | (87) EP2018059961                  | (47) 18.12.2024                                   |
| (33) United Kingdom                                                 | 25.10.2018                         | (87) EP2022056581                                 |
| (51) G01R 31/36                                                     | (22) 18.04.2018                    | 22.12.2022                                        |
| H01M 10/48                                                          | (54) SHORT CIRCUIT EVENT DETECTION | (22) 14.03.2022                                   |
| G08C 17/02                                                          | IN ELECTRICAL CONVERTER            | (54) SYSTEMS AND METHODS FOR                      |
| G01S 19/14                                                          | (73) ABB Schweiz AG                | PROVISIONING TRAINING DATA                        |
| H04Q 9/00                                                           | (72) SCHMID, Patrick               | TO ENABLE NEURAL NETWORKS                         |
| H01M 10/42                                                          | TRAUB, Felix                       | TO ANALYZE SIGNALS IN NMR                         |
| H01M 10/34                                                          | (31) 17167291                      | MEASUREMENTS                                      |
| G01R 31/371                                                         | (32) 20.04.2017                    | (73) Bruker Biospin GmbH & Co. KG                 |
| G01R 31/392                                                         | (33) European Patent Office (EPO)  | (72) LUX, Silvere                                 |
|                                                                     | (51) G01R 33/28                    |                                                   |

|                                       |                                     |                                        |
|---------------------------------------|-------------------------------------|----------------------------------------|
| (31) 21179968                         | (54) MAGNETIC RESONANCE IMAGING     | (11) EP3674740                         |
| (32) 17.06.2021                       | APPARATUS, IMAGE ANALYZER, AND      | (21) EP18847572.7                      |
| (33) European Patent Office (EPO)     | FLUID ANALYSIS METHOD               | (47) 18.12.2024                        |
| (51) G01R 33/48                       | (73) FUJIFILM Corporation           | (87) JP2018031017                      |
| G01R 33/565                           | (72) BITO, Yoshitaka                | 28.02.2019                             |
| A61B 6/12                             | OCHI, Hisaaki                       | (22) 22.08.2018                        |
| A61B 6/02                             | (31) 2022003914                     | (54) CONTROL DEVICE                    |
| A61B 6/08                             | (32) 13.01.2022                     | (73) Mitsubishi Electric Corporation   |
| A61B 34/10                            | (33) Japan                          | (72) YAMAGUCHI, Makoto                 |
| A61N 5/01                             | (51) G01R 33/58                     | MURASE, Fumiyoshi                      |
| G01R 33/563                           | G01R 33/34                          | HORIMOTO, Masanobu                     |
| A61B 6/50                             | G01R 33/54                          | (31) 2017160264                        |
| A61B 6/00                             | G01R 33/48                          | (32) 23.08.2017                        |
| A61N 5/10                             | (11) EP4170375                      | (33) Japan                             |
| G01R 33/28                            | (21) EP21203537.2                   | (51) G01S 5/02                         |
| (11) EP3661424                        | (47) 18.12.2024                     | (11) EP2643706                         |
| (21) EP18841177.1                     | (22) 19.10.2021                     | (21) EP11787900.7                      |
| (47) 18.12.2024                       | (54) MRI-PET SYSTEM FOR DETERMINING | (47) 18.12.2024                        |
| (87) US2018044475                     | THE POSITION OF AT LEAST ONE        | (87) EP2011071027                      |
| 07.02.2019                            | COIL IN A MAGNETIC RESONANCE        | 31.05.2012                             |
| (22) 31.07.2018                       | IMAGING                             | (22) 25.11.2011                        |
| (54) SYSTEM FOR RESPIRATORY GATED     | (73) Siemens Healthineers AG        | (54) FLIGHT GUIDANCE SYSTEM            |
| RADIOTHERAPY                          | (72) Schröter, Steffen              | (73) Meißner, Ute Marita               |
| (73) The Regents of the University of | Matschl, Volker                     | (72) MEISSNER, Ute Marita              |
| California                            | Sukkau, Johann                      | HAHN, Klaus-Uwe                        |
| (72) GINN, John, S.                   | (51) G01R 35/00                     | (31) 102010052474                      |
| LAMB, James, M.                       | (11) EP4001945                      | (32) 26.11.2010                        |
| LOW, Daniel, A.                       | (21) EP21204439.0                   | (33) Germany                           |
| (31) 201762538854 P                   | (47) 18.12.2024                     | (51) G01S 5/02                         |
| (32) 31.07.2017                       | (22) 25.10.2021                     | G08B 21/02                             |
| (33) United States of America         | (54) SYSTEMS AND METHODS FOR        | (11) EP3982147                         |
| (51) G01R 33/56                       | VERIFYING AND MAINTAINING           | (21) EP20200389.3                      |
| A61B 6/00                             | ACCURACY OF METERING DEVICES        | (47) 18.12.2024                        |
| A61B 8/00                             | (73) Schneider Electric USA, Inc.   | (22) 06.10.2020                        |
| (11) EP4332601                        | (72) Anderson, David P.             | (54) SYSTEM FOR DETERMINING AND        |
| (21) EP22193834.3                     | (31) 202017096503                   | DISPLAYING POSITION-DEPENDENT          |
| (47) 18.12.2024                       | (32) 12.11.2020                     | DATA FROM SENSOR TRANSMITTERS          |
| (22) 05.09.2022                       | (33) United States of America       | RELATIVE TO EACH RECEIVING             |
| (54) GENERATION OF ARTIFICIAL         | (51) G01S 1/04                      | STATION                                |
| CONTRAST AGENT-ENHANCED               | G01S 5/02                           | (73) MC-Technologies GmbH              |
| RADIOLOGICAL RECORDINGS               | H04W 4/02                           | (72) Bannach, Matthias                 |
| (73) Bayer AG                         | H04W 64/00                          | (51) G01S 7/288                        |
| (72) PIETSCH, Hubertus                | H04B 7/06                           | G01S 7/295                             |
| KNOBLOCH, Gesine                      | H04L 5/00                           | G01S 7/52                              |
| JOST, Gregor                          | (11) EP3907519                      | G01S 13/10                             |
| LIENERTH, Christian                   | (21) EP21181854.7                   | G01S 13/28                             |
| LENGA, Matthias                       | (47) 18.12.2024                     | G01S 13/42                             |
| KREIS, Felix, Karl                    | (22) 27.06.2018                     | G01S 13/89                             |
| SCHÜTZ, Gunnar                        | (54) SYSTEMS AND METHODS            | G01S 15/02                             |
| BALTRUSCHAT, Ivo, Matteo              | TO FACILITATE LOCATION              | G01S 15/10                             |
| (51) G01R 33/561                      | DETERMINATION BY BEAMFORMING        | G01S 15/89                             |
| G01R 33/48                            | OF A POSITIONING REFERENCE          | G01S 17/02                             |
| (11) EP3683595                        | SIGNAL                              | (11) EP3665500                         |
| (21) EP19151853.9                     | (73) QUALCOMM Incorporated          | (21) EP18844084.6                      |
| (47) 18.12.2024                       | (72) EDGE, Stephen William          | (47) 18.12.2024                        |
| (22) 15.01.2019                       | FISCHER, Sven                       | (87) US2018045625                      |
| (54) SEGMENT-SPECIFIC                 | PON, Rayman                         | 14.02.2019                             |
| UNDERSAMPLING IN READOUT-             | (31) 201815866538                   | (22) 07.08.2018                        |
| SEGMENTED MAGNETIC                    | 201762538952 P                      | (54) SENSOR ARRAY IMAGING DEVICE       |
| RESONANCE IMAGING                     | (32) 10.01.2018                     | (73) Georgia Tech Research Corporation |
| (73) Siemens Healthineers AG          | 31.07.2017                          | (72) PONNATHPUR NAGENDRA, Skanda       |
| (72) Liebig, Patrick                  | (33) United States of America       | Prasad                                 |
| Heidemann, Robin                      | United States of America            | BARNES, Christopher, Floyd             |
| (51) G01R 33/563                      | (51) G01S 3/42                      | (31) 201762543128 P                    |
| (11) EP4212900                        | H01Q 3/08                           | (32) 09.08.2017                        |
| (21) EP22211518.0                     | H01Q 25/02                          | (33) United States of America          |
| (47) 18.12.2024                       | G01S 3/32                           | (51) G01S 7/40                         |
| (22) 05.12.2022                       | G01S 3/02                           |                                        |



|                                   |                                     |                                            |
|-----------------------------------|-------------------------------------|--------------------------------------------|
| G01S 13/931                       | G01S 7/493                          | (11) EP3540462                             |
| G01S 13/76                        | G01S 17/894                         | (21) EP19162917.9                          |
| (11) EP4078214                    | G01S 7/4911                         | (47) 18.12.2024                            |
| (21) EP21711764.7                 | G01S 17/931                         | (22) 14.03.2019                            |
| (47) 18.12.2024                   | G02F 1/01                           | (54) COHERENCE CHANGE DETECTION            |
| (87) EP2021055136                 | (11) EP4133303                      | TECHNIQUES                                 |
| 30.09.2021                        | (21) EP21737311.7                   | (73) Elta Systems Ltd.                     |
| (22) 02.03.2021                   | (47) 18.12.2024                     | (72) ABRAHAM, Michael                      |
| (54) SYSTEM FOR MONITORING A      | (87) US2021037006                   | (31) 25811918                              |
| TRAFFIC SITUATION                 | 16.12.2021                          | (32) 14.03.2018                            |
| (73) Robert Bosch GmbH            | (22) 11.06.2021                     | (33) Israel                                |
| (72) FIEGE, Ludger                | (54) LIDAR PIXEL WITH ACTIVE        | (51) G01S 19/44                            |
| POPRAWA, Florian                  | POLARIZATION CONTROL                | (11) EP3430430                             |
| SCHMID, Rolf                      | (73) Aurora Operations, Inc.        | (21) EP17767183.1                          |
| (31) 102020203715                 | (72) MICHAELS, Andrew, Steil        | (47) 18.12.2024                            |
| (32) 23.03.2020                   | LIN, Sen                            | (87) US2017021548                          |
| (33) Germany                      | (31) 202117344386                   | 21.09.2017                                 |
| (51) G01S 7/48                    | 202063038452 P                      | (22) 09.03.2017                            |
| B60W 50/02                        | (32) 10.06.2021                     | (54) SATELLITE NAVIGATION RECEIVER         |
| B60W 60/00                        | 12.06.2020                          | WITH IMPROVED AMBIGUITY                    |
| G01S 13/86                        | (33) United States of America       | RESOLUTION                                 |
| G01S 13/931                       | United States of America            | (73) Deere & Company                       |
| G01S 17/86                        | (51) G01S 7/481                     | (72) ZEITZEW, Michael, A.                  |
| G01S 17/931                       | G02B 6/10                           | DAI, Liwen, L.                             |
| B60W 50/029                       | F21V 8/00                           | (31) 201615281012                          |
| G01M 17/007                       | G01S 17/10                          | 201662310297 P                             |
| G06V 20/58                        | G02B 5/09                           | (32) 29.09.2016                            |
| (11) EP3945338                    | G02B 6/00                           | 18.03.2016                                 |
| (21) EP21185711.5                 | G01S 7/4863                         | (33) United States of America              |
| (47) 18.12.2024                   | (11) EP3841394                      | United States of America                   |
| (22) 15.07.2021                   | (21) EP19865408.9                   | (51) G01T 1/24                             |
| (54) ENVIRONMENT RECOGNITION      | (47) 18.12.2024                     | G01T 1/29                                  |
| DEVICE FOR AN AUTOMATED           | (87) US2019051982                   | (11) EP2921882                             |
| DRIVING SYSTEM                    | 02.04.2020                          | (21) EP13814664.2                          |
| (73) ZF Friedrichshafen AG        | (22) 19.09.2019                     | (47) 18.12.2024                            |
| (72) Bollmann, Martin             | (54) WAVEGUIDE DIFFUSERS FOR LIDARS | (87) PT2013000067                          |
| Ruchti, Martin                    | (73) WAYMO LLC                      | 22.05.2014                                 |
| Hinsberger, Arno                  | (72) Shepard, Ralph, Hamilton       | (22) 18.11.2013                            |
| Rinkenauer, Stefan                | HUTCHISON, David, Neil              | (54) READING DEVICE AND METHOD             |
| (31) 102020209680                 | DROZ, Pierre-Yves                   | FOR MEASURING ENERGY AND                   |
| (32) 31.07.2020                   | GOLSHAN, Nathaniel                  | FLIGHT TIME USING SILICON                  |
| (33) Germany                      | DUNPHY, James                       | PHOTOMULTIPLIERS                           |
| (51) G01S 7/48                    | (31) 201816140535                   | (73) Petsys - Medical Pet Imaging Systems, |
| G01S 7/481                        | (32) 25.09.2018                     | S.A.                                       |
| G01S 7/4911                       | (33) United States of America       | (72) RIVETTI, Angelo                       |
| G01S 7/493                        | (51) G01S 7/484                     | DA ROCHA ROLO, Manuel Dionísio             |
| G01S 17/04                        | G01S 7/481                          | MARQUES BUGALHO, Ricardo                   |
| G01S 17/32                        | G01S 17/93                          | Alexandre                                  |
| G01S 17/88                        | G01S 17/89                          | COELHO DAS SANTOS VARELA, João             |
| G01S 17/95                        | G01S 7/486                          | Manuel                                     |
| (11) EP3956677                    | G01S 17/931                         | (31) 2013106650 U                          |
| (21) EP20751258.3                 | G01S 7/497                          | (32) 19.11.2012                            |
| (47) 18.12.2024                   | G01S 17/10                          | (33) Portugal                              |
| (87) GB2020051816                 | G01S 17/42                          | (51) G01V 7/02                             |
| 11.02.2021                        | (11) EP3695247                      | G01P 15/08                                 |
| (22) 29.07.2020                   | (21) EP19867968.0                   | (11) EP3983829                             |
| (54) RAPIDLY TUNEABLE DIODE LIDAR | (47) 18.12.2024                     | (21) EP20734280.9                          |
| (73) QLM Technology Ltd           | (87) US2019050514                   | (47) 18.12.2024                            |
| (72) Ai, Xiao                     | 02.04.2020                          | (87) GB2020051434                          |
| TITCHENER, James                  | (22) 11.09.2019                     | 17.12.2020                                 |
| (31) 201911081                    | (54) TERRAIN ADAPTIVE PULSE POWER   | (22) 12.06.2020                            |
| (32) 02.08.2019                   | IN A SCANNING LIDAR                 | (54) QUANTUM GRAVIMETERS AND               |
| (33) United Kingdom               | (73) Waymo LLC                      | GRADIOMETERS                               |
| (51) G01S 7/481                   | (72) SHAND, Mark, Alexander         | (73) University of Southampton             |
| G01S 7/499                        | (31) 201816145647                   | (72) RÄTZEL, Dennis                        |
| G01S 7/4912                       | (32) 28.09.2018                     | FUENTES, Ivette                            |
| G01S 17/34                        | (33) United States of America       | IBARRA, Tupac Bravo                        |
| G01S 17/42                        | (51) G01S 13/90                     | BRUSCHI, David Edward                      |

|                                     |                                             |                                    |
|-------------------------------------|---------------------------------------------|------------------------------------|
| (31) 202000112                      | BY A THICK LOW REFRACTIVE INDEX             | Japan                              |
| 201908538                           | HARD COAT                                   | (51) G02B 5/20                     |
| (32) 06.01.2020                     | (73) Essilor International                  | G02B 5/08                          |
| 13.06.2019                          | (72) JIANG, Peiqi                           | F21S 2/00                          |
| (33) United Kingdom                 | BITEAU, John                                | G02F 1/13357                       |
| United Kingdom                      | (31) 20315189                               | F21V 7/00                          |
| (51) G01V 11/00                     | (32) 17.04.2020                             | F21Y 105/16                        |
| (11) EP2912497                      | (33) European Patent Office (EPO)           | F21V 7/22                          |
| (21) EP13848286.4                   | (51) G02B 3/00                              | F21Y 115/10                        |
| (47) 18.12.2024                     | G02B 21/00                                  | F21V 9/08                          |
| (87) US2013066058                   | (11) EP3482238                              | F21Y 115/15                        |
| 01.05.2014                          | (21) EP17745220.8                           | F21V 1/17                          |
| (22) 22.10.2013                     | (47) 18.12.2024                             | F21Y 115/20                        |
| (54) DISTRIBUTING PETROFACIES USING | (87) US2017041393                           | G02B 5/26                          |
| ANALYTICAL MODELING                 | 18.01.2018                                  | G02B 5/28                          |
| (73) Landmark Graphics Corporation  | (22) 10.07.2017                             | G02B 5/30                          |
| (72) YARUS, Jeffrey M.              | (54) THREE-DIMENSIONAL IMAGING              | B29C 55/02                         |
| (31) 201261718893 P                 | USING SWEPT, CONFOCALLY                     | (11) EP3537187                     |
| (32) 26.10.2012                     | ALIGNED PLANAR EXCITATION WITH              | (21) EP17867291.1                  |
| (33) United States of America       | AN IMAGE RELAY                              | (47) 18.12.2024                    |
| (51) G02B 1/00                      | (73) The Trustees of Columbia University in | (87) JP2017036842                  |
| G02B 5/00                           | the City of New York                        | 11.05.2018                         |
| G02B 5/18                           | (72) HILLMAN, Elizabeth Marjorie Clare      | (22) 11.10.2017                    |
| G02B 13/16                          | (31) 201662360460 P                         | (54) LIGHT SOURCE UNIT             |
| (11) EP4174531                      | (32) 10.07.2016                             | (73) Toray Industries, Inc.        |
| (21) EP22203213.8                   | (33) United States of America               | (72) GOUDA, Wataru                 |
| (47) 18.12.2024                     | (51) G02B 5/02                              | UTO, Takayuki                      |
| (22) 24.10.2022                     | G02B 27/01                                  | (31) 2016216898                    |
| (54) APPARATUS AND METHODE FOR      | (11) EP4031928                              | (32) 07.11.2016                    |
| A VISION SYSTEM HAVING A            | (21) EP20761057.7                           | (33) Japan                         |
| TRANSPARENT DISPLAY AND A           | (47) 18.12.2024                             | (51) G02B 6/255                    |
| DIFFRACTIVE, PLANAR LENS            | (87) US2020045539                           | (11) EP3757636                     |
| (73) L3Harris Technologies, Inc.    | 25.03.2021                                  | (21) EP18749283.0                  |
| (72) Becker, Jacob J.               | (22) 08.08.2020                             | (47) 18.12.2024                    |
| Burnsed, Jon D.                     | (54) VARIFOCAI POLARIZATION                 | (87) JP2018015862                  |
| (31) 202117514905                   | SENSITIVE DIFFUSIVE DISPLAY                 | 29.08.2019                         |
| (32) 29.10.2021                     | (73) Meta Platforms Technologies, LLC       | (22) 17.04.2018                    |
| (33) United States of America       | (72) LU, Lu                                 | (54) OPTICAL FIBER FUSION SPLICING |
| (51) G02B 1/14                      | LI, Yunqi                                   | DEVICE                             |
| C09D 4/00                           | LI, Gang                                    | (73) FUJIKURA LTD.                 |
| C09D 5/20                           | WANG, Mengfei                               | (72) KAWANISHI, Noriyuki           |
| (11) EP3475740                      | (31) 201916714441                           | IWAMATSU, Makoto                   |
| (21) EP17726588.1                   | 201962902831 P                              | (31) 2018029156                    |
| (47) 18.12.2024                     | 201962902823 P                              | (32) 21.02.2018                    |
| (87) EP2017062237                   | (32) 13.12.2019                             | (33) Japan                         |
| 28.12.2017                          | 19.09.2019                                  | (51) G02B 6/38                     |
| (22) 22.05.2017                     | 19.09.2019                                  | (11) EP3811136                     |
| (54) TEMPORARY PROTECTIVE LACQUER   | (33) United States of America               | (21) EP19821812.5                  |
| FOR OPTICAL ELEMENT                 | United States of America                    | (47) 18.12.2024                    |
| (73) Tooz Technologies GmbH         | United States of America                    | (87) US2019037955                  |
| (72) KRIEG, Matthias                | (51) G02B 5/02                              | 26.12.2019                         |
| PÜTZ, Jörg                          | G02B 27/01                                  | (22) 19.06.2019                    |
| WEIPPERT, Hans-Joachim              | (11) EP4075172                              | (54) MULTI-FIBER FIBER OPTIC       |
| (31) 102016111418                   | (21) EP22163148.4                           | CONNECTOR HAVING ENHANCED          |
| (32) 22.06.2016                     | (47) 18.12.2024                             | FUNCTIONALITY                      |
| (33) Germany                        | (22) 21.03.2022                             | (73) CommScope Technologies LLC    |
| (51) G02B 3/00                      | (54) HEAD MOUNTED DISPLAY,                  | (72) LU, Yu                        |
| G02B 1/14                           | LOUVER, OPTICAL DEVICE, AND                 | (31) 201862687163 P                |
| B29D 11/00                          | MANUFACTURING METHOD OF                     | (32) 19.06.2018                    |
| G02C 7/02                           | LOUVER                                      | (33) United States of America      |
| (11) EP4136484                      | (73) CANON KABUSHIKI KAISHA                 | (51) G02B 6/38                     |
| (21) EP21718877.0                   | (72) GENDA, Hideo                           | G01J 3/02                          |
| (47) 18.12.2024                     | TATSUMI, Shumpei                            | G01J 3/28                          |
| (87) EP2021059725                   | (31) 2022014027                             | A61B 5/00                          |
| 21.10.2021                          | 2021046946                                  | G01N 21/27                         |
| (22) 15.04.2021                     | (32) 01.02.2022                             | (11) EP3132295                     |
| (54) LENS WITH SURFACE              | 22.03.2021                                  | (21) EP15714504.6                  |
| MICROSTRUCTURES ENCAPSULATED        | (33) Japan                                  | (47) 18.12.2024                    |

|                                             |                                      |                                   |
|---------------------------------------------|--------------------------------------|-----------------------------------|
| (87) EP2015057435<br>22.10.2015             | (33) United States of America        | (21) EP18792683.7                 |
| (22) 07.04.2015                             | (51) G02B 6/44                       | (47) 18.12.2024                   |
| (54) OPTICAL FIBER CALIBRATION<br>CONNECTOR | H02G 3/08                            | (87) US2018053600                 |
| (73) Koninklijke Philips N.V.               | H02B 1/38                            | 06.06.2019                        |
| (72) KNOESTER, Jaap                         | (11) EP3936914                       | (22) 28.09.2018                   |
| LUCASSEN, Gerhardus Wilhelmus               | (21) EP21179177.7                    | (54) MULTI-MATERIAL MIRROR SYSTEM |
| VAN ROOIJ, Johannes Antonius                | (47) 18.12.2024                      | (73) Raytheon Company             |
| HENDRIKS, Bernardus Hendrikus               | (22) 14.06.2021                      | (72) SILNY, John F.               |
| Wilhelmus                                   | (54) BOX FOR CABLES                  | CARRIGAN, Keith                   |
| WIJBRANS, Klaas Cornelis Jan                | (73) Prysmian S.p.A.                 | (31) 201715828223                 |
| REICH, Christian                            | (72) PADDICK, Nathan                 | (32) 30.11.2017                   |
| (31) 201461980164 P                         | (31) 202000015466                    | (33) United States of America     |
| 14198423                                    | (32) 26.06.2020                      | (51) G02B 7/182                   |
| 14167748                                    | (33) Italy                           | F21S 10/06                        |
| (32) 16.04.2014                             | (51) G02B 7/04                       | (11) EP4034929                    |
| 17.12.2014                                  | G03B 5/00                            | (21) EP20788722.5                 |
| 09.05.2014                                  | H02N 2/04                            | (47) 18.12.2024                   |
| (33) United States of America               | G02B 7/08                            | (87) EP2020076998                 |
| European Patent Office (EPO)                | H02N 2/02                            | 01.04.2021                        |
| European Patent Office (EPO)                | (11) EP3913415                       | (22) 25.09.2020                   |
| (51) G02B 6/44                              | (21) EP19910219.5                    | (54) OPTICAL DEVICE AND MODULE    |
| G02B 6/38                                   | (47) 18.12.2024                      | COMPRISING SUCH AN OPTICAL        |
| (11) EP4187297                              | (87) JP2019050347                    | DEVICE, BOTH INTENDED FOR A       |
| (21) EP22208987.2                           | 23.07.2020                           | LIGHTING DEVICE, ENABLING THE     |
| (47) 18.12.2024                             | (22) 23.12.2019                      | CREATION OF LIGHTING EFFECTS      |
| (22) 23.11.2022                             | (54) OPTICAL DEVICE ACTUATOR AND     | (73) Arteffect                    |
| (54) FIBER OPTIC TERMINAL HAVING            | LENS BARREL PROVIDED WITH SAME       | (72) COMPERAT, Charles            |
| ONE OR MORE CONNECTION PORTS                | (73) Panasonic Intellectual Property | NATCHOO, Philippe                 |
| FOR RECEIVING FIBER OPTIC                   | Management Co., Ltd.                 | BLATRIX, Simon                    |
| CONNECTORS HAVING A LATCHING                | (72) MORITA, Tetsuya                 | STRAZIELLE, Sylvain               |
| TRIGGER                                     | SAKAKIBARA, Takeshi                  | (31) 1910667                      |
| (73) Corning Research & Development         | YOSHIKAWA, Naoki                     | (32) 26.09.2019                   |
| Corporation                                 | UMEDA, Makoto                        | (33) France                       |
| (72) Ruda, Michal                           | ENOMOTO, Tatsuhiko                   | (51) G02B 19/00                   |
| Ciechomski, Tomasz Andrzej                  | (31) 2019006701                      | (11) EP3737986                    |
| (31) 202163282747 P                         | (32) 18.01.2019                      | (21) EP19705782.1                 |
| (32) 24.11.2021                             | (33) Japan                           | (47) 18.12.2024                   |
| (33) United States of America               | (51) G02B 7/09                       | (87) GB2019050076                 |
| (51) G02B 6/44                              | G03B 13/36                           | 18.07.2019                        |
| G02B 6/50                                   | G02B 7/28                            | (22) 11.01.2019                   |
| (11) EP2796910                              | G03B 5/00                            | (54) ILLUMINATION APPARATUS       |
| (21) EP13178960.4                           | (11) EP3879327                       | (73) Optovate Limited             |
| (47) 18.12.2024                             | (21) EP19882004.5                    | (72) WOODGATE, Graham             |
| (22) 01.08.2013                             | (47) 18.12.2024                      | HARROLD, Jonathan                 |
| (54) End cap                                | (87) KR2019014444                    | (31) 201800574                    |
| (73) Stark, Elena                           | 14.05.2020                           | (32) 14.01.2018                   |
| (72) Stark, Elena                           | (22) 30.10.2019                      | (33) United Kingdom               |
| (31) 102013104206                           | (54) LENS DRIVING DEVICE, AND CAMERA | (51) G02B 19/00                   |
| (32) 25.04.2013                             | MODULE INCLUDING SAME                | F24S 23/74                        |
| (33) Germany                                | (73) LG Innotek Co., Ltd.            | H04B 10/116                       |
| (51) G02B 6/44                              | (72) PARK, Tae Bong                  | (11) EP4222547                    |
| H02G 3/08                                   | KIM, Kyung Hwan                      | (21) EP21790950.6                 |
| (11) EP3776046                              | LEE, Seung Hak                       | (47) 18.12.2024                   |
| (21) EP19725786.8                           | LEE, Kap Jin                         | (87) FR2021051612                 |
| (47) 18.12.2024                             | (31) 20190031895                     | 07.04.2022                        |
| (87) US2019024903                           | 20190016806                          | (22) 21.09.2021                   |
| 10.10.2019                                  | 20180135008                          | (54) METHOD FOR DESIGNING A       |
| (22) 29.03.2019                             | (32) 20.03.2019                      | CORRECTABLE EXPANDED              |
| (54) ENTRY MODULE ASSEMBLY                  | 13.02.2019                           | COMPOUND PARABOLIC                |
| (73) Corning Research & Development         | 06.11.2018                           | CONCENTRATOR (ECPC) FOR           |
| Corporation                                 | (33) Korea (Republic)                | COLLECTING LIGHT IN THE NEAR      |
| (72) KLAK, Robert Tomasz                    | Korea (Republic)                     | FIELD                             |
| GIRAUD, William Julius McPhil               | Korea (Republic)                     | (73) Oledcomm                     |
| KINGSBURY, Brian Duane                      | (51) G02B 7/18                       | (72) ESPINOZA-GARCIA, Alejandro   |
| (31) 201862652694 P                         | G02B 7/183                           | VALENCIA-ESTRADA, Juan Camilo     |
| (32) 04.04.2018                             | G02B 7/00                            | (31) 2010004                      |
|                                             | G02B 23/16                           | (32) 30.09.2020                   |
|                                             | (11) EP3717950                       | (33) France                       |

|                                      |                                      |                                           |
|--------------------------------------|--------------------------------------|-------------------------------------------|
| (51) G02B 21/00                      | (31) 111101066                       | ZHAO, Xingming                            |
| G02F 1/33                            | (32) 11.01.2022                      | TIAN, Kehan                               |
| (11) EP3066512                       | (33) Taiwan, Chinese Taipei          | (31) 202210254157                         |
| (21) EP14796073.6                    | (51) G02B 27/01                      | (32) 15.03.2022                           |
| (47) 18.12.2024                      | (11) EP3673316                       | (33) China                                |
| (87) EP2014074076                    | (21) EP18762798.9                    | (51) G02B 27/01                           |
| 14.05.2015                           | (47) 18.12.2024                      | G02B 27/00                                |
| (22) 07.11.2014                      | (87) EP2018072757                    | G02B 27/28                                |
| (54) ADJUSTABLE SPEED FAST LASER     | 28.02.2019                           | (11) EP3921694                            |
| SCANNING SYSTEM AND TWO-             | (22) 23.08.2018                      | (21) EP20703461.2                         |
| PHOTON MICROSCOPE ASSOCIATED         | (54) CURVED LIGHT GUIDE, IMAGING     | (47) 18.12.2024                           |
| (73) Centre National de la Recherche | OPTICAL UNIT AND HMD                 | (87) EP2020052864                         |
| Scientifique (C.N.R.S.)              | (73) Tooz Technologies GmbH          | 13.08.2020                                |
| INSTITUT NATIONAL DE LA SANTE        | (72) MÜNZ, Holger                    | (22) 05.02.2020                           |
| ET DE LA RECHERCHE MEDICALE          | (31) 102017119440                    | (54) DISPLAY UNIT AND INSTRUMENT          |
| (INSERM)                             | (32) 24.08.2017                      | CLUSTER                                   |
| Ecole Normale Supérieure             | (33) Germany                         | (73) Valeo Comfort and Driving Assistance |
| (72) MATHIEU, Benjamin               | (51) G02B 27/01                      | (72) IRZYK, Michael                       |
| DIEUDONNE, Stéphane                  | (11) EP3977195                       | (31) 1901219                              |
| (31) 13306533                        | (21) EP20742890.5                    | (32) 07.02.2019                           |
| (32) 08.11.2013                      | (47) 18.12.2024                      | (33) France                               |
| (33) European Patent Office (EPO)    | (87) IB2020054996                    | (51) G02B 27/09                           |
| (51) G02B 26/06                      | 03.12.2020                           | G01B 11/25                                |
| G02B 21/00                           | (22) 27.05.2020                      | G01B 11/14                                |
| (11) EP4049080                       | (54) PROJECTION SYSTEM FOR           | G01S 3/783                                |
| (21) EP20800723.7                    | VEHICLES AND RELATED                 | G01S 17/46                                |
| (47) 18.12.2024                      | PROJECTION METHOD                    | G01C 3/02                                 |
| (87) IB2020059625                    | (73) MTA S.p.A.                      | G01S 7/481                                |
| 29.04.2021                           | (72) BOTTI, Emanuele Alfredo         | (11) EP4042234                            |
| (22) 14.10.2020                      | CASARI, Stefano                      | (21) EP20800554.6                         |
| (54) OPTICAL SYSTEM                  | PORCARO, Luca Francesco              | (47) 18.12.2024                           |
| (73) Dynamic Optics S.r.l.           | (31) 201900007278                    | (87) EP2020077915                         |
| (72) BONORA, Stefano                 | (32) 27.05.2019                      | 15.04.2021                                |
| (31) 201900019235                    | (33) Italy                           | (22) 06.10.2020                           |
| (32) 21.10.2019                      | (51) G02B 27/01                      | (54) PROJECTOR FOR ILLUMINATING AT        |
| (33) Italy                           | G01C 21/36                           | LEAST ONE OBJECT                          |
| (51) G02B 26/10                      | G08G 1/16                            | (73) trinamiX GmbH                        |
| G02B 26/08                           | (11) EP3559725                       | (72) CLAUS, Daniel                        |
| H10N 30/20                           | (21) EP17792002.2                    | HIBST, Raimund                            |
| (11) EP4209824                       | (47) 18.12.2024                      | SCHICK, Jens                              |
| (21) EP21864012.6                    | (87) EP2017076373                    | RUSS, Detlef                              |
| (47) 18.12.2024                      | 28.06.2018                           | (31) 19201691                             |
| (87) JP2021028498                    | (22) 16.10.2017                      | (32) 07.10.2019                           |
| 10.03.2022                           | (54) HEAD-UP DISPLAY DEVICE FOR      | (33) European Patent Office (EPO)         |
| (22) 30.07.2021                      | A MOTOR VEHICLE, METHOD,             | (51) G02B 27/10                           |
| (54) MICROMIRROR DEVICE AND OPTICAL  | DEVICE AND COMPUTER-READABLE         | G02B 26/08                                |
| SCANNING APPARATUS                   | RECORDING MEDIUM WITH                | (11) EP4109167                            |
| (73) FUJIFILM Corporation            | INSTRUCTIONS FOR CONTROLLING         | (21) EP22179931.5                         |
| (72) AOSHIMA, Keisuke                | A DISPLAY OF A HEAD-UP DISPLAY       | (47) 18.12.2024                           |
| NAONO, Takayuki                      | DEVICE                               | (22) 20.06.2022                           |
| (31) 2020149130                      | (73) Volkswagen Aktiengesellschaft   | (54) OPTICAL PATH CONTROL                 |
| (32) 04.09.2020                      | (72) BAGSCHIK, Silke                 | APPARATUS, DISPLAY APPARATUS,             |
| (33) Japan                           | LASSOTA, Andreas                     | AND METHOD OF CONTORLLING                 |
| (51) G02B 27/00                      | (31) 102016225639                    | OPTICAL PATH                              |
| G02B 7/02                            | (32) 20.12.2016                      | (73) JVCKenwood Corporation               |
| (11) EP4209825                       | (33) Germany                         | (72) TAKADA, Hiroyuki                     |
| (21) EP22186959.7                    | (51) G02B 27/01                      | (31) 2021103353                           |
| (47) 18.12.2024                      | G02B 5/18                            | 2021103275                                |
| (22) 26.07.2022                      | F21V 8/00                            | 2021102973                                |
| (54) DEFROSTING LENS                 | (11) EP4261596                       | (32) 22.06.2021                           |
| (73) Calin Technology Co., Ltd.      | (21) EP23161875.2                    | 22.06.2021                                |
| (72) TSAI, Meng-Chien                | (47) 18.12.2024                      | 22.06.2021                                |
| HSIAO, Chih-Yung                     | (22) 14.03.2023                      | (33) Japan                                |
| CHENG, Yi-Hsung                      | (54) DIFFRACTIVE OPTICAL WAVEGUIDE   | Japan                                     |
| LEE, Shu-Ming                        | AND DISPLAY                          | Japan                                     |
| TSENG, Chi-Jui                       | (73) Jiaxing Uphoton Optoelectronics | (51) G02B 27/34                           |
| LIN, Hong-Yen                        | Technology Co., Ltd.                 | F41G 1/38                                 |
| LI, Cyuan-Cong                       | (72) FAN, Zhentao                    | F41G 1/34                                 |

|                                                                                                   |                                                            |                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G02B 23/10                                                                                        | (32) 27.10.2021                                            | 17.05.2018                                                                                                                                                       |
| G02B 23/14                                                                                        | (33) United States of America                              | (22) 13.10.2017                                                                                                                                                  |
| (11) EP3762676                                                                                    | (51) G02F 1/133                                            | (54) DISPLAY DEVICE                                                                                                                                              |
| (21) EP19765114.4                                                                                 | G02F 1/1333                                                | (73) Seoul Semiconductor Co., Ltd.                                                                                                                               |
| (47) 18.12.2024                                                                                   | G06F 1/16                                                  | (72) KIM, Eun Ju                                                                                                                                                 |
| (87) US2019020720                                                                                 | G06V 40/13                                                 | (31) 201662436553 P                                                                                                                                              |
| 12.09.2019                                                                                        | (11) EP4009229                                             | 201662422157 P                                                                                                                                                   |
| (22) 05.03.2019                                                                                   | (21) EP20856723.0                                          | 201662421454 P                                                                                                                                                   |
| (54) RETICLE WITH FIBER OPTIC ILLUMINATION                                                        | (47) 18.12.2024                                            | (32) 20.12.2016                                                                                                                                                  |
| (73) Sheltered Wings, Inc. D/b/a/ Vortex Optics                                                   | (87) CN2020107769                                          | 15.11.2016                                                                                                                                                       |
| (72) HAMILTON, Samuel J.                                                                          | 04.03.2021                                                 | 14.11.2016                                                                                                                                                       |
| HAMILTON, David M.                                                                                | (22) 07.08.2020                                            | (33) United States of America                                                                                                                                    |
| (31) 201862638549 P                                                                               | (54) DISPLAY MODULE AND ELECTRONIC DEVICE                  | United States of America                                                                                                                                         |
| (32) 05.03.2018                                                                                   | (73) Vivo Mobile Communication Co., Ltd.                   | United States of America                                                                                                                                         |
| (33) United States of America                                                                     | (72) MIAO, Guosheng                                        | (51) G02F 1/13357                                                                                                                                                |
| (51) G02B 27/62                                                                                   | (31) 201910806711                                          | H01L 33/58                                                                                                                                                       |
| G01M 11/02                                                                                        | (32) 29.08.2019                                            | H01L 33/62                                                                                                                                                       |
| (11) EP4018251                                                                                    | (33) China                                                 | H05K 1/02                                                                                                                                                        |
| (21) EP20757808.9                                                                                 | (51) G02F 1/1335                                           | H05K 3/28                                                                                                                                                        |
| (47) 18.12.2024                                                                                   | G02F 1/137                                                 | (11) EP4163714                                                                                                                                                   |
| (87) US2020045110                                                                                 | G02F 1/1333                                                | (21) EP21882950.5                                                                                                                                                |
| 04.03.2021                                                                                        | (11) EP3640719                                             | (47) 18.12.2024                                                                                                                                                  |
| (22) 06.08.2020                                                                                   | (21) EP18818662.1                                          | (87) KR2021002823                                                                                                                                                |
| (54) OPTICAL ASSEMBLIES AND APPARATUSES AND METHODS FOR ALIGNING COMPONENTS OF OPTICAL ASSEMBLIES | (47) 18.12.2024                                            | 28.04.2022                                                                                                                                                       |
| (73) Corning Incorporated                                                                         | (87) CN2018090614                                          | (22) 08.03.2021                                                                                                                                                  |
| (72) MCMASTER, Brian Monroe                                                                       | 20.12.2018                                                 | (54) DISPLAY DEVICE                                                                                                                                              |
| GREJDA, Robert Dennis                                                                             | (22) 11.06.2018                                            | (73) Samsung Electronics Co., Ltd.                                                                                                                               |
| MAGIERSKI, Kevin John                                                                             | (54) LIQUID CRYSTAL DISPLAY DEVICE AND APPLICATION THEREOF | (72) JANG, Hyukjun                                                                                                                                               |
| MCMICHAEL, Todd Robert                                                                            | (73) Jiangsu Hecheng Display Technology Co., Ltd.          | LEE, Kyehoon                                                                                                                                                     |
| (31) 201962902667 P                                                                               | (72) LI, Pengfei                                           | (31) 20200138630                                                                                                                                                 |
| 201962891055 P                                                                                    | DING, Wenquan                                              | (32) 23.10.2020                                                                                                                                                  |
| (32) 19.09.2019                                                                                   | ZHU, Chuncai                                               | (33) Korea (Republic)                                                                                                                                            |
| 23.08.2019                                                                                        | (31) 201710445052                                          | (51) G02F 1/39                                                                                                                                                   |
| (33) United States of America                                                                     | (32) 12.06.2017                                            | (11) EP4273623                                                                                                                                                   |
| United States of America                                                                          | (33) China                                                 | (21) EP22171982.6                                                                                                                                                |
| (51) G02C 7/02                                                                                    | (51) G02F 1/13357                                          | (47) 18.12.2024                                                                                                                                                  |
| G02C 7/06                                                                                         | (11) EP3859442                                             | (22) 06.05.2022                                                                                                                                                  |
| (11) EP4030221                                                                                    | (21) EP20214281.6                                          | (54) WAVELENGTH CONVERSION APPARATUS AND METHOD FOR SPECTRALLY CONVERTING LASER PULSES, AND LASER SOURCE APPARATUS INCLUDING THE WAVELENGTH CONVERSION APPARATUS |
| (21) EP21217476.7                                                                                 | (47) 18.12.2024                                            | (73) Deutsches Elektronen-Synchrotron DESY                                                                                                                       |
| (47) 18.12.2024                                                                                   | (22) 30.10.2015                                            | GSI Helmholtzzentrum für Schwerionenforschung GmbH                                                                                                               |
| (22) 23.12.2021                                                                                   | (54) DISPLAY DEVICE INCLUDING BACKLIGHT UNIT               | (72) Tünnermann, Henrik                                                                                                                                          |
| (54) EYEGLASS LENS FOR SUPPRESSING PROGRESSION OF MYOPIA                                          | (73) LG Electronics, Inc.                                  | Heyl, Christoph                                                                                                                                                  |
| (73) Tokai Optical Co., Ltd.                                                                      | (72) OH, Sewon                                             | Balla, Prannay                                                                                                                                                   |
| (72) SUZUKI, Eiji                                                                                 | KIM, Eunseok                                               | (51) G03B 3/10                                                                                                                                                   |
| (31) 2020213185                                                                                   | (31) 20150109165                                           | G03B 5/00                                                                                                                                                        |
| (32) 23.12.2020                                                                                   | 20150109155                                                | G03B 13/36                                                                                                                                                       |
| (33) Japan                                                                                        | 201462073509 P                                             | G03B 19/07                                                                                                                                                       |
| (51) G02C 7/04                                                                                    | (32) 31.07.2015                                            | G03B 17/14                                                                                                                                                       |
| (11) EP4405738                                                                                    | 31.07.2015                                                 | (11) EP4141534                                                                                                                                                   |
| (21) EP22789659.4                                                                                 | 31.10.2014                                                 | (21) EP22200663.7                                                                                                                                                |
| (47) 18.12.2024                                                                                   | (33) Korea (Republic)                                      | (47) 18.12.2024                                                                                                                                                  |
| (87) GB2022052493                                                                                 | Korea (Republic)                                           | (22) 12.02.2018                                                                                                                                                  |
| 04.05.2023                                                                                        | United States of America                                   | (54) LENS DRIVING DEVICE, CAMERA MODULE AND OPTICAL INSTRUMENT                                                                                                   |
| (22) 30.09.2022                                                                                   | (51) G02F 1/13357                                          | (73) LG INNOTEK CO., LTD.                                                                                                                                        |
| (54) OPHTHALMIC LENSES                                                                            | G02B 6/00                                                  | (72) LEE, Sung Guk                                                                                                                                               |
| (73) CooperVision International Limited                                                           | H01L 25/075                                                | JUNG, Tae Jin                                                                                                                                                    |
| (72) ARUMUGAM, Baskar                                                                             | H01L 33/46                                                 | LEE, Seong Min                                                                                                                                                   |
| WEBBER, Martin                                                                                    | H01L 33/50                                                 | MIN, Sang Jun                                                                                                                                                    |
| BRADLEY, Arthur                                                                                   | H01L 33/54                                                 | (31) 20170045169                                                                                                                                                 |
| CHAMBERLAIN, Paul                                                                                 | H01L 33/60                                                 |                                                                                                                                                                  |
| HAMMOND, David S.                                                                                 | (11) EP3540504                                             |                                                                                                                                                                  |
| (31) 202163272357 P                                                                               | (21) EP17870386.4                                          |                                                                                                                                                                  |
|                                                                                                   | (47) 18.12.2024                                            |                                                                                                                                                                  |
|                                                                                                   | (87) KR2017011299                                          |                                                                                                                                                                  |

|                                    |                                    |                                     |
|------------------------------------|------------------------------------|-------------------------------------|
| 20170027847                        | 26.12.2019                         | AONO, Shinjiro                      |
| 20170018826                        | (22) 20.06.2019                    | (31) 2022189890                     |
| (32) 07.04.2017                    | (54) IMAGE CAPTURE DEVICE,         | 2022142418                          |
| 03.03.2017                         | ACCESSORY DEVICE, AND CONTROL      | (32) 29.11.2022                     |
| 10.02.2017                         | METHOD THEREFOR                    | 07.09.2022                          |
| (33) Korea (Republic)              | (73) CANON KABUSHIKI KAISHA        | (33) Japan                          |
| Korea (Republic)                   | (72) TAKANASHI, Hideya             | Japan                               |
| Korea (Republic)                   | TANAKA, Tomoki                     | (51) G03G 21/16                     |
| (51) G03B 9/04                     | (31) 2018165392                    | G03G 21/18                          |
| (11) EP3647866                     | 2018118125                         | (11) EP3992726                      |
| (21) EP19206574.6                  | (32) 04.09.2018                    | (21) EP21198776.3                   |
| (47) 18.12.2024                    | 21.06.2018                         | (47) 18.12.2024                     |
| (22) 31.10.2019                    | (33) Japan                         | (22) 14.05.2013                     |
| (54) CAMERA MODULE INCLUDING       | Japan                              | (54) IMAGE FORMING APPARATUS        |
| APERTURE                           | (51) G03B 21/20                    | (73) CANON KABUSHIKI KAISHA         |
| (73) Samsung Electronics Co., Ltd. | H01L 33/50                         | (72) SEKIDO, Kota                   |
| (72) Moon, Chanyoung               | F21V 9/32                          | (31) 2012115845                     |
| Kim, Yeonhak                       | F21K 9/64                          | (32) 21.05.2012                     |
| Rho, Hyungjin                      | F21Y 105/10                        | (33) Japan                          |
| (31) 20180131862                   | F21Y 115/10                        | (51) G03G 21/16                     |
| (32) 31.10.2018                    | F21Y 115/30                        | G03G 21/18                          |
| (33) Korea (Republic)              | (11) EP3803509                     | G03G 15/01                          |
| (51) G03B 17/12                    | (21) EP19733209.1                  | G03G 15/08                          |
| G03B 5/02                          | (47) 18.12.2024                    | (11) EP3948428                      |
| G02B 27/64                         | (87) US2019032838                  | (21) EP20779181.5                   |
| G02B 7/09                          | 28.11.2019                         | (47) 18.12.2024                     |
| G02B 7/02                          | (22) 17.05.2019                    | (87) JP2020005466                   |
| G03B 3/10                          | (54) WHITE LIGHT PHOSPHOR DEVICE   | 01.10.2020                          |
| (11) EP3588185                     | (73) Materion Corporation          | (22) 13.02.2020                     |
| (21) EP18756744.1                  | (72) NEWELL, Michael P.            | (54) DEVELOPING CARTRIDGE           |
| (47) 18.12.2024                    | (31) 201862675844 P                | (73) Brother Kogyo Kabushiki Kaisha |
| (87) KR2018001883                  | (32) 24.05.2018                    | (72) OKABE, Yasushi                 |
| 30.08.2018                         | (33) United States of America      | HASHIMOTO, Junichi                  |
| (22) 13.02.2018                    | (51) G03G 15/08                    | (31) 2019063305                     |
| (54) LENS DRIVING DEVICE, CAMERA   | G03G 15/00                         | (32) 28.03.2019                     |
| MODULE, AND OPTICAL INSTRUMENT     | G03G 21/16                         | (33) Japan                          |
| (73) LG Innotek Co., Ltd.          | (11) EP4202555                     | (51) G03H 1/02                      |
| (72) LEE, Sung Guk                 | (21) EP22208215.8                  | B32B 37/08                          |
| MIN, Sang Jun                      | (47) 18.12.2024                    | G03H 1/00                           |
| JUNG, Tae Jin                      | (22) 06.06.2012                    | G03H 1/04                           |
| YOO, Kyoung Ho                     | (54) DEVELOPER SUPPLY CONTAINER    | B65H 20/00                          |
| (31) 20170025290                   | AND DEVELOPER SUPPLYING            | G03H 1/20                           |
| 20170025082                        | SYSTEM                             | G11B 7/26                           |
| 20170025080                        | (73) Canon Kabushiki Kaisha        | (11) EP4105730                      |
| 20170025078                        | (72) JIMBA, Manabu                 | (21) EP22179192.4                   |
| 20170025073                        | NAGASHIMA, Toshiaki                | (47) 18.12.2024                     |
| (32) 27.02.2017                    | TAZAWA, Fumio                      | (22) 15.06.2022                     |
| 24.02.2017                         | OKINO, Ayatomo                     | (54) APPARATUS FOR THE PRODUCTION   |
| 24.02.2017                         | MURAKAMI, Katsuya                  | OF HOLOGRAMS BY CONTACT             |
| 24.02.2017                         | (31) 2011126137                    | COPYING WITH HIGH DIFFRACTION       |
| 24.02.2017                         | (32) 06.06.2011                    | EFFICIENCY                          |
| (33) Korea (Republic)              | (33) Japan                         | (73) Bundesdruckerei GmbH           |
| Korea (Republic)                   | (51) G03G 15/20                    | (72) Kunath, Christian              |
| Korea (Republic)                   | (11) EP4336272                     | Bielesch, Ulrich                    |
| Korea (Republic)                   | (21) EP23195575.8                  | Mauderer, Michael                   |
| Korea (Republic)                   | (47) 18.12.2024                    | Langgaßner, Michael                 |
| (51) G03B 17/14                    | (22) 06.09.2023                    | Frank, Alexander                    |
| G03B 17/18                         | (54) HEATER AND IMAGE FORMING      | Gahlbeck, Jeffry                    |
| G03B 17/56                         | APPARATUS                          | Uhlig, Florian                      |
| H04N 23/60                         | (73) Toshiba Lighting & Technology | Karvounis, Gerasimos                |
| H04N 23/66                         | Corporation                        | Rötzer, Martin                      |
| H04N 23/67                         | (72) TAMAI, Masahiko               | Klunder, Kathrin                    |
| H04N 23/68                         | OHASHI, Tsuyoshi                   | Sprenger, Martin                    |
| H04N 23/69                         | UENO, Kousuke                      | (31) 102021206107                   |
| (11) EP3796083                     | DOI, Masahiro                      | (32) 15.06.2021                     |
| (21) EP19822582.3                  | KATO, Satoko                       | (33) Germany                        |
| (47) 18.12.2024                    | SAKAI, Makoto                      | (51) G04B 13/02                     |
| (87) JP2019024466                  | TSUBOUCHI, Akio                    | G04B 17/34                          |

|                                           |                                     |                                     |
|-------------------------------------------|-------------------------------------|-------------------------------------|
| (11) EP3853670                            | G04G 21/00                          | SAYEM, Abu, T.                      |
| (21) EP19756417.2                         | (11) EP3982379                      | (31) 201916409535                   |
| (47) 18.12.2024                           | (21) EP20200735.7                   | 201862683979 P                      |
| (87) EP2019072968                         | (47) 18.12.2024                     | (32) 10.05.2019                     |
| 26.03.2020                                | (22) 08.10.2020                     | 12.06.2018                          |
| (22) 28.08.2019                           | (54) MICRO-ACTUATOR WITH            | (33) United States of America       |
| (54) ELASTIC HOLDING MEMBER FOR           | MAGNETICALLY RETRACTING             | United States of America            |
| FIXING A TIMEPIECE COMPONENT              | SOLENOID                            | (51) G05B 13/04                     |
| ON A SUPPORT ELEMENT                      | (73) The Swatch Group Research and  | F04C 14/28                          |
| (73) Nivarox-FAR S.A.                     | Development Ltd                     | H02P 27/04                          |
| (72) HERNANDEZ, Ivan                      | (72) IMBODEN, Matthias              | G05B 19/042                         |
| CUSIN, Pierre                             | NICOLAS, Cédric                     | G05B 19/05                          |
| (31) 18196016                             | LIVAT, Nicolas                      | (11) EP3974919                      |
| (32) 21.09.2018                           | (51) G04D 7/10                      | (21) EP20198651.0                   |
| (33) European Patent Office (EPO)         | G04D 7/12                           | (47) 18.12.2024                     |
| (51) G04B 19/02                           | (11) EP4278234                      | (22) 28.09.2020                     |
| G04B 11/00                                | (21) EP22700645.9                   | (54) CONTROL LOOP PERFORMANCE       |
| G04B 27/00                                | (47) 18.12.2024                     | MONITORING IN VARIABLE              |
| G04B 15/06                                | (87) EP2022050760                   | FREQUENCY DRIVE                     |
| G04B 15/14                                | 21.07.2022                          | (73) ABB Schweiz AG                 |
| (11) EP4310603                            | (22) 14.01.2022                     | (72) Mäkelä, Vesa                   |
| (21) EP22185520.8                         | (54) METHOD FOR MONITORING AND      | Grüner, Sten                        |
| (47) 18.12.2024                           | MANUFACTURING TIMEPIECE             | (51) G05B 17/02                     |
| (22) 18.07.2022                           | HAIRSPRINGS                         | (11) EP4095627                      |
| (54) TIMEPIECE MOVEMENT                   | (73) Richemont International S.A.   | (21) EP21175517.8                   |
| (73) Patek Philippe SA Genève             | (72) SOOBBARAYEN, Kevin             | (47) 18.12.2024                     |
| (72) Geiser, Sylvain                      | GACHET, David                       | (22) 24.05.2021                     |
| Benoist, Quentin                          | TOBENAS, Susana                     | (54) EVALUATING ALTERNATIVE CONTROL |
| (51) G04B 19/08                           | (31) 21152144                       | PARAMETERS BASED ON A DIGITAL       |
| G04B 19/24                                | (32) 18.01.2021                     | TWIN                                |
| G04B 19/253                               | (33) European Patent Office (EPO)   | (73) ABB Schweiz AG                 |
| (11) EP4276545                            | (51) G04F 10/00                     | (72) Tamminiemi, Petri              |
| (21) EP22173340.5                         | H03K 27/00                          | Hu, Zhongliang                      |
| (47) 18.12.2024                           | H03K 3/00                           | Kohvakka, Mikko                     |
| (22) 13.05.2022                           | H03K 5/14                           | (51) G05B 19/042                    |
| (54) ANTEROGRADE DISPLAY DEVICE           | H03M 1/50                           | (11) EP4235323                      |
| FOR A TIMEPIECE                           | H03M 1/60                           | (21) EP23185739.2                   |
| (73) Blancpain SA                         | (11) EP4143641                      | (47) 18.12.2024                     |
| (72) DENDEN, Mehdi                        | (21) EP21817487.8                   | (22) 25.05.2016                     |
| (51) G04B 21/06                           | (47) 18.12.2024                     | (54) METHOD AND DEVICE FOR          |
| (11) EP4105733                            | (87) CA20221050746                  | AUTOMATICALLY VALIDATING            |
| (21) EP21179616.4                         | 09.12.2021                          | SECURITY FUNCTIONS ON A             |
| (47) 18.12.2024                           | (22) 02.06.2021                     | MODULAR SECURITY SYSTEM             |
| (22) 15.06.2021                           | (54) TIME TO DIGITAL CONVERSION     | (73) PHOENIX CONTACT GMBH & CO. KG  |
| (54) CHIMING MECHANISM BY IMPACT, IN      | (73) SOCPRA SCIENCES ET GENIE S.E.C | (72) HORN, Steffen                  |
| PARTICULAR FOR TIMEPIECES                 | (72) ROY, Nicolas                   | (31) 102015108359                   |
| (73) Montres Breguet S.A.                 | NOLET, Frédéric                     | (32) 27.05.2015                     |
| (72) KARAPATIS, Polychronis Nakis         | DUBOIS, Frederik                    | (33) Germany                        |
| STRANCZL, Marc                            | PRATTE, Jean-François               | (51) G05B 19/042                    |
| (51) G04B 39/00                           | (31) 202063035473 P                 | H04B 1/401                          |
| C03C 15/00                                | (32) 05.06.2020                     | H04B 1/18                           |
| G04B 31/004                               | (33) United States of America       | (11) EP4123397                      |
| (11) EP4303665                            | (51) G04G 17/02                     | (21) EP22764989.4                   |
| (21) EP22183434.4                         | G04R 20/02                          | (47) 18.12.2024                     |
| (47) 18.12.2024                           | H01Q 7/00                           | (87) CN2022086439                   |
| (22) 06.07.2022                           | G04R 60/08                          | 15.12.2022                          |
| (54) TIMEPIECE COMPONENT                  | (11) EP3807724                      | (22) 12.04.2022                     |
| COMPRISING A GLASS SUBSTRATE              | (21) EP19819674.3                   | (54) SWITCH SWITCHING METHOD AND    |
| TRANSPARENT TO VISIBLE LIGHT              | (47) 18.12.2024                     | RELATED DEVICE                      |
| AND WITH IMPROVED RESISTANCE              | (87) US2019036231                   | (73) Honor Device Co., Ltd.         |
| TO BREAKAGE                               | 19.12.2019                          | (72) CHEN, Dan                      |
| (73) Association Suisse pour la Recherche | (22) 10.06.2019                     | JIANG, Cheng                        |
| Horlogère                                 | (54) WRIST-WORN ELECTRONIC DEVICE   | (31) 202110654892                   |
| (72) Vallat, Evelyne                      | WITH HOUSING-BASED LOOP             | (32) 11.06.2021                     |
| Hogg, Andreas                             | ANTENNA                             | (33) China                          |
| (51) G04C 3/00                            | (73) Garmin Switzerland GmbH        | (51) G05B 19/05                     |
| G04G 9/08                                 | (72) KENKEL, John, M.               | (11) EP4194976                      |
|                                           | CHEN, Ting-Ying                     |                                     |

|                                                                                                                                                         |                                                                                                                                                     |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| (21) EP22202879.7                                                                                                                                       | (33) Japan                                                                                                                                          | (33) Japan                                                                        |
| (47) 18.12.2024                                                                                                                                         | (51) G05B 19/4065                                                                                                                                   | (51) G05B 23/02                                                                   |
| (22) 21.10.2022                                                                                                                                         | (11) EP3853679                                                                                                                                      | (11) EP4170448                                                                    |
| (54) SOFT ERROR AGGREGATION<br>METHOD FOR DETECTION AND<br>REPORTING OF RISKS IN A SAFETY<br>PLC SYSTEM                                                 | (21) EP19765737.2                                                                                                                                   | (21) EP22202476.2                                                                 |
| (73) Schneider Electric Systems USA, Inc.                                                                                                               | (47) 18.12.2024                                                                                                                                     | (47) 18.12.2024                                                                   |
| (72) Banchik, Erna                                                                                                                                      | (87) EP2019074385                                                                                                                                   | (22) 19.10.2022                                                                   |
| Ivanov, Diana                                                                                                                                           | 26.03.2020                                                                                                                                          | (54) PROCESS SIGNAL                                                               |
| Mishra, Ajay                                                                                                                                            | (22) 12.09.2019                                                                                                                                     | RECONSTRUCTION AND ANOMALY                                                        |
| Muthuramalingam, Murugananth                                                                                                                            | (54) METHOD FOR STATE ANALYSIS OF<br>AN ELECTROMECHANICAL JOINING<br>SYSTEM AND ELECTROMECHANICAL<br>JOINING SYSTEM FOR CARRYING<br>OUT THIS METHOD | DETECTION IN LASER MACHINING<br>PROCESSES                                         |
| (31) 202117547523                                                                                                                                       | (73) Kistler Holding AG                                                                                                                             | (73) Precitec GmbH & Co. KG                                                       |
| (32) 10.12.2021                                                                                                                                         | (72) MÜLLER, Alexander                                                                                                                              | (72) Mack, Fabian                                                                 |
| (33) United States of America                                                                                                                           | (31) 18195998                                                                                                                                       | Thill, Markus                                                                     |
| (51) G05B 19/05                                                                                                                                         | (32) 21.09.2018                                                                                                                                     | Krause, Martin                                                                    |
| G06F 8/00                                                                                                                                               | (33) European Patent Office (EPO)                                                                                                                   | (31) 102021127016                                                                 |
| G06F 8/33                                                                                                                                               | (51) G05B 19/4103                                                                                                                                   | (32) 19.10.2021                                                                   |
| G06F 8/34                                                                                                                                               | G05B 19/404                                                                                                                                         | (33) Germany                                                                      |
| G06F 8/73                                                                                                                                               | (11) EP3709117                                                                                                                                      | (51) G05B 23/02                                                                   |
| (11) EP3951519                                                                                                                                          | (21) EP18876860.0                                                                                                                                   | F16K 37/00                                                                        |
| (21) EP20779668.1                                                                                                                                       | (47) 18.12.2024                                                                                                                                     | (11) EP3529677                                                                    |
| (47) 18.12.2024                                                                                                                                         | (87) JP2018040891                                                                                                                                   | (21) EP17794478.2                                                                 |
| (87) JP2020004316                                                                                                                                       | 16.05.2019                                                                                                                                          | (47) 18.12.2024                                                                   |
| 01.10.2020                                                                                                                                              | (22) 02.11.2018                                                                                                                                     | (87) US2017057145                                                                 |
| (22) 05.02.2020                                                                                                                                         | (54) SERVO DRIVER                                                                                                                                   | 03.05.2018                                                                        |
| (54) DEVELOPMENT SUPPORT DEVICE,<br>METHOD FOR CONTROLLING<br>DEVELOPMENT SUPPORT DEVICE,<br>INFORMATION PROCESSING<br>PROGRAM, AND RECORDING<br>MEDIUM | (73) Omron Corporation                                                                                                                              | (22) 18.10.2017                                                                   |
| (73) OMRON CORPORATION                                                                                                                                  | (72) EGI, Mamoru                                                                                                                                    | (54) VALVE SERVICE DETECTION<br>THROUGH DATA ANALYSIS                             |
| (72) KAGAWA, Tetsuo                                                                                                                                     | (31) 2017216317                                                                                                                                     | (73) Fisher Controls International LLC                                            |
| NAGAO, Kenjiro                                                                                                                                          | (32) 09.11.2017                                                                                                                                     | (72) ANDERSON, Shawn, W.                                                          |
| (31) 2019064684                                                                                                                                         | (33) Japan                                                                                                                                          | (31) 201615332542                                                                 |
| (32) 28.03.2019                                                                                                                                         | (51) G05B 19/418                                                                                                                                    | (32) 24.10.2016                                                                   |
| (33) Japan                                                                                                                                              | G06Q 10/0631                                                                                                                                        | (33) United States of America                                                     |
| (51) G05B 19/05                                                                                                                                         | G06Q 10/083                                                                                                                                         | (51) G05B 23/02                                                                   |
| H03K 19/017                                                                                                                                             | G06Q 50/04                                                                                                                                          | G16H 40/40                                                                        |
| H03K 19/0175                                                                                                                                            | (11) EP3704551                                                                                                                                      | (11) EP4232877                                                                    |
| (11) EP3851926                                                                                                                                          | (21) EP18872932.1                                                                                                                                   | (21) EP21791349.0                                                                 |
| (21) EP20201733.1                                                                                                                                       | (47) 18.12.2024                                                                                                                                     | (47) 18.12.2024                                                                   |
| (47) 18.12.2024                                                                                                                                         | (87) IB2018058682                                                                                                                                   | (87) EP2021078380                                                                 |
| (22) 14.10.2020                                                                                                                                         | 09.05.2019                                                                                                                                          | 28.04.2022                                                                        |
| (54) SELF-LEARNING APPARATUS FOR<br>CONNECTING INPUTS AND OUTPUTS<br>OF A PROGRAMMABLE LOGIC<br>CONTROLLER TO A FIELD DEVICE                            | (22) 05.11.2018                                                                                                                                     | (22) 14.10.2021                                                                   |
| (73) Valmet Flow Control Inc.                                                                                                                           | (54) DISTRIBUTED PRODUCTION METHOD                                                                                                                  | (54) MULTI-CRITERIA FAIR QUEUEING OF<br>ALERTS                                    |
| (72) Beehler, Robert A.                                                                                                                                 | (73) LightGuide Inc.                                                                                                                                | (73) Koninklijke Philips N.V.                                                     |
| (31) 202016747238                                                                                                                                       | (72) SOMMERVILLE, William T.                                                                                                                        | (72) PRONK, Serverius Petrus Paulus                                               |
| (32) 20.01.2020                                                                                                                                         | RYZNAR, Paul                                                                                                                                        | KORST, Johannes Henricus Maria                                                    |
| (33) United States of America                                                                                                                           | (31) 201762581196 P                                                                                                                                 | GAO, Qi                                                                           |
| (51) G05B 19/05                                                                                                                                         | (32) 03.11.2017                                                                                                                                     | PETERS, Marc André                                                                |
| H04L 12/40                                                                                                                                              | (33) United States of America                                                                                                                       | BARBIERI, Mauro                                                                   |
| G06F 9/50                                                                                                                                               | (51) G05B 23/02                                                                                                                                     | (31) 202063094955 P                                                               |
| (11) EP3767893                                                                                                                                          | (11) EP4152115                                                                                                                                      | (32) 22.10.2020                                                                   |
| (21) EP19766839.5                                                                                                                                       | (21) EP22188519.7                                                                                                                                   | (33) United States of America                                                     |
| (47) 18.12.2024                                                                                                                                         | (47) 18.12.2024                                                                                                                                     | (51) G05D 1/00                                                                    |
| (87) JP2019009240                                                                                                                                       | (22) 03.08.2022                                                                                                                                     | (11) EP4235335                                                                    |
| 19.09.2019                                                                                                                                              | (54) MONITORING APPARATUS, METHOD,<br>AND PROGRAM                                                                                                   | (21) EP20958631.2                                                                 |
| (22) 08.03.2019                                                                                                                                         | (73) Toshiba Energy Systems & Solutions<br>Corporation                                                                                              | (47) 18.12.2024                                                                   |
| (54) NETWORK SYSTEM                                                                                                                                     | KABUSHIKI KAISHA TOSHIBA                                                                                                                            | (87) JP2020039407                                                                 |
| (73) Omron Corporation                                                                                                                                  | (72) Nakata, Kouta                                                                                                                                  | 28.04.2022                                                                        |
| (72) TAHARA, Yutaka                                                                                                                                     | Ookuma, Eiichi                                                                                                                                      | (22) 20.10.2020                                                                   |
| (31) 2018047601                                                                                                                                         | Aoki, Toshio                                                                                                                                        | (54) AUTOMATIC MOVING DEVICE AND<br>CONTROL METHOD FOR AUTOMATIC<br>MOVING DEVICE |
| (32) 15.03.2018                                                                                                                                         | Kato, Yuichi                                                                                                                                        | (73) Fuji Corporation                                                             |
|                                                                                                                                                         | Taguchi, Yasunori                                                                                                                                   | (72) ODA, Takuya                                                                  |
|                                                                                                                                                         | Miyamoto, Chikashi                                                                                                                                  | SAWANAMI, Hisato                                                                  |
|                                                                                                                                                         | Naito, Susumu                                                                                                                                       | KAWAGUCHI, Koji                                                                   |
|                                                                                                                                                         | (31) 2021150380                                                                                                                                     | (51) G05D 1/00                                                                    |
|                                                                                                                                                         | (32) 15.09.2021                                                                                                                                     | (11) EP4193229                                                                    |



|                                        |                                    |                                    |
|----------------------------------------|------------------------------------|------------------------------------|
| (21) EP21746727.3                      | (73) Yanmar Holdings Co., Ltd.     | NANBA, Shinji                      |
| (47) 18.12.2024                        | (72) TANAKA, Taishi                | SAKAI, Haruhisa                    |
| (87) EP2021070253                      | MURAYAMA, Masaaki                  | (31) 2020169211                    |
| 10.02.2022                             | YAMAGUCHI, Yuji                    | (32) 06.10.2020                    |
| (22) 20.07.2021                        | ISHIKAWA, Kohei                    | (33) Japan                         |
| (54) CLEANING SYSTEM COMPRISING        | (31) 2022096279                    | (51) G05D 1/00                     |
| A SELF-DRIVING CLEANING ROBOT          | (32) 15.06.2022                    | G06F 9/455                         |
| AND A CHARGING STATION,                | (33) Japan                         | G06F 13/36                         |
| AND METHOD FOR MOVING                  | (51) G05D 1/00                     | G06F 9/50                          |
| THE CLEANING ROBOT TO THE              | B25J 9/16                          | B64U 10/25                         |
| CHARGING STATION                       | B25J 19/02                         | B64U 101/30                        |
| (73) BSH Hausgeräte GmbH               | B25J 11/00                         | (11) EP4220326                     |
| (72) FREMEREY, Maximilian              | A01D 34/00                         | (21) EP23160843.1                  |
| BAIRAMPALLI, Sandeep                   | (11) EP4063079                     | (47) 18.12.2024                    |
| GHOSH, Pratip                          | (21) EP20891067.9                  | (22) 04.01.2019                    |
| NITHIN, Ganesh                         | (47) 18.12.2024                    | (54) PROCESSOR VIRTUALIZATION IN   |
| (31) 102020209841                      | (87) KR2020014477                  | UNMANNED VEHICLES                  |
| (32) 05.08.2020                        | 27.05.2021                         | (73) GE Aviation Systems LLC       |
| (33) Germany                           | (22) 22.10.2020                    | (72) LASSINI, Stefano Angelo Mario |
| (51) G05D 1/00                         | (54) MOBILE ROBOT SYSTEM AND       | HOOKER, Brent Dale                 |
| (11) EP4311760                         | BOUNDARY INFORMATION               | TAYLOR, Braeton                    |
| (21) EP22460033.8                      | GENERATION METHOD FOR MOBILE       | (31) 201815875350                  |
| (47) 18.12.2024                        | ROBOT SYSTEM                       | (32) 19.01.2018                    |
| (22) 28.07.2022                        | (73) LG Electronics Inc.           | (33) United States of America      |
| (54) VEHICLE PROPULSION CONTROL        | (72) LEE, Jaekwang                 | (51) G05D 1/225                    |
| HANDLE, ESPECIALLY FOR                 | PARK, Sungyeon                     | G01S 19/04                         |
| UNDERWATER VEHICLES                    | NOH, Dongki                        | G01S 19/41                         |
| (73) Stowarzyszenie B-4                | BAEK, Seungmin                     | G05D 1/248                         |
| (72) Piatek, Piotr                     | LEE, Jaemin                        | G05D 105/15                        |
| (51) G05D 1/00                         | JU, Jeongwoo                       | G05D 107/20                        |
| (11) EP3951542                         | JUNG, Minkuk                       | G05D 109/10                        |
| (21) EP20779448.8                      | (31) 20190149518                   | (11) EP4343477                     |
| (47) 18.12.2024                        | (32) 20.11.2019                    | (21) EP23198046.7                  |
| (87) JP2020010794                      | (33) Korea (Republic)              | (47) 18.12.2024                    |
| 01.10.2020                             | (51) G05D 1/00                     | (22) 18.09.2023                    |
| (22) 12.03.2020                        | B60T 7/00                          | (54) SYSTEM FOR CUTTING GRASS AND  |
| (54) AUTOMATIC TRAVEL SYSTEM           | B60W 30/00                         | CORRESPONDING PROCESS              |
| (73) Yanmar Power Technology Co., Ltd. | G08G 1/00                          | (73) Bernini, Fabrizio             |
| (72) KINUTA, Keishi                    | (11) EP4278238                     | (72) Bernini, Fabrizio             |
| (31) 2019056329                        | (21) EP22701503.9                  | (31) 202200019245                  |
| (32) 25.03.2019                        | (47) 18.12.2024                    | (32) 20.09.2022                    |
| (33) Japan                             | (87) US2022012144                  | (33) Italy                         |
| (51) G05D 1/00                         | 21.07.2022                         | (51) G05D 1/246                    |
| (11) EP4161241                         | (22) 12.01.2022                    | G05D 1/648                         |
| (21) EP21729258.0                      | (54) AUTOMATION CONTROL USING STOP | G05D 1/698                         |
| (47) 18.12.2024                        | TRAJECTORIES                       | G05D 105/15                        |
| (87) EP2021063780                      | (73) Apple Inc.                    | G05D 107/20                        |
| 09.12.2021                             | (72) WAYDO, Jamie M.               | G05D 109/10                        |
| (22) 25.05.2021                        | MUJICA, Fernando A.                | (11) EP4372511                     |
| (54) AGRICULTURAL IMPLEMENT FOR THE    | COLOSKY, Mark P.                   | (21) EP22208590.4                  |
| CULTIVATION OF ROW CROPS               | (31) 202163136308 P                | (47) 18.12.2024                    |
| (73) Amazonen-Werke H. Dreyer SE & Co. | (32) 12.01.2021                    | (22) 21.11.2022                    |
| KG                                     | (33) United States of America      | (54) SYSTEM AND METHOD FOR         |
| (72) RESCH, Rainer                     | (51) G05D 1/00                     | CONTROLLING MULTIPLE ROBOTIC       |
| MAHLER, Tom                            | B62D 6/00                          | MOWERS                             |
| (31) 102020114957                      | B62D 7/15                          | (73) SMAUT Technology s.r.o.       |
| (32) 05.06.2020                        | B62D 15/02                         | (72) Grunt, Jan                    |
| (33) Germany                           | (11) EP4227752                     | Sopik, Vincenc                     |
| (51) G05D 1/00                         | (21) EP21877191.3                  | (51) G05D 7/06                     |
| A01B 69/00                             | (47) 18.12.2024                    | (11) EP4209858                     |
| A01B 69/04                             | (87) JP2021025761                  | (21) EP22201840.0                  |
| (11) EP4293463                         | 14.04.2022                         | (47) 18.12.2024                    |
| (21) EP23176665.0                      | (22) 08.07.2021                    | (22) 17.10.2022                    |
| (47) 18.12.2024                        | (54) VEHICLE                       | (54) POWDERY MATERIAL FEEDING      |
| (22) 01.06.2023                        | (73) JFE Steel Corporation         | DEVICE                             |
| (54) AUTONOMOUS TRAVEL METHOD,         | (72) KANETA, Yusuke                | (73) Kikusui Seisakusho Ltd.       |
| AUTONOMOUS TRAVEL SYSTEM, AND          | HIRAYAMA, Hideki                   | (72) NISHIMURA, Hideyuki           |
| AUTONOMOUS TRAVEL PROGRAM              | KOHARA, Toshiyuki                  | KAWAI, Yuuya                       |

|                                                                   |                                                                       |                                                                                       |
|-------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| FUSHIMI, Shinsuke                                                 | (54) AUGMENTED OR VIRTUAL REALITY (AR/VR) COMPANION DEVICE TECHNIQUES | G06F 3/038                                                                            |
| (31) 2022001843                                                   |                                                                       | G06F 40/20                                                                            |
| (32) 07.01.2022                                                   |                                                                       | G06F 40/30                                                                            |
| (33) Japan                                                        | (73) eBay Inc.                                                        | G06V 10/82                                                                            |
| (51) G06F 1/16                                                    | (72) CHALKLEY, Andrew                                                 | G06V 40/16                                                                            |
| H04M 1/02                                                         | TIMONEN, Joshua, Reino                                                | G06V 40/18                                                                            |
| (11) EP4148532                                                    | (31) 201916353333                                                     | G06V 40/20                                                                            |
| (21) EP22204486.9                                                 | (32) 14.03.2019                                                       | G10L 15/22                                                                            |
| (47) 18.12.2024                                                   | (33) United States of America                                         | G10L 25/78                                                                            |
| (22) 19.02.2019                                                   | (51) G06F 3/01                                                        | (11) EP4130941                                                                        |
| (54) ELECTRONIC DEVICE INCLUDING MOVABLE FLEXIBLE DISPLAY         | G06F 3/0481                                                           | (21) EP22196913.2                                                                     |
| (73) Samsung Electronics Co., Ltd.                                | G02B 27/01                                                            | (47) 18.12.2024                                                                       |
| (72) YOON, Byounguk                                               | G02B 27/00                                                            | (22) 02.05.2019                                                                       |
| BAEK, Moohyun                                                     | (11) EP4202617                                                        | (54) HOT-WORD FREE ADAPTATION OF AUTOMATED ASSISTANT FUNCTION(S)                      |
| LEE, Jiwoo                                                        | (21) EP22773099.1                                                     | (73) Google LLC                                                                       |
| CHUN, Youngsoo                                                    | (47) 18.12.2024                                                       | (72) BETTADAPURA, Vinay                                                               |
| YOON, Shinho                                                      | (87) KR2022014167                                                     | CHAUDHURI, Sourish                                                                    |
| SHIN, Dongryul                                                    | 11.05.2023                                                            | PANTOFARU, Caroline                                                                   |
| (31) 20180021794                                                  | (22) 22.09.2022                                                       | MATSUI, Hideaki                                                                       |
| (32) 23.02.2018                                                   | (54) WEARABLE DEVICE AND METHOD FOR DISPLAYING MULTIMEDIA CONTENT     | KONZELMANN, Jaclyn                                                                    |
| (33) Korea (Republic)                                             | (73) Samsung Electronics Co., Ltd.                                    | NGUYEN, Tuan                                                                          |
| (51) G06F 1/16                                                    | (72) LEE, Eunbin                                                      | MIXTER, Kenneth                                                                       |
| H04M 1/02                                                         | YOO, Sanga                                                            | (31) PCT/US2018/031170                                                                |
| G09F 9/30                                                         | SHIN, Giyoung                                                         | PCT/US2018/031164                                                                     |
| (11) EP4194994                                                    | (31) 20210170075                                                      | (32) 04.05.2018                                                                       |
| (21) EP21872862.4                                                 | 20210151835                                                           | 04.05.2018                                                                            |
| (47) 18.12.2024                                                   | (32) 01.12.2021                                                       | (33) World Intellectual Property Office (WIPO)                                        |
| (87) KR2021012832                                                 | 06.11.2021                                                            | World Intellectual Property Office (WIPO)                                             |
| 31.03.2022                                                        | (33) Korea (Republic)                                                 | (51) G06F 3/01                                                                        |
| (22) 17.09.2021                                                   | Korea (Republic)                                                      | G06F 21/34                                                                            |
| (54) HINGE STRUCTURE AND ELECTRONIC DEVICE COMPRISING SAME        | (51) G06F 3/01                                                        | G07C 9/25                                                                             |
| (73) Samsung Electronics Co., Ltd.                                | G06F 3/0482                                                           | (11) EP3785099                                                                        |
| (72) LEE, Giyun                                                   | (11) EP3639120                                                        | (21) EP19729385.5                                                                     |
| (31) 20200124239                                                  | (21) EP18770130.5                                                     | (47) 18.12.2024                                                                       |
| (32) 24.09.2020                                                   | (47) 18.12.2024                                                       | (87) US2019028761                                                                     |
| (33) Korea (Republic)                                             | (87) US2018034033                                                     | 31.10.2019                                                                            |
| (51) G06F 1/30                                                    | 20.12.2018                                                            | (22) 23.04.2019                                                                       |
| G06F 1/28                                                         | (22) 23.05.2018                                                       | (54) MODELING OF PREPROGRAMMED SCENARIO DATA OF A GESTURE-BASED ACCESS CONTROL SYSTEM |
| G06F 1/26                                                         | (54) DISPLACEMENT ORIENTED INTERACTION IN COMPUTER-MEDIATED REALITY   | (73) Honeywell International Inc.                                                     |
| G05F 1/569                                                        | (73) Microsoft Technology Licensing, LLC                              | (72) SRIVASTAVA, Kunal                                                                |
| G01R 19/165                                                       | (72) HURTER, Christophe                                               | NOVOZHENETS, Yuri                                                                     |
| (11) EP3899690                                                    | RICHE, Nathalie                                                       | FERNANDEZ-ORELLANA, Pedro                                                             |
| (21) EP19898065.8                                                 | PAHUD, Michel                                                         | KUENZI, Adam                                                                          |
| (47) 18.12.2024                                                   | OFEK, Eyal                                                            | TIWARI, Ankit                                                                         |
| (87) US2019062160                                                 | (31) 201715624463                                                     | MANIKANTAN SHILA, Devu                                                                |
| 25.06.2020                                                        | (32) 15.06.2017                                                       | (31) 201810396309                                                                     |
| (22) 19.11.2019                                                   | (33) United States of America                                         | (32) 27.04.2018                                                                       |
| (54) MAINTAINING PROPER VOLTAGE SEQUENCE DURING SUDDEN POWER LOSS | (51) G06F 3/01                                                        | (33) China                                                                            |
| (73) Intel Corporation                                            | G06F 3/0484                                                           | (51) G06F 3/03                                                                        |
| (72) TAMDEM, Horthense D.                                         | G06F 30/10                                                            | G06F 3/01                                                                             |
| KUMAR, Pavan                                                      | G06F 30/12                                                            | G06F 3/0346                                                                           |
| (31) 201816225047                                                 | G06F 3/04842                                                          | G06T 7/73                                                                             |
| (32) 19.12.2018                                                   | (11) EP3846003                                                        | (11) EP3987488                                                                        |
| (33) United States of America                                     | (21) EP19306790.7                                                     | (21) EP20734166.0                                                                     |
| (51) G06F 3/01                                                    | (47) 18.12.2024                                                       | (47) 18.12.2024                                                                       |
| (11) EP3938868                                                    | (22) 30.12.2019                                                       | (87) EP2020067175                                                                     |
| (21) EP20708311.4                                                 | (54) SELECTION OF A FACE WITH AN IMMERSIVE GESTURE IN 3D MODELING     | 24.12.2020                                                                            |
| (47) 18.12.2024                                                   | (73) Dassault Systèmes                                                | (22) 19.06.2020                                                                       |
| (87) US2020014832                                                 | (72) DOGANIS, Fivos                                                   | (54) AUGMENTED PHOTO CAPTURE                                                          |
| 17.09.2020                                                        | (51) G06F 3/01                                                        | (73) RE'FLEKT GmbH                                                                    |
| (22) 23.01.2020                                                   | G06F 3/16                                                             | (72) HEITGER, Jan                                                                     |
|                                                                   | G06F 3/03                                                             | (31) 102019116834                                                                     |
|                                                                   |                                                                       | (32) 21.06.2019                                                                       |
|                                                                   |                                                                       | (33) Germany                                                                          |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) G06F 3/0481<br>G06F 3/04817<br>G06F 3/0486<br>G06F 3/04883<br>G06F 3/04886                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | (21) EP21857813.6<br>(47) 18.12.2024<br>(87) CN2021125425<br>24.02.2022<br>(22) 21.10.2021<br>(54) SPLIT-SCREEN DISPLAY METHOD<br>AND ELECTRONIC DEVICE<br>(73) Honor Device Co., Ltd.<br>(72) YI, Jie<br>(31) 202010850840<br>(32) 21.08.2020<br>(33) China                                                                                                                                                                                   | United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| (11) EP4310655<br>(21) EP23215523.4<br>(47) 18.12.2024<br>(22) 30.03.2020<br>(54) SYSTEMS, METHODS, AND USER<br>INTERFACES FOR INTERACTING<br>WITH MULTIPLE APPLICATION<br>WINDOWS<br>(73) Apple Inc.<br>(72) WALKIN, Brandon M.<br>COFFMAN, Patrick L.<br>(31) PA201970529<br>PA201970528<br>201916581674<br>201916581665<br>201962844102 P<br>201962834367 P<br>(32) 22.08.2019<br>22.08.2019<br>24.09.2019<br>24.09.2019<br>06.05.2019<br>15.04.2019<br>(33) Denmark<br>Denmark<br>United States of America<br>United States of America<br>United States of America<br>United States of America | (51) G06F 3/04886<br>G11B 27/34<br>G11B 27/10<br>G09G 3/20<br>G09G 5/14<br>(11) EP3776553<br>(21) EP19724060.9<br>(47) 18.12.2024<br>(87) US2019030674<br>12.12.2019<br>(22) 03.05.2019<br>(54) MEDIA CONTROL FOR<br>SCREENSAVERS ON AN ELECTRONIC<br>DEVICE<br>(73) Apple Inc.<br>(72) PUREVDORJ, Tergel<br>(31) 201816143426<br>201862679929 P<br>(32) 26.09.2018<br>03.06.2018<br>(33) United States of America<br>United States of America | (51) G06F 3/12<br>(11) EP3660655<br>(21) EP19209891.1<br>(47) 18.12.2024<br>(22) 19.11.2019<br>(54) PRINTER AND CONTROL METHOD<br>THEREOF<br>(73) Seiko Epson Corporation<br>(72) HIRAI, Shigeru<br>OMIYA, Hidehisa<br>SUGIYAMA, Yuichi<br>(31) 2018216252<br>(32) 19.11.2018<br>(33) Japan                                                                                                                                                                       |
| (51) G06F 3/0482<br>G06F 3/0484<br>G06Q 10/00<br>G06Q 10/06<br>G07C 3/06<br>G07C 3/12<br>G07C 5/06<br>G07C 5/12<br>A01G 23/00<br>(11) EP3507684<br>(21) EP17845589.5<br>(47) 18.12.2024<br>(87) FI2017050606<br>08.03.2018<br>(22) 29.08.2017<br>(54) METHOD, ARRANGEMENT AND USER<br>INTERFACE FOR MANAGING MOBILE<br>FOREST MACHINES AND TRANSPORT<br>EQUIPMENT THEREFOR<br>(73) Ponsse Oyj<br>(72) HILJANEN, Jarmo<br>VILKMAN, Hanna<br>(31) 20165645<br>(32) 30.08.2016<br>(33) Finland                                                                                                        | (51) G06F 3/06<br>G06F 9/50<br>(11) EP3889755<br>(21) EP21154572.8<br>(47) 18.12.2024<br>(22) 01.02.2021<br>(54) SCALING PERFORMANCE IN A<br>STORAGE SERVER WITH STORAGE<br>DEVICES<br>(73) Samsung Electronics Co., Ltd.<br>(72) ARUL DHAS, Benixon<br>PANDIAN, Ramaraj<br>LEE, Ronald<br>(31) 202016886713<br>202063003151 P<br>(32) 28.05.2020<br>31.03.2020<br>(33) United States of America<br>United States of America                   | (51) G06F 3/14<br>H04M 1/02<br>H04M 1/72409<br>H04M 1/18<br>H04M 1/72454<br>(11) EP4002817<br>(21) EP19937655.9<br>(47) 18.12.2024<br>(87) KR2019008855<br>21.01.2021<br>(22) 18.07.2019<br>(54) TERMINAL SET AND METHOD FOR<br>CONTROLLING SAME<br>(73) LG Electronics Inc.<br>(72) LEE, Tae Sung<br>PARK, Joo Hyun                                                                                                                                              |
| (51) G06F 3/0481<br>G06F 3/04886<br>G06F 3/04883<br>G06F 1/16<br>G06F 3/04817<br>G06F 3/0482<br>G06F 3/0486<br>(11) EP4095664                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (51) G06F 3/06<br>G06F 12/02<br>(11) EP4145266<br>(21) EP22193409.4<br>(47) 18.12.2024<br>(22) 01.09.2022<br>(54) DUAL MODE STORAGE DEVICE<br>(73) Samsung Electronics Co., Ltd.<br>(72) KI, Yang Seok<br>GIM, Jongmin<br>(31) 202117517659<br>202163240363 P<br>(32) 02.11.2021<br>02.09.2021<br>(33) United States of America                                                                                                                | (51) G06F 3/16<br>G01L 15/00<br>(11) EP4143674<br>(21) EP21752821.5<br>(47) 18.12.2024<br>(87) US2021042231<br>26.01.2023<br>(22) 19.07.2021<br>(54) BIT VECTOR-BASED CONTENT<br>MATCHING FOR THIRD-PARTY<br>DIGITAL ASSISTANT ACTIONS<br>(73) Google LLC<br>(72) MUPPALLA, Dharmadeep                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                | (51) G06F 3/16<br>G06T 1/00<br>G10L 15/22<br>H04L 67/125<br>(11) EP3888082<br>(21) EP20744728.5<br>(47) 18.12.2024<br>(87) KR2020001225<br>30.07.2020<br>(22) 23.01.2020<br>(54) METHOD OF CONTROLLING<br>EXTERNAL ELECTRONIC DEVICE<br>AND ELECTRONIC DEVICE FOR<br>SUPPORTING SAME<br>(73) Samsung Electronics Co., Ltd.<br>(72) KIM, Seunggyun<br>KIM, Minkyu<br>RYU, Daeyoung<br>PARK, Taejun<br>(31) 20190008781<br>(32) 23.01.2019<br>(33) Korea (Republic) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                | (51) G06F 3/16                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                          |                                           |                                  |
|------------------------------------------|-------------------------------------------|----------------------------------|
| G10L 15/22                               | H04W 84/12                                | (22) 11.04.2016                  |
| (11) EP4297020                           | H04W 88/06                                | (54) TECHNOLOGIES FOR SECURE     |
| (21) EP23206223.2                        | (11) EP4211551                            | BOOTSTRAPPING OF VIRTUAL         |
| (47) 18.12.2024                          | (21) EP21782443.2                         | NETWORK FUNCTIONS                |
| (22) 17.10.2019                          | (47) 18.12.2024                           | (73) INTEL Corporation           |
| (54) ELECTRONIC DEVICE, CONTROL          | (87) EP2021074933                         | (72) WALKER, Jesse               |
| METHOD THEREOF, AND SOUND                | 17.03.2022                                | SOOD, Kapil                      |
| OUTPUT CONTROL SYSTEM OF THE             | (22) 10.09.2021                           | (31) 201514709170                |
| ELECTRONIC DEVICE                        | (54) METHOD FOR UPDATING EMBEDDED         | (32) 11.05.2015                  |
| (73) Samsung Electronics Co., Ltd.       | SOFTWARE                                  | (33) United States of America    |
| (72) KIM, Jung Su                        | (73) Commissariat à l'Energie Atomique et | (51) G06F 9/46                   |
| EO, Ho Jin                               | aux Energies Alternatives                 | G06F 21/53                       |
| (31) 20180123698                         | (72) TRESARRIEU, Alban                    | G06F 21/62                       |
| (32) 17.10.2018                          | CHAPUIS, Bastien                          | (11) EP3759597                   |
| (33) Korea (Republic)                    | ALBERTINI, Julien                         | (21) EP19710896.2                |
| (51) G06F 7/02                           | (31) 2009237                              | (47) 18.12.2024                  |
| G06F 7/544                               | (32) 11.09.2020                           | (87) US2019019798                |
| (11) EP4002090                           | (33) France                               | 06.09.2019                       |
| (21) EP21206528.8                        | (51) G06F 9/445                           | (22) 27.02.2019                  |
| (47) 18.12.2024                          | H04W 28/18                                | (54) SYSTEMS AND METHODS FOR     |
| (22) 04.11.2021                          | H04L 41/0806                              | RUNNING APPLICATIONS ON A MULTI- |
| (54) EXTREMA-RETENTIVE DATA              | H04L 67/00                                | TENANT CONTAINER PLATFORM        |
| BUFFERING AND SIMPLIFICATION             | H04L 41/0869                              | (73) Veritas Technologies LLC    |
| (73) GEOTAB Inc.                         | G06F 8/61                                 | (72) GOEL, Vikas                 |
| (72) Beams, Darren Marc Lohmann          | H04L 9/40                                 | (31) 201815908854                |
| Sukhov, Alexey                           | H04W 84/10                                | (32) 01.03.2018                  |
| Frincu, Cristian                         | (11) EP3247086                            | (33) United States of America    |
| (31) 202117194659                        | (21) EP17020259.2                         | (51) G06F 9/48                   |
| 202063117577 P                           | (47) 18.12.2024                           | G06F 9/50                        |
| (32) 08.03.2021                          | (22) 22.12.2008                           | (11) EP3314426                   |
| 24.11.2020                               | (54) SERVICE PROVISIONING UTILIZING       | (21) EP16738327.2                |
| (33) United States of America            | NEAR FIELD COMMUNICATION                  | (47) 18.12.2024                  |
| United States of America                 | (73) Intel Corporation                    | (87) US2016039863                |
| (51) G06F 8/51                           | (72) LORTZ, Victor                        | 05.01.2017                       |
| (11) EP4184315                           | (31) 968063                               | (22) 28.06.2016                  |
| (21) EP22151652.9                        | (32) 31.12.2007                           | (54) VIRTUAL MACHINE INSTANCE    |
| (47) 18.12.2024                          | (33) United States of America             | MIGRATION USING A TRIANGLE       |
| (22) 14.01.2022                          | (51) G06F 9/455                           | APPROACH                         |
| (54) GENERATION OF SERVICE-LEVEL         | G06F 9/48                                 | (73) Amazon Technologies, Inc.   |
| OBJECTIVE SPECIFICATIONS USING           | G06F 12/1036                              | (72) OLSON, Marc Stephen         |
| JAVA ANNOTATION                          | G06F 13/24                                | BRENNEMAN, Kristina Kraemer      |
| (73) Red Hat, Inc.                       | (11) EP3924822                            | BROOKER, Marc John               |
| (72) WITTMAN, Eric                       | (21) EP20754921.3                         | LIN, Jerry                       |
| ANTINORI, Paolo                          | (47) 18.12.2024                           | BROUWER, Pieter Kristian         |
| (31) 202117529952                        | (87) IB2020050517                         | (31) 201514754519                |
| (32) 18.11.2021                          | 20.08.2020                                | 201514754497                     |
| (33) United States of America            | (22) 23.01.2020                           | (32) 29.06.2015                  |
| (51) G06F 8/51                           | (54) DIRECTED INTERRUPT                   | 29.06.2015                       |
| G06F 30/30                               | VIRTUALIZATION WITH BLOCKING              | (33) United States of America    |
| G06F 117/08                              | INDICATOR                                 | United States of America         |
| (11) EP3736712                           | (73) International Business Machines      | (51) G06F 9/50                   |
| (21) EP19173775.8                        | Corporation                               | G06F 15/173                      |
| (47) 18.12.2024                          | (72) JUNGHANS, Sascha                     | H04Q 11/00                       |
| (22) 10.05.2019                          | NERZ, Bernd                               | (11) EP3761178                   |
| (54) METHOD FOR ACCESSING A              | KRAEMER, Marco                            | (21) EP20183529.5                |
| MEMORY OF AN INTEGRATED                  | SCHMIDT, Donald                           | (47) 18.12.2024                  |
| CIRCUIT, PROGRAM, DATA                   | RAISCH, Christoph                         | (22) 01.07.2020                  |
| PROCESSING DEVICE AND                    | DRIEVER, Peter                            | (54) RECONFIGURABLE COMPUTING    |
| NETWORK                                  | (31) 19157102                             | PODS USING OPTICAL NETWORKS      |
| (73) Carl Zeiss Industrielle Messtechnik | (32) 14.02.2019                           | WITH ONE-TO-MANY OPTICAL         |
| GmbH                                     | (33) European Patent Office (EPO)         | SWITCHES                         |
| (72) Maier, Thomas                       | (51) G06F 9/455                           | (73) Google LLC                  |
| Gruber, Udo                              | H04L 9/40                                 | (72) Willcock, Jeremiah          |
| (51) G06F 8/65                           | G06F 21/10                                | (31) 201916458947                |
| B61L 27/53                               | G06F 21/57                                | (32) 01.07.2019                  |
| B61L 23/04                               | (11) EP3849153                            | (33) United States of America    |
| H04W 8/24                                | (21) EP20217466.0                         | (51) G06F 11/30                  |
| H04W 84/00                               | (47) 18.12.2024                           | G06F 9/4401                      |

|                                                                   |                                                                          |                                                                                         |
|-------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| G06F 11/07                                                        | (11) EP3807772                                                           | (21) EP22208696.9                                                                       |
| (11) EP3966682                                                    | (21) EP19818697.5                                                        | (47) 18.12.2024                                                                         |
| (21) EP20722139.1                                                 | (47) 18.12.2024                                                          | (22) 22.11.2022                                                                         |
| (47) 18.12.2024                                                   | (87) US2019029572                                                        | (54) DYNAMIC ON-DEMAND DEVICE-ASSISTED PAGING                                           |
| (87) US2020026943                                                 | 19.12.2019                                                               | (73) INTEL Corporation                                                                  |
| 12.11.2020                                                        | (22) 29.04.2019                                                          | (72) SANKARAN, Rajesh                                                                   |
| (22) 06.04.2020                                                   | (54) MEMORY ACCESS DETERMINATION                                         | RAJ, Ashok                                                                              |
| (54) DYNAMICALLY-CONFIGURABLE BASEBOARD MANAGEMENT CONTROLLER     | (73) Micron Technology, Inc.                                             | Maloney, Patrick                                                                        |
| (73) Microsoft Technology Licensing, LLC                          | (72) MURPHY, Richard C.                                                  | JAIN, Anjali                                                                            |
| (72) KELLY, Bryan D.                                              | (31) 201816010174                                                        | (31) 202117560826                                                                       |
| LADKANI, Neeraj                                                   | (32) 15.06.2018                                                          | (32) 23.12.2021                                                                         |
| (31) 201916405441                                                 | (33) United States of America                                            | (33) United States of America                                                           |
| (32) 07.05.2019                                                   | (51) G06F 12/0842                                                        |                                                                                         |
| (33) United States of America                                     | G06F 12/14                                                               | (51) G06F 13/10                                                                         |
| (51) G06F 11/30                                                   | G06F 21/64                                                               | G06F 13/12                                                                              |
| H04L 41/22                                                        | G06F 21/62                                                               | G06F 13/14                                                                              |
| H04L 43/045                                                       | G06F 12/0808                                                             | G06F 1/3234                                                                             |
| H04L 43/0817                                                      | G06F 21/52                                                               | G06F 1/24                                                                               |
| H04L 43/10                                                        | G06F 21/55                                                               | G06F 1/3296                                                                             |
| (11) EP3748503                                                    | (11) EP3642721                                                           | G06F 1/324                                                                              |
| (21) EP20178695.1                                                 | (21) EP18820143.8                                                        | G06F 1/3209                                                                             |
| (47) 18.12.2024                                                   | (47) 18.12.2024                                                          | (11) EP3776225                                                                          |
| (22) 08.06.2020                                                   | (87) IL2018050598                                                        | (21) EP19775100.1                                                                       |
| (54) DYNAMIC GOLDEN BASELINE                                      | 27.12.2018                                                               | (47) 18.12.2024                                                                         |
| (73) NetBrain Technologies, Inc.                                  | (22) 03.06.2018                                                          | (87) US2019024586                                                                       |
| (72) Xu, Kai                                                      | (54) A CACHE UNIT USEFUL FOR SECURE EXECUTION                            | 03.10.2019                                                                              |
| Gao, Lingping                                                     | (73) Technion Research & Development Foundation Ltd.                     | (22) 28.03.2019                                                                         |
| Liao, Guangdong                                                   | (72) BIRK, Yitzhak                                                       | (54) PROTOCOL LEVEL CONTROL FOR SYSTEM ON A CHIP (SOC) AGENT RESET AND POWER MANAGEMENT |
| Zhao, Peng                                                        | SHWARTZ, Ofir                                                            | (73) Google LLC                                                                         |
| Cheng, Chaoxiang                                                  | (31) 201715629978                                                        | (72) JAIN, Amit                                                                         |
| (31) 201916719593                                                 | (32) 22.06.2017                                                          | PATEL, Jaymin                                                                           |
| 201962859097 P                                                    | (33) United States of America                                            | DESAI, Shailendra                                                                       |
| (32) 18.12.2019                                                   | (51) G06F 12/0895                                                        | PEARCE, Mark                                                                            |
| 08.06.2019                                                        | G06F 12/0897                                                             | BHATT, Rutul                                                                            |
| (33) United States of America                                     | G06F 12/122                                                              | (31) 201862691117 P                                                                     |
| United States of America                                          | G06F 12/123                                                              | 201862650589 P                                                                          |
| (51) G06F 11/34                                                   | G06F 12/0804                                                             | (32) 28.06.2018                                                                         |
| H04L 41/0631                                                      | G06F 12/0882                                                             | 30.03.2018                                                                              |
| H04L 41/142                                                       | G06F 12/0868                                                             | (33) United States of America                                                           |
| H04L 43/062                                                       | G06F 12/1027                                                             | United States of America                                                                |
| H04L 43/08                                                        | G06F 12/02                                                               |                                                                                         |
| H04L 43/16                                                        | G06F 11/34                                                               | (51) G06F 13/16                                                                         |
| G06F 21/55                                                        | (11) EP3885920                                                           | G11C 11/406                                                                             |
| H04L 9/40                                                         | (21) EP20216709.4                                                        | (11) EP3824466                                                                          |
| G06F 11/30                                                        | (47) 18.12.2024                                                          | (21) EP19837001.7                                                                       |
| G06F 21/56                                                        | (22) 22.12.2020                                                          | (47) 18.12.2024                                                                         |
| (11) EP4185974                                                    | (54) APPARATUS AND METHOD FOR EFFICIENT MANAGEMENT OF MULTI-LEVEL MEMORY | (87) US2019038541                                                                       |
| (21) EP21766354.1                                                 | (73) INTEL Corporation                                                   | 23.01.2020                                                                              |
| (47) 18.12.2024                                                   | (72) CHISHTI, Zeshan A.                                                  | (22) 21.06.2019                                                                         |
| (87) US2021046577                                                 | RUBINSTEIN, Asaf                                                         | (54) A REFRESH SCHEME IN A MEMORY CONTROLLER                                            |
| 07.04.2022                                                        | SHIFER, Eran                                                             | (73) Advanced Micro Devices, Inc.                                                       |
| (22) 18.08.2021                                                   | SERLIN, Eshel                                                            | (72) ZHAO, Liang                                                                        |
| (54) ANOMALOUS PATTERN DETECTION FOR CONTROL OF COMPUTER NETWORKS | GREENFIELD, Zvika                                                        | YAO, YuBin                                                                              |
| (73) Microsoft Technology Licensing, LLC                          | KUMAR, Sanjay K.                                                         | (31) 201810775044                                                                       |
| (72) GEETHANATH, Ananth                                           | LANTZ, Philip                                                            | 201816038738                                                                            |
| ARUNACHALAM, Shankaranand                                         | ROYER, Robert J.                                                         | (32) 16.07.2018                                                                         |
| ALAM, Ali                                                         | (31) 202016833337                                                        | 18.07.2018                                                                              |
| (31) 102090                                                       | (32) 27.03.2020                                                          | (33) China                                                                              |
| (32) 29.09.2020                                                   | (33) United States of America                                            | United States of America                                                                |
| (33) Luxembourg                                                   | (51) G06F 12/1027                                                        |                                                                                         |
| (51) G06F 12/0842                                                 | G06F 13/28                                                               | (51) G06F 13/38                                                                         |
| G06F 12/14                                                        | G06F 13/42                                                               | (11) EP4343563                                                                          |
| G06F 3/06                                                         | G06F 9/455                                                               | (21) EP23194653.4                                                                       |
| G06F 12/0811                                                      | (11) EP4202699                                                           | (47) 18.12.2024                                                                         |
|                                                                   |                                                                          | (22) 31.08.2023                                                                         |

|                                                                                                                                                                                     |                                                                                                                                                                                                              |                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) NETWORK ARCHITECTURE,<br>CORRESPONDING VEHICLE AND<br>METHOD                                                                                                                   | (21) EP20737319.2<br>(47) 18.12.2024<br>(87) US2020038266<br>01.04.2021                                                                                                                                      | (87) US2021024191<br>30.09.2021<br>(22) 25.03.2021                                                                                                                        |
| (73) STMicroelectronics S.r.l.<br>(72) RE FIORENTIN, Lorenzo<br>BORGONOVO, Giampiero                                                                                                | (22) 18.06.2020<br>(54) CLOUD BASED QUERY WORKLOAD<br>OPTIMIZATION                                                                                                                                           | (54) SPEECH-BASED SELECTION OF<br>AUGMENTED REALITY CONTENT FOR<br>DETECTED OBJECTS                                                                                       |
| (31) 202200019233<br>(32) 20.09.2022<br>(33) Italy                                                                                                                                  | (73) Microsoft Technology Licensing, LLC<br>(72) YIN, Zhicheng<br>SEN, Rathijit<br>CURINO, Carlo Aldo<br>PATEL, Hiren S.<br>QIAO, Shi<br>JINDAL, Alekh<br>KRISHNAN, Subramaniam Venkatraman<br>ROY, Abhishek | (73) Snap Inc.<br>(72) SPIEGEL, Evan<br>FORTIER, Joseph Timothy<br>ANVARIPOUR, Kaveh<br>MOURKOIANNIS, Celia Nicole                                                        |
| (51) G06F 13/40<br>H04L 12/40<br>(11) EP4038511<br>(21) EP20781515.0<br>(47) 18.12.2024<br>(87) EP2020077202<br>08.04.2021                                                          | (31) 201916581905<br>(32) 25.09.2019<br>(33) United States of America                                                                                                                                        | (31) 202117211158<br>202117211321<br>202063000071 P<br>202063000056 P<br>(32) 24.03.2021<br>24.03.2021<br>26.03.2020<br>26.03.2020                                        |
| (22) 29.09.2020<br>(54) INPUT/OUTPUT UNIT FOR DATA<br>CAPTURE IN A FIELD BUS SYSTEM                                                                                                 | (51) G06F 16/2453<br>(11) EP3413214<br>(21) EP18173559.8<br>(47) 18.12.2024<br>(22) 22.05.2018                                                                                                               | (33) United States of America<br>United States of America<br>United States of America<br>United States of America                                                         |
| (73) Phoenix Contact GmbH & Co. KG<br>(72) WESSLING, Klaus<br>(31) 102019126668<br>(32) 02.10.2019<br>(33) Germany                                                                  | (54) SELECTIVITY ESTIMATION FOR<br>DATABASE QUERY PLANNING                                                                                                                                                   | (51) G06F 16/84<br>G06F 16/957<br>G06F 40/103<br>(11) EP3317780<br>(21) EP16817386.2<br>(47) 18.12.2024<br>(87) IN2016000159<br>05.01.2017                                |
| (51) G06F 13/42<br>(11) EP4057151<br>(21) EP22150940.9<br>(47) 18.12.2024<br>(22) 11.01.2022                                                                                        | (73) SAP SE<br>(72) BOEHM, Alexander<br>MAY, Norman<br>MOERKOTTE, Guido                                                                                                                                      | (22) 22.06.2016<br>(54) TRANSFORMATION OF MARKED-<br>UP CONTENT TO A REVERSIBLE<br>FILE FORMAT FOR AUTOMATED<br>BROWSER BASED PAGINATION                                  |
| (54) SELECTION OF COMMUNICATION<br>PROTOCOL FOR MANAGEMENT BUS                                                                                                                      | (31) 201715603325<br>(32) 23.05.2017<br>(33) United States of America                                                                                                                                        | (73) TNQ Tech PVT Limited<br>(72) VITTAL, Srikanth<br>KIDAMBI, Venkatesan Sumangali<br>VENKATRAMAN, Bhaskar Mannargudi                                                    |
| (73) Intel Corporation<br>(72) Jurski, Janusz<br>Loewen, Myron<br>Schnoor, Matthew A.<br>Srivastava, Amit Kumar<br>McKee, Tim                                                       | (51) G06F 16/27<br>G06F 16/23<br>G06F 16/182<br>(11) EP4004762<br>(21) EP20757061.5<br>(47) 18.12.2024<br>(87) US2020043779<br>04.02.2021                                                                    | (31) 3348CH2015<br>(32) 01.07.2015<br>(33) India                                                                                                                          |
| (31) 202117358363<br>202163158696 P<br>(32) 25.06.2021<br>09.03.2021<br>(33) United States of America<br>United States of America                                                   | (22) 27.07.2020<br>(54) NATIVE PERSISTENT STORE<br>SUPPORT FOR BLOCKCHAINS                                                                                                                                   | (51) G06F 16/955<br>(11) EP4036760<br>(21) EP21154563.7<br>(47) 18.12.2024<br>(22) 01.02.2021                                                                             |
| (51) G06F 15/78<br>(11) EP4102377<br>(21) EP22178305.3<br>(47) 18.12.2024<br>(22) 10.06.2022                                                                                        | (73) Oracle International Corporation<br>(72) LOAIZA, Juan R.<br>YANG, Hongjie<br>GIRKAR, Mahesh Baburao<br>SONAWANE, Sachin Vijaykumar<br>HU, Wei Ming<br>STAMOS, James W.                                  | (54) METHOD AND SYSTEM FOR<br>AUTOMATED AND DYNAMIC MAIN<br>DOMAIN DETERMINATION AND<br>IDENTIFICATION                                                                    |
| (54) DATA PROCESSING SYSTEM<br>AND METHOD FOR ACCESSING<br>HETEROGENEOUS MEMORY SYSTEM                                                                                              | (31) 202016932633<br>201962880582 P<br>(32) 17.07.2020<br>30.07.2019<br>(33) United States of America<br>United States of America                                                                            | (73) Deutsche Telekom AG<br>(72) LIPPMANN, Nico<br>SBEITI, Mohamad<br>WILL, Niclas                                                                                        |
| (73) Samsung Electronics Co., Ltd.<br>Industry-Academic Cooperation<br>Foundation, Yonsei University<br>(72) JEONG, Wonseob<br>RO, Wonwoo<br>KO, Gun<br>KAL, Hongju<br>LEE, Seokmin | (51) G06F 16/432<br>G06Q 30/06<br>G06Q 30/0601<br>G06Q 50/00<br>H04N 21/422<br>H04N 21/462<br>H04N 21/4722<br>H04N 21/81                                                                                     | (51) G06F 18/22<br>G06V 10/46<br>G06V 10/75<br>G06V 10/74<br>(11) EP3690700<br>(21) EP19797155.9<br>(47) 18.12.2024<br>(87) CN2019099122<br>18.06.2020<br>(22) 02.08.2019 |
| (31) 20210117942<br>20210075745<br>(32) 03.09.2021<br>10.06.2021<br>(33) Korea (Republic)<br>Korea (Republic)                                                                       | (11) EP4127971<br>(21) EP21719781.3<br>(47) 18.12.2024                                                                                                                                                       |                                                                                                                                                                           |
| (51) G06F 16/21<br>G06F 16/25<br>(11) EP4035022                                                                                                                                     |                                                                                                                                                                                                              |                                                                                                                                                                           |

|                                                                                                |                                                                            |                                                                                                                          |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| (54) IMAGE SIMILARITY CALCULATION METHOD AND DEVICE, AND STORAGE MEDIUM                        | (73) American Express Travel Related Services Company, Inc.                | (54) METHOD FOR AUTHENTICATING A COMPUTER SYSTEM                                                                         |
| (73) XIAMEN MEIYA PICO INFORMATION CO., LTD                                                    | (72) FERENCZI, Andras, L.                                                  | (73) Bundesdruckerei GmbH                                                                                                |
| (72) WU, Hongwei                                                                               | (31) 201916555638                                                          | (72) STEINFELDT, Frank                                                                                                   |
| YAN, Chenjia                                                                                   | (32) 29.08.2019                                                            | ENTSCHEW, Enrico                                                                                                         |
| ZHOU, Chengzu                                                                                  | (33) United States of America                                              | NGUYEN, Kim                                                                                                              |
| ZHANG, Yongguang                                                                               | (51) G06F 21/44                                                            | (31) 102019106667                                                                                                        |
| NIE, Zhiqiao                                                                                   | G06F 21/57                                                                 | (32) 15.03.2019                                                                                                          |
| LIN, Shuqiang                                                                                  | (11) EP4150492                                                             | (33) Germany                                                                                                             |
| (31) 201811506274                                                                              | (21) EP21724714.7                                                          | (51) G06F 21/44                                                                                                          |
| (32) 10.12.2018                                                                                | (47) 18.12.2024                                                            | H04W 12/50                                                                                                               |
| (33) China                                                                                     | (87) EP2021062892                                                          | H04W 12/06                                                                                                               |
| (51) G06F 18/22                                                                                | 18.11.2021                                                                 | G06F 21/62                                                                                                               |
| H04W 4/02                                                                                      | (22) 14.05.2021                                                            | H04L 9/40                                                                                                                |
| (11) EP4211594                                                                                 | (54) METHOD AND SECURE ELEMENT FOR DETECTING A TRUSTED ELECTRONIC ASSEMBLY | (11) EP3031003                                                                                                           |
| (21) EP20772034.3                                                                              | (73) Wibu-Systems AG                                                       | (21) EP14750809.7                                                                                                        |
| (47) 18.12.2024                                                                                | (72) WINZENRIED, Oliver                                                    | (47) 18.12.2024                                                                                                          |
| (87) EP2020075548                                                                              | NEIFER, Wolfgang                                                           | (87) JP2014003920                                                                                                        |
| 17.03.2022                                                                                     | FUST, Ralf                                                                 | 12.02.2015                                                                                                               |
| (22) 11.09.2020                                                                                | (31) 20174702                                                              | (22) 24.07.2014                                                                                                          |
| (54) METHOD FOR IDENTIFYING AND/OR CLASSIFYING OCCUPANTS OF A VEHICLE                          | (32) 14.05.2020                                                            | (54) ELECTRONIC DEVICE, SERVER, ELECTRONIC DEVICE CONTROLLING METHOD, INFORMATION PROCESSING METHOD AND RECORDING MEDIUM |
| (73) Swiss Reinsurance Company Ltd.                                                            | (33) European Patent Office (EPO)                                          | (73) Sony Group Corporation                                                                                              |
| (72) GENOVESE, Donato                                                                          | (51) G06F 21/44                                                            | (72) HIRAGA, Tooru                                                                                                       |
| CERRUTI, Benedetta                                                                             | G06F 21/60                                                                 | MAEGAWA, Hirotooshi                                                                                                      |
| TISSEUR, Riccardo                                                                              | H04L 9/08                                                                  | (31) 2013166683                                                                                                          |
| (51) G06F 21/12                                                                                | H04L 9/32                                                                  | (32) 09.08.2013                                                                                                          |
| G06F 21/45                                                                                     | H04W 12/06                                                                 | (33) Japan                                                                                                               |
| G06F 21/34                                                                                     | H04W 12/084                                                                | (51) G06F 21/53                                                                                                          |
| G16H 40/63                                                                                     | H04W 12/63                                                                 | (11) EP4320535                                                                                                           |
| (11) EP3282383                                                                                 | H04W 12/77                                                                 | (21) EP22715438.2                                                                                                        |
| (21) EP15888259.7                                                                              | G06Q 20/18                                                                 | (47) 18.12.2024                                                                                                          |
| (47) 18.12.2024                                                                                | G06Q 20/32                                                                 | (87) US2022020667                                                                                                        |
| (87) CN2015081943                                                                              | G06Q 20/38                                                                 | 13.10.2022                                                                                                               |
| 13.10.2016                                                                                     | G06Q 20/42                                                                 | (22) 17.03.2022                                                                                                          |
| (22) 19.06.2015                                                                                | G07F 7/02                                                                  | (54) CONTROLLED DATA ACCESS VIA CONTAINER VISIBLE LOCATION                                                               |
| (54) USAGE CONTROL METHOD AND SYSTEM FOR MEDICAL DETECTION DEVICE AND MEDICAL DETECTION DEVICE | G07F 7/10                                                                  | (73) Microsoft Technology Licensing, LLC                                                                                 |
| (73) Wuxi Hisky Medical Technologies Co., Ltd.                                                 | G07F 9/00                                                                  | (72) REZNIKOV, Yan                                                                                                       |
| (72) DUAN, Houli                                                                               | G06Q 30/06                                                                 | FAHD KAMAL EHTESHAM AHMAD, .                                                                                             |
| SHAO, Jinhua                                                                                   | G07F 11/44                                                                 | FAZIO, Marco                                                                                                             |
| SUN, Jin                                                                                       | (11) EP3998567                                                             | WANG, Tao                                                                                                                |
| (31) 201510170707                                                                              | (21) EP20837085.8                                                          | PALOD, Swapnil                                                                                                           |
| (32) 10.04.2015                                                                                | (47) 18.12.2024                                                            | (31) 202117225025                                                                                                        |
| (33) China                                                                                     | (87) JP2020012426                                                          | (32) 07.04.2021                                                                                                          |
| (51) G06F 21/33                                                                                | 14.01.2021                                                                 | (33) United States of America                                                                                            |
| G06F 21/62                                                                                     | (22) 19.03.2020                                                            | (51) G06F 21/57                                                                                                          |
| G06F 21/55                                                                                     | (54) COMMUNICATION SYSTEM, COMMUNICATION METHOD, AND SENSOR UNIT           | G06F 21/51                                                                                                               |
| H04L 9/08                                                                                      | (73) Kainuma, Kenichi                                                      | G06F 21/56                                                                                                               |
| H04L 9/32                                                                                      | Ichihashi, Norio                                                           | G06F 21/64                                                                                                               |
| G06F 21/64                                                                                     | Osanai, Hiroki                                                             | H04L 9/32                                                                                                                |
| H04L 9/40                                                                                      | (72) Kainuma, Kenichi                                                      | G06F 12/14                                                                                                               |
| H04L 9/00                                                                                      | Osanai, Hiroki                                                             | (11) EP3811262                                                                                                           |
| (11) EP4022473                                                                                 | Ichihashi, Norio                                                           | (21) EP19727324.6                                                                                                        |
| (21) EP20856284.3                                                                              | (31) 2019128812                                                            | (47) 18.12.2024                                                                                                          |
| (47) 18.12.2024                                                                                | (32) 10.07.2019                                                            | (87) EP2019063188                                                                                                        |
| (87) US2020046652                                                                              | (33) Japan                                                                 | 26.12.2019                                                                                                               |
| 04.03.2021                                                                                     | (51) G06F 21/44                                                            | (22) 22.05.2019                                                                                                          |
| (22) 17.08.2020                                                                                | H04L 9/40                                                                  | (54) COMPUTING DEVICE AND METHOD FOR OPERATING SAME                                                                      |
| (54) DECENTRALIZED DATA AUTHENTICATION                                                         | (11) EP3939226                                                             | (73) Robert Bosch GmbH                                                                                                   |
|                                                                                                | (21) EP20710487.8                                                          | (72) ZIEGLER, Florian                                                                                                    |
|                                                                                                | (47) 18.12.2024                                                            | STUMPF, Frederic                                                                                                         |
|                                                                                                | (87) EP2020056181                                                          | JUNG, Ramona                                                                                                             |
|                                                                                                | 24.09.2020                                                                 | MEURER, Alexander                                                                                                        |
|                                                                                                | (22) 09.03.2020                                                            |                                                                                                                          |

|                                          |                                    |                                         |
|------------------------------------------|------------------------------------|-----------------------------------------|
| SAGAR, Ilias                             | (54) METHOD AND DEVICE FOR         | (73) Crimtan Holdings Limited           |
| LENZ, Christoph                          | ENABLING DATA ACCESS TO A          | (72) DUDMESH, John                      |
| SCHRAMM, Juergen                         | FEDERATED STORAGE                  | HOUSTOUN, Andy                          |
| WEBER, Andreas                           | (73) Helsing GmbH                  | ORLOV, Denis                            |
| (31) 102018213617                        | (72) Adler, Antonia                | CURSON, Ian                             |
| 102018211752                             | Pfeiffer, Simon                    | (31) 201807183                          |
| 102018209965                             | Fink, Robert                       | (32) 01.05.2018                         |
| (32) 13.08.2018                          | Krah, Moritz                       | (33) United Kingdom                     |
| 13.07.2018                               | Lingemann, Stephanie               | (51) G06F 30/10                         |
| 20.06.2018                               | (51) G06F 21/62                    | G06F 113/10                             |
| (33) Germany                             | (11) EP4198786                     | G06T 17/20                              |
| Germany                                  | (21) EP22175393.2                  | G06T 17/30                              |
| Germany                                  | (47) 18.12.2024                    | (11) EP3877887                          |
| (51) G06F 21/57                          | (22) 25.05.2022                    | (21) EP19732163.1                       |
| G06F 21/71                               | (54) RULE-BASED TARGETED           | (47) 18.12.2024                         |
| G06F 21/81                               | EXTRACTION AND ENCRYPTION OF       | (87) US2019034221                       |
| (11) EP4246353                           | SENSITIVE DOCUMENT FEATURES        | 14.05.2020                              |
| (21) EP22161883.8                        | (73) Intuit Inc.                   | (22) 28.05.2019                         |
| (47) 18.12.2024                          | (72) EDGINGTON, Cody Allyn         | (54) CONVERSION OF GENERATIVE           |
| (22) 14.03.2022                          | SEILNACHT, Michael J.              | DESIGN GEOMETRY TO EDITABLE             |
| (54) METHOD TO PREVENT REPLAY            | VEPA, Sirish V.                    | AND WATERTIGHT BOUNDARY                 |
| ATTACK                                   | SLATER, Richard Lee                | REPRESENTATION IN COMPUTER              |
| (73) Nagravision Sarl                    | (31) 202117644107                  | AIDED DESIGN                            |
| (72) Villegas, Karine                    | (32) 14.12.2021                    | (73) Autodesk, Inc.                     |
| Ryan, Conor                              | (33) United States of America      | (72) MESHKAT, Siavash Navadeh           |
| Gremaud, Fabien                          | (51) G06F 21/62                    | FINNIGAN, Gordon Thomas                 |
| (51) G06F 21/60                          | G06F 21/60                         | AMAGLIANI, Marco                        |
| G06F 21/62                               | G06Q 20/40                         | WOLSKI, Pawel                           |
| (11) EP4168914                           | G06Q 30/02                         | BARBACK, Tristan Ward                   |
| (21) EP21721767.8                        | G06F 21/55                         | HALLET, Justin Nicholas                 |
| (47) 18.12.2024                          | H04L 9/40                          | SANTHANAM, Nandakumar                   |
| (87) US2021026292                        | G06F 21/57                         | BARLEY, Stephen Alan                    |
| 23.12.2021                               | G06Q 10/0635                       | FLOWER, Jean Alison                     |
| (22) 08.04.2021                          | G06Q 20/10                         | SAPUN, Maciej                           |
| (54) PRIVILEGE LEVEL ASSIGNMENTS TO      | G06Q 20/34                         | FURUTA, Suguru                          |
| GROUPS                                   | G06Q 40/08                         | HENLEY, Iain Edward                     |
| (73) Microsoft Technology Licensing, LLC | G06Q 40/03                         | CHARROT, Peter Hugh                     |
| (72) KRAUS, Naama                        | (11) EP4049163                     | MARINOV, Martin Cvetanov                |
| SHALALA, Moshe                           | (21) EP20879126.9                  | (31) 201862758053 P                     |
| SALMAN, Tamer                            | (47) 18.12.2024                    | (32) 09.11.2018                         |
| ISRAEL, Moshe                            | (87) US2020057396                  | (33) United States of America           |
| LURIE, Rotem                             | 29.04.2021                         | (51) G06F 30/10                         |
| DVIR, Avihai                             | (22) 26.10.2020                    | G06T 17/20                              |
| (31) 202016907026                        | (54) DATA BREACH SYSTEM AND METHOD | (11) EP3995984                          |
| (32) 19.06.2020                          | (73) Sontiq, Inc.                  | (21) EP20306338.3                       |
| (33) United States of America            | (72) VAN DYKE, James               | (47) 18.12.2024                         |
| (51) G06F 21/60                          | PASCUAL, Alphonse                  | (22) 05.11.2020                         |
| G06F 21/62                               | (31) 202016638046                  | (54) CELL SHRINK WRAP                   |
| H04L 9/08                                | 201962926467 P                     | (73) Dassault Systemes Deutschland GmbH |
| H04L 9/32                                | (32) 10.02.2020                    | (72) Sussner, Gerd                      |
| (11) EP4035043                           | 26.10.2019                         | (51) G06F 30/12                         |
| (21) EP20785574.3                        | (33) United States of America      | G06F 3/01                               |
| (47) 18.12.2024                          | United States of America           | G06F 3/04842                            |
| (87) GB2020052319                        | (51) G06F 21/62                    | G06F 30/10                              |
| 01.04.2021                               | G06Q 30/02                         | (11) EP3846004                          |
| (22) 24.09.2020                          | G06Q 30/0201                       | (21) EP19306791.5                       |
| (54) ENCRYPTION AND VERIFICATION         | G06Q 30/0251                       | (47) 18.12.2024                         |
| METHOD                                   | G06Q 30/0241                       | (22) 30.12.2019                         |
| (73) Airbus Defence and Space Limited    | G06Q 30/0601                       | (54) SELECTION OF AN EDGE WITH          |
| (72) FRANCIS, Patrick                    | (11) EP3788582                     | AN IMMERSIVE GESTURE IN 3D              |
| (31) 201913973                           | (21) EP19735373.3                  | MODELING                                |
| (32) 27.09.2019                          | (47) 18.12.2024                    | (73) Dassault Systèmes                  |
| (33) United Kingdom                      | (87) GB2019051212                  | (72) DOGANIS, Fivos                     |
| (51) G06F 21/62                          | 07.11.2019                         | (51) G06F 30/17                         |
| (11) EP4307151                           | (22) 01.05.2019                    | G06F 30/23                              |
| (21) EP22184820.3                        | (54) SYSTEM FOR CONTROLLING USER   | G06F 113/10                             |
| (47) 18.12.2024                          | INTERACTION VIA AN APPLICATION     | G06F 119/14                             |
| (22) 13.07.2022                          | WITH REMOTE SERVERS                | (11) EP4195086                          |



|                                                                                                                             |                                                                        |                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------|
| (21) EP22211984.4                                                                                                           | (32) 10.07.2018                                                        | SHIMOTA, Jon, M.                                                         |
| (47) 18.12.2024                                                                                                             | (33) United States of America                                          | MOREHEAD, John, H.                                                       |
| (22) 07.12.2022                                                                                                             | (51) G06K 17/00                                                        | JOHNSTON, Kevin, A.                                                      |
| (54) COMPUTER AIDED GENERATIVE DESIGN WITH FEATURE THICKNESS CONTROL TO FACILITATE MANUFACTURING AND STRUCTURAL PERFORMANCE | G06K 7/10                                                              | ROGERS, Bryan, L.                                                        |
| (73) Autodesk, Inc.                                                                                                         | G06K 19/07                                                             | (31) 201862664936 P                                                      |
| (72) BUTSCHER, Adrian Adam                                                                                                  | (11) EP4080409                                                         | (32) 30.04.2018                                                          |
| MORRIS, Nigel Jed Wesley                                                                                                    | (21) EP22168979.7                                                      | (33) United States of America                                            |
| RODRIGUEZ, Jesus                                                                                                            | (47) 18.12.2024                                                        | (51) G06N 3/04                                                           |
| WEISS, Benjamin McKittrick                                                                                                  | (22) 20.04.2022                                                        | G06N 3/067                                                               |
| (31) 202217707886                                                                                                           | (54) CONDUIT WITH RADIO FREQUENCY IDENTIFICATION (RFID) ENABLED SENSOR | (11) EP3912096                                                           |
| 202163286990 P                                                                                                              | (73) Cooper-Standard Automotive Inc.                                   | (21) EP19828441.6                                                        |
| (32) 29.03.2022                                                                                                             | (72) CARDWELL, Brian James                                             | (47) 18.12.2024                                                          |
| 07.12.2021                                                                                                                  | (31) 202117236507                                                      | (87) US2019064554                                                        |
| (33) United States of America                                                                                               | (32) 21.04.2021                                                        | 23.07.2020                                                               |
| United States of America                                                                                                    | (33) United States of America                                          | (22) 04.12.2019                                                          |
| (51) G06F 40/30                                                                                                             | (51) G06K 19/073                                                       | (54) OPTOELECTRONIC COMPUTING SYSTEMS                                    |
| (11) EP4298548                                                                                                              | G06K 19/07                                                             | (73) Lightelligence Pte. Ltd.                                            |
| (21) EP22714953.1                                                                                                           | (11) EP4055527                                                         | (72) LU, Cheng-Kuan                                                      |
| (47) 18.12.2024                                                                                                             | (21) EP20816045.7                                                      | STEINMAN, Maurice                                                        |
| (87) US2022018134                                                                                                           | (47) 18.12.2024                                                        | GAGNON, Ronald                                                           |
| 01.09.2022                                                                                                                  | (87) US2020058886                                                      | BAI, Yanfei                                                              |
| (22) 28.02.2022                                                                                                             | 14.05.2021                                                             | DENG, Jingdong                                                           |
| (54) INFORMED CONSENSUS DETERMINATION AMONG MULTIPLE DIVERGENT USER OPINIONS                                                | (22) 04.11.2020                                                        | MENG, Huaiyu                                                             |
| (73) Deliberati LLC                                                                                                         | (54) CONFIGURABLE ANTI-TAMPER SYSTEM AND METHOD                        | XU, Yelong                                                               |
| (72) WARDEN, Jonathan Robert                                                                                                | (73) Avery Dennison Retail Information Services LLC                    | HOSSEINZADEH, Arash                                                      |
| (31) 202163154628 P                                                                                                         | (72) FORSTER, Ian, J.                                                  | SHEN, Yichen                                                             |
| (32) 26.02.2021                                                                                                             | (31) 201962930078 P                                                    | TERRY, Jonathan                                                          |
| (33) United States of America                                                                                               | (32) 04.11.2019                                                        | (31) 201916431167                                                        |
| (51) G06K 7/14                                                                                                              | (33) United States of America                                          | 201962820562 P                                                           |
| G06K 19/06                                                                                                                  | (51) G06K 19/077                                                       | 201962792144 P                                                           |
| (11) EP3602391                                                                                                              | A61M 5/32                                                              | (32) 04.06.2019                                                          |
| (21) EP18772467.9                                                                                                           | (11) EP4154179                                                         | 19.03.2019                                                               |
| (47) 18.12.2024                                                                                                             | (21) EP21722267.8                                                      | 14.01.2019                                                               |
| (87) US2018023068                                                                                                           | (47) 18.12.2024                                                        | (33) United States of America                                            |
| 27.09.2018                                                                                                                  | (87) EP2021061883                                                      | United States of America                                                 |
| (22) 19.03.2018                                                                                                             | 25.11.2021                                                             | United States of America                                                 |
| (54) A TWO DIMENSIONAL BARCODE WITH DYNAMIC ENVIRONMENTAL DATA SYSTEM, METHOD, AND APPARATUS                                | (22) 05.05.2021                                                        | (51) G06N 3/04                                                           |
| (73) Temptime Corporation                                                                                                   | (54) RING-SHAPED RFID LABEL FOR SYRINGE TIP CAP                        | G06V 40/12                                                               |
| (72) PRUSIK, Thaddeus                                                                                                       | (73) Becton Dickinson France                                           | (11) EP4206983                                                           |
| ABDO, Mohannad                                                                                                              | Becton Dickinson and Company                                           | (21) EP22778365.1                                                        |
| HOBERGER, Clive                                                                                                             | (72) LEIBRAND, Alfred                                                  | (47) 18.12.2024                                                          |
| (31) 201715464207                                                                                                           | EUVARD, Nicolas                                                        | (87) CN2022075709                                                        |
| (32) 20.03.2017                                                                                                             | MARTY, Daniel                                                          | 06.10.2022                                                               |
| (33) United States of America                                                                                               | RIVIER, Cédric                                                         | (22) 09.02.2022                                                          |
| (51) G06K 17/00                                                                                                             | THOMAS, Fassler                                                        | (54) FINGERPRINT IDENTIFICATION METHOD AND ELECTRONIC DEVICE             |
| B41J 3/407                                                                                                                  | (31) 20175265                                                          | (73) Honor Device Co., Ltd.                                              |
| B41J 3/50                                                                                                                   | (32) 18.05.2020                                                        | (72) ZHANG, Xiaowu                                                       |
| B65C 9/00                                                                                                                   | (33) European Patent Office (EPO)                                      | DI, Haoxuan                                                              |
| (11) EP4123507                                                                                                              | (51) G06M 1/10                                                         | LI, Danhong                                                              |
| (21) EP22195179.1                                                                                                           | G06M 1/27                                                              | (31) 202110363678                                                        |
| (47) 18.12.2024                                                                                                             | B30B 15/14                                                             | (32) 02.04.2021                                                          |
| (22) 08.07.2019                                                                                                             | (11) EP3788548                                                         | (33) China                                                               |
| (54) METHODS AND APPARATUSES FOR ENCODING A RADIO FREQUENCY IDENTIFICATION (RFID) INLAY                                     | (21) EP19723287.9                                                      | (51) G06N 3/063                                                          |
| (73) Hand Held Products, Inc.                                                                                               | (47) 18.12.2024                                                        | (11) EP4105838                                                           |
| (72) D'ARMANCOURT, Sebastien                                                                                                | (87) US2019029752                                                      | (21) EP22167293.4                                                        |
| LEONG, Hong Sheng                                                                                                           | 07.11.2019                                                             | (47) 18.12.2024                                                          |
| (31) 201816031175                                                                                                           | (22) 29.04.2019                                                        | (22) 08.04.2022                                                          |
|                                                                                                                             | (54) TOOL TRACKING AND DATA COLLECTION ASSEMBLY                        | (54) MIXED-PRECISION NEURAL NETWORK ACCELERATOR TILE WITH LATTICE FUSION |
|                                                                                                                             | (73) Wilson Tool International Inc.                                    | (73) Samsung Electronics Co., Ltd.                                       |
|                                                                                                                             | (72) SCHWARTZ, Anthony, David                                          | (72) SHAFIEE ARDESTANI, Ali                                              |
|                                                                                                                             | LEE, Brian, J.                                                         | ABDELAZIZ, Hamzah Ahmed Ali                                              |
|                                                                                                                             | TIMP, Richard, L.                                                      | HASSOUN, Joseph H.                                                       |
|                                                                                                                             |                                                                        | (31) 202117463544                                                        |
|                                                                                                                             |                                                                        | 202163212104 P                                                           |

|                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (32) 31.08.2021<br>17.06.2021                                                                                                                                                                                                                            | (22) 21.12.2021                                                                                                                                                                                                                                                                                                                                                                                                                | (33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| (33) United States of America<br>United States of America                                                                                                                                                                                                | (54) TRAINING A NEURAL NETWORK<br>(73) Imagination Technologies Limited                                                                                                                                                                                                                                                                                                                                                        | (51) G06Q 10/04<br>G06Q 10/06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| (51) G06N 3/063<br>G06F 9/50                                                                                                                                                                                                                             | (72) ASAD, Muhammad<br>CONDORELLI, Elia<br>DIKICI, Gagatay                                                                                                                                                                                                                                                                                                                                                                     | (11) EP4303785<br>(21) EP22206945.2<br>(47) 18.12.2024<br>(22) 11.11.2022                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| (11) EP3577605<br>(21) EP18703134.9<br>(47) 18.12.2024                                                                                                                                                                                                   | (31) 202020386<br>(32) 22.12.2020<br>(33) United Kingdom                                                                                                                                                                                                                                                                                                                                                                       | (54) RESERVOIR FLOW RATE<br>REGULATING METHOD AND<br>APPARATUS, ELECTRONIC DEVICE,<br>AND STORAGE MEDIUM                                                                                                                                                                                                                                                                                                                                                                                                       |
| (87) US2018013939<br>22.11.2018<br>(22) 17.01.2018<br>(54) SCHEDULING NEURAL NETWORK<br>PROCESSING                                                                                                                                                       | (51) G06N 3/126<br>G06N 5/045<br>G06N 5/022<br>G06N 3/08                                                                                                                                                                                                                                                                                                                                                                       | (73) China Three Gorges Co., Ltd.<br>(72) JIANG, Dingguo<br>LIU, Xiaoting<br>HU, Peng<br>ZENG, Qinghui<br>JIANG, Yunzhong<br>DAI, Huichao                                                                                                                                                                                                                                                                                                                                                                      |
| (73) Google LLC<br>(72) WOO, Dong Hyuk<br>(31) 201715599559<br>(32) 19.05.2017<br>(33) United States of America                                                                                                                                          | (11) EP3594864<br>(21) EP18763801.0<br>(47) 18.12.2024<br>(87) JP2018007022<br>13.09.2018<br>(22) 26.02.2018                                                                                                                                                                                                                                                                                                                   | (31) 202210795217<br>(32) 07.07.2022<br>(33) China                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| (51) G06N 3/063<br>G06N 3/045<br>(11) EP3788555<br>(21) EP19719694.2<br>(47) 18.12.2024<br>(87) US2019025892<br>07.11.2019<br>(22) 04.04.2019<br>(54) SYSTEMS AND METHODS FOR<br>ASSIGNING TASKS IN A NEURAL<br>NETWORK PROCESSOR                        | (54) FACTOR INFERENCE DEVICE,<br>FACTOR INFERENCE SYSTEM, AND<br>FACTOR INFERENCE METHOD<br>(73) Omron Corporation<br>(72) MIYATA, Kiichiro<br>ANDO, Tanichi<br>MIYAURA, Hiroyuki<br>(31) 2017044375<br>(32) 08.03.2017<br>(33) Japan                                                                                                                                                                                          | (51) G06Q 10/06<br>(11) EP3834146<br>(21) EP19849085.6<br>(47) 18.12.2024<br>(87) US2019045073<br>20.02.2020<br>(22) 05.08.2019<br>(54) A METHOD AND A SYSTEM FOR<br>MONITORING A FIRE OR SECURITY<br>SYSTEM AND A STORAGE MEDIUM                                                                                                                                                                                                                                                                              |
| (73) Apple Inc.<br>(72) NORDEN, Erik<br>FISHEL, Liran<br>(31) 201815971872<br>(32) 04.05.2018<br>(33) United States of America                                                                                                                           | (51) G06N 5/04<br>G06N 20/00<br>G06F 21/62<br>G06F 21/60<br>G06F 16/35<br>(11) EP3355248<br>(21) EP18150475.4<br>(47) 18.12.2024<br>(22) 05.01.2018<br>(54) SECURITY CLASSIFICATION BY<br>MACHINE LEARNING<br>(73) Accenture Global Solutions Limited<br>(72) LUO, Song<br>SALEM, Malek Ben<br>(31) 201715400298<br>201715400112<br>(32) 06.01.2017<br>06.01.2017<br>(33) United States of America<br>United States of America | (73) Carrier Corporation<br>(72) JIA, Zhen<br>SHA, Danqing<br>LI, Benliang<br>SUN, Ellen<br>(31) 201810891613<br>(32) 07.08.2018<br>(33) China                                                                                                                                                                                                                                                                                                                                                                 |
| (51) G06N 3/08<br>G06T 7/00<br>G06V 10/50<br>G06V 10/764<br>G06V 40/10<br>G06N 3/048<br>G06N 3/063<br>(11) EP3690803<br>(21) EP18861998.5<br>(47) 18.12.2024<br>(87) JP2018035607<br>04.04.2019<br>(22) 26.09.2018<br>(54) INFORMATION PROCESSING DEVICE | (73) AISIN CORPORATION<br>Kyushu Institute of Technology<br>(72) YAMASAKI, Yuta<br>YAMADA, Hideo<br>MURAMATSU, Ryuya<br>ENOKIDA, Shuichi<br>SHIBATA, Masatoshi<br>TAMUKOH, Hakaru<br>(31) 2017185476<br>(32) 26.09.2017<br>(33) Japan                                                                                                                                                                                          | (51) G06Q 10/06<br>G06Q 10/10<br>(11) EP3971805<br>(21) EP21166517.9<br>(47) 18.12.2024<br>(22) 01.04.2021<br>(54) GENERATING WORKFLOW, REPORT,<br>INTERFACE, CONVERSION,<br>ENHANCEMENT, AND FORMS<br>(WRICEF) OBJECTS FOR<br>ENTERPRISE SOFTWARE<br>(73) Accenture Global Solutions Limited<br>(72) PIGANEAU, Aymeric<br>LIEGARD, Michel-Etienne<br>GUIMBELLOT, Stephanie<br>(31) 202017103164<br>20290064<br>(32) 24.11.2020<br>17.09.2020<br>(33) United States of America<br>European Patent Office (EPO) |
| (51) G06N 3/082<br>G06N 3/045<br>G06N 3/063<br>G06N 3/084<br>(11) EP4020325<br>(21) EP21216321.6<br>(47) 18.12.2024                                                                                                                                      | (51) G06N 10/20<br>G06N 10/60<br>G06N 10/40<br>G06N 20/00<br>(11) EP4099233<br>(21) EP22179379.7<br>(47) 18.12.2024<br>(22) 31.12.2014<br>(54) CONSTRUCTING AND<br>PROGRAMMING QUANTUM<br>HARDWARE FOR QUANTUM<br>ANNEALING PROCESSES<br>(73) Google LLC<br>(72) MOHSENI, Masoud<br>NEVEN, Hartmut<br>(31) 201461985348 P<br>201461924207 P<br>(32) 28.04.2014<br>06.01.2014                                                   | (51) G06Q 10/0633<br>G06N 3/08<br>G06N 3/044<br>G06N 3/045<br>G06Q 10/10<br>G06Q 50/18<br>(11) EP3750121                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                  |                                |                                             |
|----------------------------------|--------------------------------|---------------------------------------------|
| (21) EP19705788.8                | (33) Germany                   | (21) EP20186590.4                           |
| (47) 18.12.2024                  | (51) G06Q 10/10                | (47) 18.12.2024                             |
| (87) GB2019050309                | G06Q 10/0631                   | (22) 17.07.2020                             |
| 15.08.2019                       | (11) EP4109367                 | (54) SYSTEM, METHOD, AND APPARATUS          |
| (22) 06.02.2019                  | (21) EP22180517.9              | FOR INTEGRATING MULTIPLE                    |
| (54) COMPUTER-IMPLEMENTED METHOD | (47) 18.12.2024                | PAYMENT OPTIONS ON A MERCHANT               |
| FOR TRAINING A PLURALITY OF      | (22) 22.06.2022                | WEBPAGE                                     |
| COMPUTERS                        | (54) METHOD AND DEVICE FOR     | (73) Visa International Service Association |
| (73) Thoughtriver Limited        | MANAGING PROJECT BY USING DATA | (72) MCGURK, Niall                          |
| (72) HUDSON, Dominic             | FILTERING                      | HODKINSON, Timothy                          |
| PULLAN, Timothy                  | (73) Crowdworks, Inc.          | PROKOP, Bartlomiej Piotr                    |
| (31) 201802000                   | (72) CHOI, Uiho                | LOONEY, Thomas Joseph                       |
| (32) 07.02.2018                  | WON, Dongbeom                  | CARROLL, Bryan                              |
| (33) United Kingdom              | JANG, Jeong Sik                | MORGAN, Nathan                              |
| (51) G06Q 10/08                  | SEO, Hyung Joon                | JOHN, Rhidian Desmond Thomas                |
| G07F 7/06                        | JUNG, Ku Young                 | DUTTA, Rajiv                                |
| G07F 9/10                        | PARK, Min Woo                  | DONALDSON, James                            |
| G07F 11/62                       | (31) 20210081193               | MCMANUS, Brian                              |
| G07F 17/00                       | (32) 22.06.2021                | MACHICAO, Andre Walter                      |
| (11) EP3961533                   | (33) Korea (Republic)          | FLOREZ, Clinton Lopaka                      |
| (21) EP21191754.7                | (51) G06Q 20/00                | AGRAWAL, Shobhit                            |
| (47) 18.12.2024                  | G06Q 20/06                     | (31) 201962876117 P                         |
| (22) 17.08.2021                  | G06Q 20/10                     | (32) 19.07.2019                             |
| (54) AUTONOMOUS FOOD STATION     | G06F 21/62                     | (33) United States of America               |
| (73) T3 Micro, Inc.              | G06F 21/88                     | (51) G06Q 20/32                             |
| (72) Miller, Michael             | (11) EP3830778                 | H04L 9/32                                   |
| Rojee, Andrew                    | (21) EP19845262.5              | H04L 9/00                                   |
| Glucksman, Dov                   | (47) 18.12.2024                | H04B 5/00                                   |
| Yu, Kent                         | (87) IB2019051937              | G06F 21/57                                  |
| (31) 202117387936                | 06.02.2020                     | H04L 9/08                                   |
| 202063105056 P                   | (22) 11.03.2019                | G06Q 20/40                                  |
| 202063066904 P                   | (54) A COMPUTER-IMPLEMENTED    | G06Q 20/36                                  |
| (32) 28.07.2021                  | METHOD, A COMPUTER SYSTEM AND  | G06Q 20/38                                  |
| 23.10.2020                       | A CRYPTOCURRENCY DEPOSITORY    | H04B 5/72                                   |
| 18.08.2020                       | FOR ENABLING SECURE ESCROW     | H04B 5/77                                   |
| (33) United States of America    | AND SAFEKEEPING OF A           | (11) EP3821386                              |
| United States of America         | CRYPTOCURRENCY                 | (21) EP19858133.2                           |
| United States of America         | (73) Baratam, Praveen          | (47) 18.12.2024                             |
| (51) G06Q 10/083                 | (72) Baratam, Praveen          | (87) KR2019011316                           |
| G06Q 10/087                      | (31) 201841028454              | 12.03.2020                                  |
| (11) EP4293591                   | 201841028453                   | (22) 03.09.2019                             |
| (21) EP23160443.0                | (32) 29.07.2018                | (54) SYSTEM AND METHOD FOR SECURE           |
| (47) 18.12.2024                  | 29.07.2018                     | TRANSACTIONS WITH A TRUSTED                 |
| (22) 07.03.2023                  | (33) India                     | EXECUTION ENVIRONMENT (TEE)                 |
| (54) SYSTEM FOR MONITORING AND   | India                          | (73) Samsung Electronics Co., Ltd.          |
| PREDICTING WATER DAMAGE IN       | (51) G06Q 20/12                | (72) WANG, Yifei                            |
| SHIPPING CONTAINERS              | G06Q 20/20                     | NING, Peng                                  |
| (73) Hitachi, Ltd.               | G06Q 20/38                     | LIU, An                                     |
| (72) CHAKRABARTI, Arnab          | (11) EP4128118                 | PENG, Pai                                   |
| MENG, Lin                        | (21) EP21776738.3              | (31) 201816122705                           |
| (31) 202217841413                | (47) 18.12.2024                | (32) 05.09.2018                             |
| (32) 15.06.2022                  | (87) US2021024527              | (33) United States of America               |
| (33) United States of America    | 30.09.2021                     | (51) G06Q 30/02                             |
| (51) G06Q 10/0832                | (22) 26.03.2021                | G06F 21/62                                  |
| G06Q 10/0833                     | (54) SYSTEMS AND METHODS FOR   | (11) EP3518169                              |
| G06Q 10/08                       | CONSUMER INTEGRATION INTO A    | (21) EP19163127.4                           |
| (11) EP4216125                   | POINT-OF-SALE SYSTEM           | (47) 18.12.2024                             |
| (21) EP23000009.3                | (73) Savor Brands Inc.         | (22) 21.09.2011                             |
| (47) 18.12.2024                  | (72) LAU, Mio L.K.             | (54) METHODS AND APPARATUS TO               |
| (22) 19.01.2023                  | LAU, Patrick C.W.              | DETERMINE IMPRESSIONS USING                 |
| (54) METHOD AND SYSTEM FOR       | GONZALEZ, Josué M.             | DISTRIBUTED DEMOGRAPHIC                     |
| COMMUNICATION BETWEEN A          | MUTHUKUMARASAMY, Jayaraj       | INFORMATION                                 |
| TARGET PERSON AND A PACKET       | (31) 202063001115 P            | (73) The Nielsen Company (US), LLC          |
| RECEPTION PERSON                 | (32) 27.03.2020                | (72) PAPARO, Ari                            |
| (73) Weisse, Philip              | (33) United States of America  | DELIYANNIS, Alexandros                      |
| (72) Weisse, Philip              | (51) G06Q 20/12                | GERAGHTY, Kevin                             |
| (31) 102022101278                | G06Q 20/38                     | SPLAINE, Steven, J.                         |
| (32) 20.01.2022                  | (11) EP3767567                 | HEFFERNAN, Ronan                            |

|                                 |                                          |                                          |
|---------------------------------|------------------------------------------|------------------------------------------|
| KALUS, Mark                     | H04N 23/62                               | (32) 23.08.2018                          |
| MAZUMDAR, Mainak                | (11) EP4195679                           | (33) United Kingdom                      |
| (31) 38555310 P                 | (21) EP22822251.9                        | (51) G06T 7/00                           |
| 38654310 P                      | (47) 18.12.2024                          | (11) EP3857508                           |
| (32) 22.09.2010                 | (87) CN2022098260                        | (21) EP19817532.5                        |
| 26.09.2010                      | 20.04.2023                               | (47) 18.12.2024                          |
| (33) United States of America   | (22) 10.06.2022                          | (87) US2019061858                        |
| United States of America        | (54) IMAGE PROCESSING METHOD AND         | 22.05.2020                               |
| (51) G06Q 30/0601               | ELECTRONIC DEVICE                        | (22) 15.11.2019                          |
| G06Q 20/20                      | (73) Honor Device Co., Ltd.              | (54) MACHINE BASED THREE-                |
| G06Q 20/38                      | (72) WANG, Ning                          | DIMENSIONAL (3D) OBJECT DEFECT           |
| H04L 67/52                      | ZENG, Xiangrui                           | DETECTION                                |
| H04L 67/53                      | CHEN, Bin                                | (73) Align Technology, Inc.              |
| G06Q 30/0201                    | WANG, Yu                                 | (72) PARPARA, Anatoliy                   |
| G06F 21/62                      | (31) 202210108412                        | CHERKAS, Andrey                          |
| H04W 4/02                       | 202111199715                             | KALINICHENKO, Alexey                     |
| (11) EP3915081                  | (32) 28.01.2022                          | SHAH, Paren Indravadan                   |
| (21) EP20749338.8               | 14.10.2021                               | (31) 201862768770 P                      |
| (47) 18.12.2024                 | (33) China                               | (32) 16.11.2018                          |
| (87) US2020015796               | China                                    | (33) United States of America            |
| 06.08.2020                      | (51) G06T 5/60                           | (51) G06T 7/00                           |
| (22) 30.01.2020                 | G06T 5/92                                | A61B 5/055                               |
| (54) ANONYMIZED ONLINE SHOPPING | G06T 5/10                                | A61B 6/03                                |
| SYSTEM AND METHOD AND POINT-    | (11) EP4302259                           | A61B 6/00                                |
| OF-SALE PRICING SYSTEM AND      | (21) EP21820576.3                        | (11) EP2130490                           |
| METHOD                          | (47) 18.12.2024                          | (21) EP08720471.5                        |
| (73) BELOWTHEBUYBOX.COM, LLC    | (87) EP2021083324                        | (47) 18.12.2024                          |
| (72) Dana, Sean Patrick         | 09.09.2022                               | (87) JP2008000585                        |
| (31) 201916426408               | (22) 29.11.2021                          | 18.09.2008                               |
| 201962799929 P                  | (54) SYSTEM, METHOD, AND COMPUTER        | (22) 14.03.2008                          |
| (32) 30.05.2019                 | PROGRAM PRODUCT FOR                      | (54) HEART FUNCTION DISPLAY DEVICE       |
| 01.02.2019                      | CONTRAST-ENHANCED RADIOLOGY              | AND PROGRAM THEREFOR                     |
| (33) United States of America   | USING MACHINE LEARNING                   | (73) FUJIFILM Corporation                |
| United States of America        | (73) Bayer Aktiengesellschaft            | (72) SAKURAGI, Futoshi                   |
| (51) G06T 3/00                  | (72) LENGA, Matthias                     | MASUMOTO, Jun                            |
| H04N 13/139                     | PURTORAB, Marvin                         | HIRANO, Masaharu                         |
| H04N 13/232                     | (31) 21167116                            | MIYAMOTO, Masaki                         |
| H04N 13/117                     | 21160325                                 | (31) 2007064583                          |
| H04N 13/161                     | (32) 07.04.2021                          | (32) 14.03.2007                          |
| H04N 13/194                     | 02.03.2021                               | (33) Japan                               |
| H04N 13/178                     | (33) European Patent Office (EPO)        | (51) G06T 7/00                           |
| H04N 21/81                      | European Patent Office (EPO)             | G06N 3/0464                              |
| H04N 21/2343                    | (51) G06T 5/73                           | G06N 3/09                                |
| H04N 21/235                     | (11) EP4109396                           | G06N 3/091                               |
| H04N 21/236                     | (21) EP22179125.4                        | (11) EP4384979                           |
| (11) EP3624446                  | (47) 18.12.2024                          | (21) EP22770040.8                        |
| (21) EP18870426.6               | (22) 15.06.2022                          | (47) 18.12.2024                          |
| (47) 18.12.2024                 | (54) IMAGE DE-BLURRING                   | (87) PT2022050024                        |
| (87) KR2018012606               | (73) Canon Kabushiki Kaisha              | 16.02.2023                               |
| 02.05.2019                      | (72) KUSUMI, Yuichi                      | (22) 08.08.2022                          |
| (22) 24.10.2018                 | HIASA, Norihito                          | (54) AUTOMATIC DETECTION AND             |
| (54) METHOD FOR TRANSMITTING/   | (31) 2021101003                          | DIFFERENTIATION/CLASSIFICATION           |
| RECEIVING 360-DEGREE VIDEO      | (32) 17.06.2021                          | OF THE ESOPHAGUS, STOMACH,               |
| INCLUDING FISHEYE VIDEO         | (33) Japan                               | SMALL BOWEL AND COLON LESIONS            |
| INFORMATION, AND DEVICE         | (51) G06T 5/77                           | IN DEVICE-ASSISTED ENTEROSCOPY           |
| THEREFOR                        | (11) EP3841554                           | USING A CONVOLUTIONAL                    |
| (73) LG Electronics Inc.        | (21) EP19753429.0                        | NEURONAL NETWORK                         |
| (72) OH, Hyunmook               | (47) 18.12.2024                          | (73) Digestaid - Artificial Intelligence |
| OH, Sejin                       | (87) GB2019052199                        | Development, Lda.                        |
| (31) 201762576087 P             | 27.02.2020                               | (72) LIMA AFONSO, João Pedro             |
| (32) 24.10.2017                 | (22) 06.08.2019                          | MOREIRA SÁ CARDOSO, Pedro Marílio        |
| (33) United States of America   | (54) METHOD AND SYSTEM FOR               | NATAL JORGE, Renato Manuel               |
| (51) G06T 3/40                  | RECONSTRUCTING COLOUR AND                | CASAL CARDOSO, Hélder Manuel             |
| G06T 5/70                       | DEPTH INFORMATION OF A SCENE             | CARNEIRO RIBEIRO, Tiago Filipe           |
| H04N 23/60                      | (73) Sony Interactive Entertainment Inc. | RIBEIRO ANDRADE, Ana Patrícia            |
| H04N 23/63                      | (72) CAPPELLO, Fabio                     | LAGES PARENTE, Marco Paulo               |
| H04N 23/951                     | WILLIAMS, Nigel John                     | SOUZA FERREIRA, João Pedro               |
| H04N 5/91                       | (31) 201813752                           |                                          |

|                                  |                                       |                                          |
|----------------------------------|---------------------------------------|------------------------------------------|
| DA QUINTA E COSTA DE             | (33) Japan                            | 201762557121 P                           |
| MASCARENHAS SARAIVA, Miguel José | (51) G06T 7/80                        | 201762556412 P                           |
| GONÇALVES DE MACEDO, Manuel      | (11) EP3848901                        | 201762507177 P                           |
| Guilherme                        | (21) EP21166759.7                     | (32) 22.09.2017                          |
| (31) 2021117392                  | (47) 18.12.2024                       | 22.09.2017                               |
| (32) 09.08.2021                  | (22) 01.04.2021                       | 29.05.2017                               |
| (33) Portugal                    | (54) METHOD AND APPARATUS             | 11.09.2017                               |
| (51) G06T 7/30                   | FOR CALIBRATING EXTERNAL              | 09.09.2017                               |
| G06T 7/73                        | PARAMETERS OF IMAGE                   | 16.05.2017                               |
| G06V 10/25                       | ACQUISITION DEVICE, DEVICE AND        | (33) Denmark                             |
| G06F 3/048                       | STORAGE MEDIUM                        | Denmark                                  |
| (11) EP3796258                   | (73) BEIJING BAIDU NETCOM SCIENCE     | Denmark                                  |
| (21) EP18919225.5                | AND TECHNOLOGY CO. LTD.               | United States of America                 |
| (47) 18.12.2024                  | (72) Yuan, Caimao                     | United States of America                 |
| (87) KR2018010711                | Ni, Fei                               | United States of America                 |
| 21.11.2019                       | Yang, Pengbin                         | (51) G06T 19/00                          |
| (22) 12.09.2018                  | Yang, Yang                            | (11) EP3314580                           |
| (54) METHOD AND SYSTEM FOR       | Han, Fengze                           | (21) EP16732071.2                        |
| CALCULATING SPATIAL              | (31) 202010699987                     | (47) 18.12.2024                          |
| COORDINATES OF REGION OF         | (32) 20.07.2020                       | (87) US2016036116                        |
| INTEREST, AND NON-TRANSITORY     | (33) China                            | 29.12.2016                               |
| COMPUTER-READABLE RECORDING      | (51) G06T 11/40                       | (22) 07.06.2016                          |
| MEDIUM                           | G06T 1/20                             | (54) COLOR FILL IN AN AUGMENTED          |
| (73) Vtouch Co., Ltd.            | G06T 15/00                            | REALITY ENVIRONMENT                      |
| (72) JUNG, Jik Han               | (11) EP3588443                        | (73) Microsoft Technology Licensing, LLC |
| KIM, Seok Joong                  | (21) EP19182750.0                     | (72) OSBORN, Dan                         |
| (31) 20180056039                 | (47) 18.12.2024                       | WRIGHT, Shawn Crispin                    |
| (32) 16.05.2018                  | (22) 26.06.2019                       | BRINKLEY, Marc                           |
| (33) Korea (Republic)            | (54) CONSERVATIVE RASTERIZATION       | GAVRILIUC, Anotolie                      |
| (51) G06T 7/33                   | USING GRADIENTS                       | ROBLES, Albert                           |
| G06T 7/246                       | (73) Imagination Technologies Limited | (31) 201514749887                        |
| G06T 3/00                        | (72) VAN BENTHEM, Casper              | (32) 25.06.2015                          |
| G01C 21/16                       | (31) 201810718                        | (33) United States of America            |
| G01S 17/42                       | (32) 29.06.2018                       | (51) G06V 10/10                          |
| G01S 17/86                       | (33) United Kingdom                   | G06V 40/16                               |
| G01S 17/89                       | (51) G06T 13/40                       | (11) EP3710983                           |
| G06T 3/14                        | H04N 21/81                            | (21) EP19790106.9                        |
| (11) EP4057224                   | G06V 20/20                            | (47) 18.12.2024                          |
| (21) EP22160260.0                | G06V 40/16                            | (87) US2019053692                        |
| (47) 18.12.2024                  | H04L 51/04                            | 30.07.2020                               |
| (22) 04.03.2022                  | H04L 51/08                            | (22) 27.09.2019                          |
| (54) OPTICAL DATA PROCESSING     | H04L 51/10                            | (54) POSE CORRECTION                     |
| APPARATUS, OPTICAL DATA          | H04L 51/52                            | (73) Google LLC                          |
| PROCESSING METHOD AND OPTICAL    | (11) EP3529779                        | (72) CASTANEDA, Humberto                 |
| DATA PROCESSING PROGRAM          | (21) EP18703184.4                     | HEFNY, Tarek                             |
| (73) TOPCON CORPORATION          | (47) 18.12.2024                       | (31) 201916258348                        |
| (72) SASAKI, You                 | (87) US2018014892                     | (32) 25.01.2019                          |
| (31) 2021036523                  | 22.11.2018                            | (33) United States of America            |
| (32) 08.03.2021                  | (22) 23.01.2018                       | (51) G06V 10/141                         |
| (33) Japan                       | (54) EMOJI RECORDING AND SENDING      | G06V 20/56                               |
| (51) G06T 7/73                   | (73) Apple Inc.                       | (11) EP3610411                           |
| G02B 27/01                       | (72) KING, Nicholas V.                | (21) EP18740749.9                        |
| G06V 10/147                      | ANZURES, Freddy Allen                 | (47) 18.12.2024                          |
| G06V 10/24                       | JONES, Matthew                        | (87) EP2018068106                        |
| G06V 20/20                       | YERKES, Giancarlo                     | 10.01.2019                               |
| (11) EP3793192                   | BAUER, Sebastian                      | (22) 04.07.2018                          |
| (21) EP19800467.3                | MALIA, Joseph Anthony                 | (54) CONTROLLING A PIXEL HEADLIGHT       |
| (47) 18.12.2024                  | HOFFNUNG, Amir                        | OF A MOTOR VEHICLE DISPOSED ON           |
| (87) JP2019007418                | SCAPEL, Nicolas                       | A DRIVING LANE                           |
| 14.11.2019                       | DYE, Alan C.                          | (73) Audi AG                             |
| (22) 27.02.2019                  | GUZMAN, Aurelio                       | (72) NEUKAM, Johannes                    |
| (54) INFORMATION PROCESSING      | WILSON, Christopher                   | (31) 102017211430                        |
| DEVICE, INFORMATION PROCESSING   | PHAM, Hoan                            | (32) 05.07.2017                          |
| METHOD, AND PROGRAM              | BARLIER, Guillaume Pierre Andre       | (33) Germany                             |
| (73) Sony Group Corporation      | BERNSTEIN, Jeffrey Traer              | (51) G06V 10/30                          |
| (72) KASHITANI, Tatsuki          | (31) PA201770720                      | (11) EP3859606                           |
| (31) 2018089793                  | PA201770721                           | (21) EP21150698.5                        |
| (32) 08.05.2018                  | PA201770393                           | (47) 18.12.2024                          |

|                                    |                                    |                                       |
|------------------------------------|------------------------------------|---------------------------------------|
| (22) 08.01.2021                    | RYU, Wooju                         | (54) AN APPARATUS AND RELATED         |
| (54) TRAINING PROGRAM, TRAINING    | JANG, Taewoong                     | METHOD FOR PROXIMITY                  |
| METHOD, AND INFORMATION            | (31) 202016740165                  | AWARENESS                             |
| PROCESSING APPARATUS               | 201962799386 P                     | (73) Lopos BV                         |
| (73) RIKEN                         | (32) 10.01.2020                    | (72) Jooris, Bart                     |
| National Cancer Center             | 31.01.2019                         | Rossey, Jen                           |
| FUJITSU LIMITED                    | (33) United States of America      | (51) G08B 13/16                       |
| (72) Sakai, Akira                  | United States of America           | G08B 25/10                            |
| Komatsu, Masaaki                   | (51) G06V 20/69                    | G08B 29/20                            |
| Dozen, Ai                          | G02B 7/36                          | H04R 3/00                             |
| (31) 2020014105                    | G06T 7/00                          | H04R 3/12                             |
| (32) 30.01.2020                    | G06T 5/50                          | H04W 4/80                             |
| (33) Japan                         | G06T 5/73                          | (11) EP3997683                        |
| (51) G06V 10/82                    | (11) EP2524338                     | (21) EP20751414.2                     |
| G06V 20/64                         | (21) EP11733297.3                  | (47) 18.12.2024                       |
| G06V 30/24                         | (47) 18.12.2024                    | (87) US2020041482                     |
| G06V 40/10                         | (87) US2011020952                  | 21.01.2021                            |
| G06V 10/25                         | 21.07.2011                         | (22) 10.07.2020                       |
| G06V 10/764                        | (22) 12.01.2011                    | (54) SECURITY SYSTEM WITH             |
| (11) EP3916628                     | (54) CELL CHARACTERIZATION USING   | DISTRIBUTED AUDIO AND VIDEO           |
| (21) EP20817904.4                  | MULTIPLE FOCUS PLANES              | SOURCES                               |
| (47) 18.12.2024                    | (73) Bio-Rad Laboratories, Inc.    | (73) Carrier Corporation              |
| (87) CN2020094803                  | (72) BRENIMAN, Gene                | (72) DAHER, Gabriel                   |
| 10.12.2020                         | GRIFFIN, Michael                   | OLDS, Schott                          |
| (22) 08.06.2020                    | (31) 201113004718                  | CONNOR, Stephen                       |
| (54) OBJECT IDENTIFICATION METHOD  | 294416 P                           | (31) 201916521152                     |
| AND DEVICE                         | (32) 11.01.2011                    | 201962873769 P                        |
| (73) Huawei Technologies Co., Ltd. | 12.01.2010                         | (32) 24.07.2019                       |
| (72) QU, Zhan                      | (33) United States of America      | 12.07.2019                            |
| ZHANG, Wei                         | United States of America           | (33) United States of America         |
| JIANG, Lihui                       | (51) G07D 1/02                     | United States of America              |
| (31) 201910493331                  | G07D 1/04                          | (51) G08B 21/18                       |
| (32) 06.06.2019                    | G07D 1/06                          | G08B 13/14                            |
| (33) China                         | G07D 11/00                         | B62K 3/00                             |
| (51) G06V 20/59                    | G07D 11/24                         | G01H 11/06                            |
| G06V 20/56                         | G07D 11/32                         | (11) EP3593333                        |
| G06T 7/80                          | G07D 11/50                         | (21) EP18764355.6                     |
| G06V 10/24                         | (11) EP4152283                     | (47) 18.12.2024                       |
| G06V 10/44                         | (21) EP21197677.4                  | (87) US2018021177                     |
| G06V 10/98                         | (47) 18.12.2024                    | 13.09.2018                            |
| G06N 3/045                         | (22) 20.09.2021                    | (22) 06.03.2018                       |
| H04N 23/695                        | (54) CONTROLLING A CASH PROCESSING | (54) NAVIGATION SYSTEMS FOR           |
| H04N 17/00                         | APPARATUS                          | WHEELED CARTS                         |
| (11) EP3702964                     | (73) GLORY LTD.                    | (73) Gatekeeper Systems, Inc.         |
| (21) EP20153035.9                  | (72) KOBAYASHI, Kiyoaki            | (72) HANNAH, Stephen, E.              |
| (47) 18.12.2024                    | DOI, Kazuhiro                      | JAMES, Jesse, M.                      |
| (22) 22.01.2020                    | (51) G08B 13/14                    | RAMANATHAN, Narayanan, V.             |
| (54) METHOD FOR CORRECTING         | G08B 21/02                         | JOHNSON, Jack                         |
| MISALIGNMENT OF CAMERA BY          | (11) EP3594917                     | CARTER, Scott, J.                     |
| SELECTIVELY USING INFORMATION      | (21) EP18764193.1                  | HARLING, Robert, M.                   |
| GENERATED BY ITSELF AND            | (47) 18.12.2024                    | (31) 201762468913 P                   |
| INFORMATION GENERATED BY           | (87) JP2018008458                  | (32) 08.03.2017                       |
| OTHER ENTITIES AND DEVICE USING    | 13.09.2018                         | (33) United States of America         |
| THE SAME                           | (22) 06.03.2018                    | (51) G08B 25/14                       |
| (73) StradVision, Inc.             | (54) THEFT PREVENTION DEVICE AND   | (11) EP3953921                        |
| (72) SUNG, Myungchul               | THEFT PREVENTION SYSTEM            | (21) EP20714591.3                     |
| BOO, SukHoon                       | (73) Takaya Corporation            | (47) 18.12.2024                       |
| CHO, Hojin                         | (72) KAIHATA, Keita                | (87) EP2020058481                     |
| JE, Hongmo                         | (31) 2017042117                    | 15.10.2020                            |
| JEONG, Kyungjoong                  | (32) 06.03.2017                    | (22) 26.03.2020                       |
| LEE, Hyungsoo                      | (33) Japan                         | (54) CONTROL UNIT FOR A HAZARD        |
| LEE, Myeong-Chun                   | (51) G08B 13/14                    | ALERT CENTER, HAZARD ALERT            |
| YEO, Donghun                       | G08B 21/02                         | SYSTEM AND METHOD FOR                 |
| KIM, Kye-Hyeon                     | G08B 21/22                         | OPERATING A HAZARD ALERT              |
| KIM, Hak-Kyoung                    | (11) EP3933791                     | CENTER                                |
| SHIN, Dongsoo                      | (21) EP20183275.5                  | (73) Minimax Viking Patent Management |
| KIM, Yongjoong                     | (47) 18.12.2024                    | GmbH                                  |
| NAM, Woonhyun                      | (22) 30.06.2020                    | (72) HIPPI, Sabine                    |

|                                     |                                            |                                           |
|-------------------------------------|--------------------------------------------|-------------------------------------------|
| KLOTZ, Frieder                      | H04W 4/46                                  | HOFSTETTER, Gregory K.                    |
| (31) 102019109744                   | H04W 84/18                                 | KENNEDAY, Sean                            |
| (32) 12.04.2019                     | H04W 4/02                                  | LANDINO, Nathan                           |
| (33) Germany                        | H04W 84/00                                 | FILEK, Jacob J.                           |
| (51) G08C 19/00                     | (11) EP3547281                             | CARTER, Brandon                           |
| G05B 19/05                          | (21) EP17874973.5                          | (31) 201762458972 P                       |
| H04Q 9/00                           | (47) 18.12.2024                            | (32) 14.02.2017                           |
| (11) EP3968302                      | (87) KR2017004765                          | (33) United States of America             |
| (21) EP20806545.8                   | 31.05.2018                                 | (51) G09C 1/00                            |
| (47) 18.12.2024                     | (22) 08.05.2017                            | H04L 9/08                                 |
| (87) JP2020010165                   | (54) VEHICLE COMMUNICATION DEVICE          | (11) EP4095834                            |
| 19.11.2020                          | AND VEHICLE                                | (21) EP20916206.4                         |
| (22) 10.03.2020                     | (73) LG Electronics Inc.                   | (47) 18.12.2024                           |
| (54) SIGNAL MEASUREMENT UNIT        | (72) PARK, Suho                            | (87) JP2020001677                         |
| (73) OMRON Corporation              | YOON, Jaehwan                              | 29.07.2021                                |
| (72) OBA, Hitoshi                   | KIM, Hansung                               | (22) 20.01.2020                           |
| KUDO, Masaya                        | BAE, Jaeseung                              | (54) SECURE SELECTIVE PRODUCT             |
| (31) 2019090134                     | (31) 20160155953                           | COMPUTATION SYSTEM, SECURE                |
| (32) 10.05.2019                     | (32) 22.11.2016                            | SELECTIVE PRODUCT COMPUTATION             |
| (33) Japan                          | (33) Korea (Republic)                      | METHOD, SECURE COMPUTATION                |
| (51) G08G 1/00                      | (51) G08G 5/00                             | APPARATUS, AND PROGRAM                    |
| B60Q 1/50                           | G08G 5/02                                  | (73) Nippon Telegraph And Telephone       |
| B60W 50/00                          | (11) EP3618037                             | Corporation                               |
| B60W 30/165                         | (21) EP19191012.4                          | (72) IKARASHI, Dai                        |
| (11) EP3614356                      | (47) 18.12.2024                            | (51) G09F 9/30                            |
| (21) EP18190537.3                   | (22) 09.08.2019                            | H04M 1/02                                 |
| (47) 18.12.2024                     | (54) SYSTEMS AND METHODS FOR               | G06F 1/16                                 |
| (22) 23.08.2018                     | IDENTIFYING AIR TRAFFIC OBJECTS            | (11) EP4152303                            |
| (54) APPARATUS, PLATOONING VEHICLE, | (73) Sensors Unlimited, Inc.               | (21) EP22818591.4                         |
| PLATOON OF VEHICLES, METHOD         | (72) DVONCH, Curt                          | (47) 18.12.2024                           |
| AND COMPUTER PROGRAM FOR A          | (31) 201816100138                          | (87) CN2022092365                         |
| PLATOONING VEHICLE                  | (32) 09.08.2018                            | 15.12.2022                                |
| (73) Volkswagen AG                  | (33) United States of America              | (22) 12.05.2022                           |
| MAN Truck & Bus SE                  | (51) G08G 5/04                             | (54) LAMINATED DISPLAY MODULE AND         |
| Scania CV AB                        | (11) EP3662460                             | ELECTRONIC DEVICE                         |
| (72) Alieiev, Roman                 | (21) EP18840571.6                          | (73) Honor Device Co., Ltd.               |
| Buburuzan, Teodor                   | (47) 18.12.2024                            | (72) GUO, Ning                            |
| Cerwall, Joakim                     | (87) IB2018055628                          | ZHANG, Yujun                              |
| Hehn, Thorsten                      | 07.02.2019                                 | (31) 202110642361                         |
| Zielinski, Ernst                    | (22) 27.07.2018                            | (32) 09.06.2021                           |
| (51) G08G 1/00                      | (54) UAV SYSTEM EMERGENCY PATH             | (33) China                                |
| G08G 1/01                           | PLANNING ON COMMUNICATION                  | (51) G09F 9/33                            |
| G08G 1/02                           | FAILURE                                    | G09G 3/32                                 |
| G08G 1/04                           | (73) Ideaforge Technology Pvt. Ltd.        | (11) EP3433852                            |
| G08G 1/042                          | (72) SINGH, Rahul                          | (21) EP17717329.1                         |
| G06N 7/00                           | (31) 201721027849                          | (47) 18.12.2024                           |
| G06N 7/01                           | (32) 04.08.2017                            | (87) EP2017056628                         |
| G06N 3/04                           | (33) India                                 | 28.09.2017                                |
| G06N 3/08                           | (51) G09B 23/28                            | (22) 21.03.2017                           |
| (11) EP3912150                      | (11) EP3583589                             | (54) DISPLAY WITH FUSED LEDS              |
| (21) EP20741438.4                   | (21) EP18708015.5                          | (73) X Display Company Technology Limited |
| (47) 18.12.2024                     | (47) 18.12.2024                            | (72) MEITL, Matthew                       |
| (87) IL2020050063                   | (87) US2018018036                          | COK, Ronald S.                            |
| 23.07.2020                          | 23.08.2018                                 | (31) 201715438319                         |
| (22) 15.01.2020                     | (22) 13.02.2018                            | 201662311288 P                            |
| (54) SYSTEM AND METHOD FOR          | (54) LAPAROSCOPIC TRAINING SYSTEM          | (32) 21.02.2017                           |
| DETECTION AND QUANTIFICATION        | (73) Applied Medical Resources Corporation | 21.03.2016                                |
| OF IRREGULAR TRAFFIC                | (72) HO, Jimmy                             | (33) United States of America             |
| CONGESTION                          | MICHAELS, Zachary                          | United States of America                  |
| (73) Waycare Technologies Ltd.      | PERELES, Brandon                           | (51) G09G 3/20                            |
| (72) HAHN, Idan                     | BOLANOS, Eduardo                           | H01L 25/075                               |
| SMOLYAK, Alex                       | SHAH, Jigar                                | H01L 33/62                                |
| (31) 201916247608                   | MCMORROW, Timothy                          | H10K 50/86                                |
| (32) 15.01.2019                     | CHASE, Lindsey                             | H10K 59/131                               |
| (33) United States of America       | CHAN, Samantha                             | (11) EP4128204                            |
| (51) G08G 1/09                      | HAGUE, Cory S.                             | (21) EP21928526.9                         |
| G08G 1/017                          | VELASCO, Joel B.                           | (47) 18.12.2024                           |
| G08G 1/16                           | SLABBER, Nico                              | (87) CN2021079091                         |

|                                                                                                        |                                                                         |                                                                      |
|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| 09.09.2022                                                                                             | (47) 18.12.2024                                                         | G10L 19/00                                                           |
| (22) 04.03.2021                                                                                        | (87) GB2020051121                                                       | H04S 5/02                                                            |
| (54) LIGHT EMITTING SUBSTRATE, DISPLAY APPARATUS, AND METHOD OF MANUFACTURING LIGHT EMITTING SUBSTRATE | (22) 07.05.2020                                                         | H04S 7/00                                                            |
| (73) BOE Technology Group Co., Ltd.                                                                    | (54) ACOUSTIC PANEL                                                     | H04S 3/00                                                            |
| (72) ZHOU, Lin                                                                                         | (73) Safran Nacelles Limited                                            | (11) EP3699906                                                       |
| QI, Qi                                                                                                 | (72) KIRK, Dave                                                         | (21) EP18869347.7                                                    |
| SHANG, Xingce                                                                                          | HEBDEN, Dave                                                            | (47) 18.12.2024                                                      |
| LI, Fuqiang                                                                                            | FURMSTON, Simon                                                         | (87) JP2018037329                                                    |
| YANG, Ming                                                                                             | HILL, Graeme                                                            | 25.04.2019                                                           |
| HAO, Wei                                                                                               | (31) 201906537                                                          | (22) 05.10.2018                                                      |
| (51) G09G 3/3225                                                                                       | (32) 09.05.2019                                                         | (54) SIGNAL PROCESSING DEVICE AND METHOD, AND PROGRAM                |
| (11) EP2843649                                                                                         | (33) United Kingdom                                                     | (73) Sony Group Corporation                                          |
| (21) EP14150261.7                                                                                      | (51) G10K 11/172                                                        | (72) HATANAKA, Mitsuyuki                                             |
| (47) 18.12.2024                                                                                        | G10K 11/168                                                             | CHINEN, Toru                                                         |
| (22) 07.01.2014                                                                                        | F02K 1/82                                                               | TSUJI, Minoru                                                        |
| (54) Display device and luminance control method thereof                                               | (11) EP4131252                                                          | FUKUI, Takao                                                         |
| (73) LG Electronics Inc.                                                                               | (21) EP22188140.2                                                       | (31) 2017203876                                                      |
| (72) Park, Sungjin                                                                                     | (47) 18.12.2024                                                         | (32) 20.10.2017                                                      |
| (31) 20130105124                                                                                       | (22) 01.08.2022                                                         | (33) Japan                                                           |
| (32) 02.09.2013                                                                                        | (54) ACOUSTIC PANEL WITH RECONFIGURABLE CHAMBER CONSTRUCTIONS           | (51) G10L 13/08                                                      |
| (33) Korea (Republic)                                                                                  | (73) Rohr, Inc.                                                         | G10L 13/00                                                           |
| (51) G09G 3/3266                                                                                       | (72) DAVIS, Jennifer                                                    | G10L 13/02                                                           |
| G11C 19/28                                                                                             | KESTLER, Steven M.                                                      | G10L 13/10                                                           |
| G11C 19/18                                                                                             | ALONSO-MIRALLES, Jose S.                                                | (11) EP3931824                                                       |
| (11) EP4092661                                                                                         | (31) 202117391750                                                       | (21) EP20798202.6                                                    |
| (21) EP22172821.5                                                                                      | (32) 02.08.2021                                                         | (47) 18.12.2024                                                      |
| (47) 18.12.2024                                                                                        | (33) United States of America                                           | (87) US2020021070                                                    |
| (22) 11.05.2022                                                                                        | (51) G10K 11/34                                                         | 05.11.2020                                                           |
| (54) SCAN DRIVER                                                                                       | H04R 3/00                                                               | (22) 05.03.2020                                                      |
| (73) Samsung Display Co., Ltd.                                                                         | G08G 1/0965                                                             | (54) DURATION INFORMED ATTENTION NETWORK FOR TEXT-TO-SPEECH ANALYSIS |
| (72) LEE, Jae Hoon                                                                                     | G10L 21/0216                                                            | (73) Tencent America LLC                                             |
| (31) 20210061609                                                                                       | H04S 7/00                                                               | (72) YU, Dong                                                        |
| (32) 12.05.2021                                                                                        | G08G 1/0962                                                             | YU, Chengzhu                                                         |
| (33) Korea (Republic)                                                                                  | G10K 11/178                                                             | LU, Heng                                                             |
| (51) G09G 5/00                                                                                         | G10L 21/0208                                                            | (31) 201916397349                                                    |
| H04N 7/00                                                                                              | G10L 25/51                                                              | (32) 29.04.2019                                                      |
| (11) EP2745290                                                                                         | (11) EP4256547                                                          | (33) United States of America                                        |
| (21) EP12778432.0                                                                                      | (21) EP21815000.1                                                       | (51) G10L 13/08                                                      |
| (47) 18.12.2024                                                                                        | (47) 18.12.2024                                                         | G10L 15/22                                                           |
| (87) IB2012054985                                                                                      | (87) US2021057175                                                       | G10L 25/30                                                           |
| 04.04.2013                                                                                             | 09.06.2022                                                              | (11) EP4285358                                                       |
| (22) 20.09.2012                                                                                        | (22) 29.10.2021                                                         | (21) EP22710892.5                                                    |
| (54) APPARATUS AND METHOD FOR DYNAMIC RANGE TRANSFORMING OF IMAGES                                     | (54) IN-CABIN AUDIO FILTERING                                           | (47) 18.12.2024                                                      |
| (73) Koninklijke Philips N.V.                                                                          | (73) Cerence Operating Company                                          | (87) US2022018219                                                    |
| (72) VAN DER VLEUTEN, Renatus Josephus                                                                 | (72) BUCK, Markus                                                       | 09.09.2022                                                           |
| KNIBBELER, Charles Leonardus                                                                           | HAULICK, Tim                                                            | (22) 28.02.2022                                                      |
| Cornelius Maria                                                                                        | (31) 202063121499 P                                                     | (54) INSTANTANEOUS LEARNING IN TEXT-TO-SPEECH DURING DIALOG          |
| (31) 201261588719 P                                                                                    | (32) 04.12.2020                                                         | (73) Google LLC                                                      |
| 12160557                                                                                               | (33) United States of America                                           | (72) RAMABHADRAN, Bhuvana                                            |
| 11182922                                                                                               | (51) G10K 15/02                                                         | ROSENBERG, Andrew                                                    |
| (32) 20.01.2012                                                                                        | (11) EP3621066                                                          | GOLEBIEWSKI, Mateusz                                                 |
| 21.03.2012                                                                                             | (21) EP19195667.1                                                       | PEDDINTI, Vijayaditya                                                |
| 27.09.2011                                                                                             | (47) 18.12.2024                                                         | (31) 202117190456                                                    |
| (33) United States of America                                                                          | (22) 05.09.2019                                                         | (32) 03.03.2021                                                      |
| European Patent Office (EPO)                                                                           | (54) MULTIPLE SOUND LOCALIZATIONS FOR IMPROVED INTERNAL SOUND SYNTHESIS | (33) United States of America                                        |
| European Patent Office (EPO)                                                                           | (73) Harman International Industries, Incorporated                      | (51) G10L 15/18                                                      |
| (51) G10K 11/168                                                                                       | (72) TRUMPY, David Paul                                                 | H04M 3/527                                                           |
| B64D 33/02                                                                                             | KIM, Geon-Seok                                                          | H04L 51/02                                                           |
| G10K 11/172                                                                                            | (31) 201862727397 P                                                     | H04M 3/493                                                           |
| B64C 1/40                                                                                              | (32) 05.09.2018                                                         | G06F 3/16                                                            |
| (11) EP3966802                                                                                         | (33) United States of America                                           | G10L 15/22                                                           |
| (21) EP20726916.8                                                                                      | (51) G10K 15/12                                                         | (11) EP3871213                                                       |
|                                                                                                        |                                                                         | (21) EP18937825.0                                                    |
|                                                                                                        |                                                                         | (47) 18.12.2024                                                      |



|                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| (87) CN2018111968<br>30.04.2020                                                                                                              | CHEN, Tongzhou                                                                                                                                                            | (54) CODING/DECODING METHOD,<br>APPARATUS, AND SYSTEM                                                                                |
| (22) 25.10.2018                                                                                                                              | VARIANI, Ehsan                                                                                                                                                            | (73) Crystal Clear Codec, LLC                                                                                                        |
| (54) MULTI-PHRASE RESPONDING IN FULL<br>DUPLEX VOICE CONVERSATION                                                                            | HAGHANI, Parisa                                                                                                                                                           | (72) LIU, Zexin                                                                                                                      |
| (73) Microsoft Technology Licensing, LLC                                                                                                     | GAUR, Neeraj                                                                                                                                                              | MIAO, Lei                                                                                                                            |
| (72) ZHOU, Li                                                                                                                                | MORENO MENGIBAR, Pedro J.                                                                                                                                                 | WANG, Bin                                                                                                                            |
| (51) G10L 15/22                                                                                                                              | (31) 202163166916 P                                                                                                                                                       | (31) 201410294752                                                                                                                    |
| G10L 15/08                                                                                                                                   | (32) 26.03.2021                                                                                                                                                           | (32) 26.06.2014                                                                                                                      |
| (11) EP3828884                                                                                                                               | (33) United States of America                                                                                                                                             | (33) China                                                                                                                           |
| (21) EP20202808.0                                                                                                                            | (51) G10L 19/00                                                                                                                                                           | (51) G10L 19/022                                                                                                                     |
| (47) 18.12.2024                                                                                                                              | H04B 1/66                                                                                                                                                                 | G10L 19/02                                                                                                                           |
| (22) 20.10.2020                                                                                                                              | G10L 19/18                                                                                                                                                                | (11) EP4290512                                                                                                                       |
| (54) ELECTRONIC APPARATUS AND<br>CONTROL METHOD THEREOF                                                                                      | G10L 19/008                                                                                                                                                               | (21) EP23205462.7                                                                                                                    |
| (73) Samsung Electronics Co., Ltd.                                                                                                           | G10L 25/12                                                                                                                                                                | (47) 18.12.2024                                                                                                                      |
| (72) KIM, Sangmin                                                                                                                            | G10L 19/02                                                                                                                                                                | (22) 24.10.2006                                                                                                                      |
| (31) 20190152987                                                                                                                             | (11) EP4120246                                                                                                                                                            | (54) TIME WARPED MODIFIED<br>TRANSFORM CODING OF AUDIO<br>SIGNALS                                                                    |
| (32) 26.11.2019                                                                                                                              | (21) EP22188294.7                                                                                                                                                         | (73) Dolby International AB                                                                                                          |
| (33) Korea (Republic)                                                                                                                        | (47) 18.12.2024                                                                                                                                                           | (72) VILLEMOES, Lars                                                                                                                 |
| (51) G10L 15/22                                                                                                                              | (22) 06.04.2011                                                                                                                                                           | (31) 464176                                                                                                                          |
| G10L 15/32                                                                                                                                   | (54) MDCT-BASED COMPLEX PREDICTION                                                                                                                                        | 733512 P                                                                                                                             |
| G10L 15/00                                                                                                                                   | STEREO DECODING                                                                                                                                                           | (32) 11.08.2006                                                                                                                      |
| G10L 15/18                                                                                                                                   | (73) Dolby International AB                                                                                                                                               | 03.11.2005                                                                                                                           |
| G10L 15/183                                                                                                                                  | (72) VILLEMOES, Lars                                                                                                                                                      | (33) United States of America                                                                                                        |
| (11) EP4270385                                                                                                                               | PURNHAGEN, Heiko                                                                                                                                                          | United States of America                                                                                                             |
| (21) EP23191531.5                                                                                                                            | CARLSSON, Pontus                                                                                                                                                          | (51) G10L 19/028                                                                                                                     |
| (47) 18.12.2024                                                                                                                              | (31) 32245810 P                                                                                                                                                           | G10L 19/12                                                                                                                           |
| (22) 16.04.2018                                                                                                                              | (32) 09.04.2010                                                                                                                                                           | (11) EP3683793                                                                                                                       |
| (54) AUTOMATICALLY DETERMINING<br>LANGUAGE FOR SPEECH<br>RECOGNITION OF SPOKEN<br>UTTERANCE RECEIVED VIA AN<br>AUTOMATED ASSISTANT INTERFACE | (33) United States of America                                                                                                                                             | (21) EP20155722.0                                                                                                                    |
| (73) Google LLC                                                                                                                              | (51) G10L 19/005                                                                                                                                                          | (47) 18.12.2024                                                                                                                      |
| (72) CHAO, Pu-sen                                                                                                                            | H04L 1/00                                                                                                                                                                 | (22) 28.01.2014                                                                                                                      |
| CASADO, Diego Melendo                                                                                                                        | (11) EP3528246                                                                                                                                                            | (54) NOISE FILLING WITHOUT SIDE<br>INFORMATION FOR CELP-LIKE<br>CODERS                                                               |
| MORENO, Ignacio Lopez                                                                                                                        | (21) EP19167220.3                                                                                                                                                         | (73) Fraunhofer-Gesellschaft zur Förderung<br>der angewandten Forschung e.V.                                                         |
| (51) G10L 15/26                                                                                                                              | (47) 18.12.2024                                                                                                                                                           | (72) Yokotani, Yoshikazu                                                                                                             |
| H04L 12/18                                                                                                                                   | (22) 10.10.2014                                                                                                                                                           | Schubert, Benjamin                                                                                                                   |
| G06Q 10/10                                                                                                                                   | (54) AUDIO SIGNAL PROCESSING DEVICE,<br>AUDIO SIGNAL PROCESSING<br>METHOD, AND AUDIO SIGNAL<br>PROCESSING PROGRAM                                                         | Jander, Manuel                                                                                                                       |
| (11) EP3879526                                                                                                                               | (73) NTT Docomo, Inc.                                                                                                                                                     | Helmrich, Christian                                                                                                                  |
| (21) EP21161423.5                                                                                                                            | (72) TSUTSUMI, Kimitaka                                                                                                                                                   | Fuchs, Guillaume                                                                                                                     |
| (47) 18.12.2024                                                                                                                              | YAMAGUCHI, Atsushi                                                                                                                                                        | (31) 201361758189 P                                                                                                                  |
| (22) 09.03.2021                                                                                                                              | KIKUIRI, Kei                                                                                                                                                              | (32) 29.01.2013                                                                                                                      |
| (54) METHOD AND APPARATUS FOR<br>RECONSTRUCTING A VOICE<br>CONVERSATION                                                                      | (31) 2013224120                                                                                                                                                           | (33) United States of America                                                                                                        |
| (73) Llsollu Co., Ltd.                                                                                                                       | (32) 29.10.2013                                                                                                                                                           | (51) G10L 19/07                                                                                                                      |
| (72) JI, Changjin                                                                                                                            | (33) Japan                                                                                                                                                                | (11) EP4195203                                                                                                                       |
| HWANG, Myeongjin                                                                                                                             | (51) G10L 19/008                                                                                                                                                          | (21) EP23153888.5                                                                                                                    |
| KIM, Suntae                                                                                                                                  | (11) EP4120251                                                                                                                                                            | (47) 18.12.2024                                                                                                                      |
| (31) 20200029826                                                                                                                             | (21) EP20924543.0                                                                                                                                                         | (22) 18.10.2011                                                                                                                      |
| (32) 10.03.2020                                                                                                                              | (47) 18.12.2024                                                                                                                                                           | (54) DETERMINING A WEIGHTING<br>FUNCTION HAVING LOW<br>COMPLEXITY FOR LINEAR<br>PREDICTIVE CODING (LPC)<br>COEFFICIENTS QUANTIZATION |
| (33) Korea (Republic)                                                                                                                        | (87) JP2020010081                                                                                                                                                         | (73) Samsung Electronics Co., Ltd.                                                                                                   |
| (51) G10L 15/32                                                                                                                              | 16.09.2021                                                                                                                                                                | (72) OH, Eun Mi                                                                                                                      |
| G10L 15/16                                                                                                                                   | (22) 09.03.2020                                                                                                                                                           | SUNG, Ho Sang                                                                                                                        |
| (11) EP4295362                                                                                                                               | (54) SOUND SIGNAL ENCODING METHOD,<br>SOUND SIGNAL DECODING METHOD,<br>SOUND SIGNAL ENCODING DEVICE,<br>SOUND SIGNAL DECODING DEVICE,<br>PROGRAM, AND RECORDING<br>MEDIUM | (31) 20100101305                                                                                                                     |
| (21) EP22718355.5                                                                                                                            | (73) Nippon Telegraph and Telephone<br>Corporation                                                                                                                        | (32) 18.10.2010                                                                                                                      |
| (47) 18.12.2024                                                                                                                              | (72) MORIYA, Takehiro                                                                                                                                                     | (33) Korea (Republic)                                                                                                                |
| (87) US2022021441                                                                                                                            | KAMAMOTO, Yutaka                                                                                                                                                          | (51) G10L 21/0272                                                                                                                    |
| 29.09.2022                                                                                                                                   | SUGIURA, Ryosuke                                                                                                                                                          | (11) EP3828886                                                                                                                       |
| (22) 22.03.2022                                                                                                                              | (51) G10L 19/02                                                                                                                                                           | (21) EP20209511.3                                                                                                                    |
| (54) MULTILINGUAL RE-SCORING<br>MODELS FOR AUTOMATIC SPEECH<br>RECOGNITION                                                                   | G10L 19/26                                                                                                                                                                | (47) 18.12.2024                                                                                                                      |
| (73) Google LLC                                                                                                                              | (11) EP3637416                                                                                                                                                            | (22) 24.11.2020                                                                                                                      |
| (72) RAMABHADRAN, Bhuvana                                                                                                                    | (21) EP19177798.6                                                                                                                                                         | (54) METHOD AND SYSTEM FOR<br>SEPARATING THE VOICE                                                                                   |
|                                                                                                                                              | (47) 18.12.2024                                                                                                                                                           |                                                                                                                                      |
|                                                                                                                                              | (22) 20.03.2015                                                                                                                                                           |                                                                                                                                      |

|                                                                              |                                                       |                                                                                                                            |
|------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| COMPONENT AND THE NOISE COMPONENT IN AN AUDIO FLOW                           | G11C 16/08                                            | (33) United States of America                                                                                              |
| (73) THALES                                                                  | G11C 16/26                                            | United States of America                                                                                                   |
| (72) MATHIEU, Félix                                                          | G11C 16/30                                            | United States of America                                                                                                   |
| CAPMAN, François                                                             | H04L 25/02                                            | United States of America                                                                                                   |
| COURTAT, Thomas                                                              | H04L 25/49                                            |                                                                                                                            |
| SAUSSET, François                                                            | H03K 19/00                                            | (51) G11C 17/16                                                                                                            |
| ACHECHE, Shaheen                                                             | (11) EP3665685                                        | G11C 17/18                                                                                                                 |
| (31) 1913283                                                                 | (21) EP18844508.4                                     | H01L 27/02                                                                                                                 |
| (32) 27.11.2019                                                              | (47) 18.12.2024                                       | H10B 20/25                                                                                                                 |
| (33) France                                                                  | (87) US2018043648                                     | (11) EP4231300                                                                                                             |
| (51) G10L 21/0316                                                            | 14.02.2019                                            | (21) EP21952553.2                                                                                                          |
| G10L 21/034                                                                  | (22) 25.07.2018                                       | (47) 18.12.2024                                                                                                            |
| G10L 21/0364                                                                 | (54) OUTPUT DRIVER FOR MULTI-LEVEL SIGNALING          | (87) CN2021124181                                                                                                          |
| H04M 9/08                                                                    | (73) Micron Technology, Inc.                          | 09.02.2023                                                                                                                 |
| (11) EP3748635                                                               | (72) BUTTERFIELD, Justin D.                           | (22) 15.10.2021                                                                                                            |
| (21) EP20177963.4                                                            | (31) 201815868797                                     | (54) ANTI-FUSE MEMORY CELL AND DATA READ-WRITE CIRCUIT COMPRISING SAME, AND ANTI-FUSE MEMORY AND OPERATION METHOD THEREFOR |
| (47) 18.12.2024                                                              | 201762542163 P                                        | (73) Nanjing Qinheng Microelectronics Co., Ltd.                                                                            |
| (22) 03.06.2020                                                              | (32) 11.01.2018                                       | (72) WANG, Chunhua                                                                                                         |
| (54) ACOUSTIC DEVICE AND ACOUSTIC PROCESSING METHOD                          | 07.08.2017                                            | (31) 202110889462                                                                                                          |
| (73) YAMAHA CORPORATION                                                      | (33) United States of America                         | (32) 04.08.2021                                                                                                            |
| (72) KAWAI, Tetsuto                                                          | United States of America                              | (33) China                                                                                                                 |
| OIZUMI, Yoshifumi                                                            | (51) G11C 11/56                                       | (51) G11C 19/08                                                                                                            |
| KADOWAKI, Yusuke                                                             | G11C 16/04                                            | G01D 5/14                                                                                                                  |
| (31) 2019106860                                                              | G11C 16/08                                            | (11) EP4266007                                                                                                             |
| (32) 07.06.2019                                                              | G11C 16/10                                            | (21) EP23190460.8                                                                                                          |
| (33) Japan                                                                   | G11C 16/26                                            | (47) 18.12.2024                                                                                                            |
| (51) G10L 25/93                                                              | G11C 16/34                                            | (22) 14.02.2022                                                                                                            |
| (11) EP4202924                                                               | (11) EP4049124                                        | (54) SENSOR ELEMENT FOR STORING ROTATION OR POSITION INFORMATION AND STORAGE SYSTEM COMPRISING A SENSOR ELEMENT            |
| (21) EP22191361.9                                                            | (21) EP20917886.2                                     | (73) Dr. Johannes Heidenhain GmbH                                                                                          |
| (47) 18.12.2024                                                              | (47) 18.12.2024                                       | (72) Schneider, Johannes                                                                                                   |
| (22) 22.08.2022                                                              | (87) US2020035019                                     | (31) 102021205132                                                                                                          |
| (54) AUDIO RECOGNIZING METHOD, APPARATUS, DEVICE, MEDIUM AND PRODUCT         | 12.08.2021                                            | (32) 20.05.2021                                                                                                            |
| (73) BEIJING BAIDU NETCOM SCIENCE TECHNOLOGY CO., LTD.                       | (22) 28.05.2020                                       | (33) Germany                                                                                                               |
| (72) GAO, Zhanjie                                                            | (54) POWER MANAGEMENT FOR MULTI-PLANE READ OPERATIONS | (51) G11C 29/02                                                                                                            |
| JIA, Lei                                                                     | (73) SanDisk Technologies LLC                         | G11C 29/50                                                                                                                 |
| LI, Wenjie                                                                   | (72) LIEN, Yu-Chung                                   | G11C 29/12                                                                                                                 |
| (31) 202111614630                                                            | ELIASH, Tomer                                         | (11) EP3979250                                                                                                             |
| (32) 27.12.2021                                                              | TSENG, Huai-Yuan                                      | (21) EP21186608.2                                                                                                          |
| (33) China                                                                   | (31) 202016784171                                     | (47) 18.12.2024                                                                                                            |
| (51) G11C 11/16                                                              | (32) 06.02.2020                                       | (22) 20.07.2021                                                                                                            |
| H01F 10/32                                                                   | (33) United States of America                         | (54) 3D NONVOLATILE MEMORY DEVICE INCLUDING CHANNEL SHORT CIRCUIT DETECTION                                                |
| H10N 50/10                                                                   | (51) G11C 13/00                                       | (73) Samsung Electronics Co., Ltd.                                                                                         |
| H10N 50/85                                                                   | G11C 11/56                                            | (72) KIM, Hyungsoo                                                                                                         |
| G11C 11/18                                                                   | H10N 70/00                                            | JUNG, Won-Taek                                                                                                             |
| G01R 33/00                                                                   | H10N 70/20                                            | JOO, Sang-Hyun                                                                                                             |
| G01R 33/09                                                                   | H10B 63/00                                            | IM, Jaewoo                                                                                                                 |
| (11) EP4064375                                                               | (11) EP3968400                                        | PARK, Tae-Min                                                                                                              |
| (21) EP21178307.1                                                            | (21) EP21196018.2                                     | (31) 20200121631                                                                                                           |
| (47) 18.12.2024                                                              | (47) 18.12.2024                                       | 202117319493                                                                                                               |
| (22) 08.06.2021                                                              | (22) 10.09.2021                                       | (32) 21.09.2020                                                                                                            |
| (54) MATERIAL HAVING BOTH NEGATIVE SPIN POLARIZATION AND NEGATIVE ANISOTROPY | (54) SYSTEM AND DEVICE INCLUDING MEMRISTOR MATERIAL   | 13.05.2021                                                                                                                 |
| (73) Western Digital Technologies, Inc.                                      | (73) Rockwell Collins, Inc.                           | (33) Korea (Republic)                                                                                                      |
| (72) FREITAG, James Mac                                                      | (72) WIEBERS, Steven J.                               | United States of America                                                                                                   |
| OKAMURA, Susumu                                                              | ROWENHORST, Bruce E.                                  | (51) G16H 10/60                                                                                                            |
| KAISER, Christian                                                            | WYCKOFF, Nathaniel P.                                 | G16H 20/40                                                                                                                 |
| (31) 202117210073                                                            | HAMILTON, Brandon C.                                  | G16H 30/20                                                                                                                 |
| (32) 23.03.2021                                                              | SNYDER, Kyle B.                                       | (11) EP3933844                                                                                                             |
| (33) United States of America                                                | (31) 202017113406                                     | (21) EP21178194.3                                                                                                          |
| (51) G11C 11/56                                                              | 202017113329                                          | (47) 18.12.2024                                                                                                            |
| G11C 7/02                                                                    | 202017017365                                          |                                                                                                                            |
| G11C 7/10                                                                    | 202017017313                                          |                                                                                                                            |
|                                                                              | (32) 07.12.2020                                       |                                                                                                                            |
|                                                                              | 07.12.2020                                            |                                                                                                                            |
|                                                                              | 10.09.2020                                            |                                                                                                                            |
|                                                                              | 10.09.2020                                            |                                                                                                                            |

|                                                                                                                      |                                                                                                                                                          |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| (22) 08.06.2021                                                                                                      | (32) 28.11.2017                                                                                                                                          | (11) EP3503117                                                                                       |
| (54) SURGICAL ITEM MANAGING METHOD AND SURGICAL ITEM MANAGING SYSTEM FOR SMART OPERATING ROOM                        | (33) Korea (Republic)                                                                                                                                    | (21) EP17208716.5                                                                                    |
| (73) AI Bioelectronic Healthtech Co., Ltd.                                                                           | (51) G16H 30/40                                                                                                                                          | (47) 18.12.2024                                                                                      |
| (72) HO, Yen-Yi                                                                                                      | G16H 50/20                                                                                                                                               | (22) 20.12.2017                                                                                      |
| (31) 109122075                                                                                                       | G16H 50/70                                                                                                                                               | (54) UPDATING LEARNED MODELS                                                                         |
| (32) 30.06.2020                                                                                                      | (11) EP4336513                                                                                                                                           | (73) Nokia Technologies Oy                                                                           |
| (33) Taiwan, Chinese Taipei                                                                                          | (21) EP23163650.7                                                                                                                                        | (72) Kawsar, Fahim                                                                                   |
| (51) G16H 20/13                                                                                                      | (47) 18.12.2024                                                                                                                                          | Bhattacharya, Sourav                                                                                 |
| G16H 40/20                                                                                                           | (22) 30.08.2022                                                                                                                                          | Gil Ramos, Alberto                                                                                   |
| (11) EP3761315                                                                                                       | (54) GENERATION OF SYNTHETIC RADIOLOGICAL RECORDINGS                                                                                                     | Lane, Nicholas                                                                                       |
| (21) EP19425048.6                                                                                                    | (73) Bayer Aktiengesellschaft                                                                                                                            | (51) G16H 50/20                                                                                      |
| (47) 18.12.2024                                                                                                      | (72) LENGA, Matthias                                                                                                                                     | G16H 20/10                                                                                           |
| (22) 03.07.2019                                                                                                      | BALTRUSCHAT, Ivo Matteo                                                                                                                                  | (11) EP3665705                                                                                       |
| (54) LABELLING METHOD AND SYSTEM FOR TAGGING DRUGS TO BE ADMINISTERED TO A PATIENT IN A HOSPITAL OR SURGICAL SETTING | KREIS, Felix Karl                                                                                                                                        | (21) EP18759805.7                                                                                    |
| (73) Webbit S.r.l.                                                                                                   | (51) G16H 40/67                                                                                                                                          | (47) 18.12.2024                                                                                      |
| (72) CAIS, Fulvio                                                                                                    | (11) EP3699927                                                                                                                                           | (87) US2018045871                                                                                    |
| (51) G16H 20/17                                                                                                      | (21) EP20167259.9                                                                                                                                        | 14.02.2019                                                                                           |
| G16H 40/63                                                                                                           | (47) 18.12.2024                                                                                                                                          | (22) 08.08.2018                                                                                      |
| A61M 39/10                                                                                                           | (22) 30.06.2010                                                                                                                                          | (54) SYSTEMS AND METHODS FOR TREATING AND ESTIMATING PROGRESSION OF CHRONIC KIDNEY DISEASE           |
| (11) EP4008009                                                                                                       | (54) COORDINATION OF CONTROL COMMANDS IN A MEDICAL DEVICE SYSTEM HAVING AT LEAST ONE THERAPY DELIVERY DEVICE AND AT LEAST ONE WIRELESS CONTROLLER DEVICE | (73) Fresenius Medical Care Holdings, Inc.                                                           |
| (21) EP20749891.6                                                                                                    | (73) Medtronic Minimed, Inc.                                                                                                                             | (72) WANG, Yuedong                                                                                   |
| (47) 18.12.2024                                                                                                      | (72) HANSON, Ian B.                                                                                                                                      | KOTANKO, Peter                                                                                       |
| (87) EP2020071596                                                                                                    | GOTTLIEB, Rebecca K.                                                                                                                                     | MADDUX, Dugan W.                                                                                     |
| 11.02.2021                                                                                                           | MOBERG, Sheldon B.                                                                                                                                       | USVYAT, Len                                                                                          |
| (22) 30.07.2020                                                                                                      | SCHULTZ, Peter                                                                                                                                           | BLANCHARD, Thomas C.                                                                                 |
| (54) INTELLIGENT MEDICAL FLUID CONDUCTION AND TRANSFER SYSTEM, AND COMPONENTS THEREFOR                               | LONG, Kenny J.                                                                                                                                           | MADDUX, Franklin W.                                                                                  |
| (73) ConnCons GmbH                                                                                                   | (31) 50031709                                                                                                                                            | (31) 201762542633 P                                                                                  |
| (72) GOMMEL, Christoph                                                                                               | 50031309                                                                                                                                                 | (32) 08.08.2017                                                                                      |
| HAMPE, Jochen                                                                                                        | 50029509                                                                                                                                                 | (33) United States of America                                                                        |
| SCHURIG, Carsten                                                                                                     | 50028309                                                                                                                                                 | (51) H01B 1/22                                                                                       |
| (31) 102019120926                                                                                                    | 50028109                                                                                                                                                 | A61B 5/263                                                                                           |
| (32) 02.08.2019                                                                                                      | 50027209                                                                                                                                                 | A61B 5/265                                                                                           |
| (33) Germany                                                                                                         | (32) 09.07.2009                                                                                                                                          | A61B 5/268                                                                                           |
| (51) G16H 20/30                                                                                                      | 09.07.2009                                                                                                                                               | (11) EP4075451                                                                                       |
| A47C 31/00                                                                                                           | 09.07.2009                                                                                                                                               | (21) EP20898513.5                                                                                    |
| A47C 31/12                                                                                                           | 09.07.2009                                                                                                                                               | (47) 18.12.2024                                                                                      |
| A47C 27/08                                                                                                           | (33) United States of America                                                                                                                            | (87) JP2020041198                                                                                    |
| A47C 21/00                                                                                                           | United States of America                                                                                                                                 | 17.06.2021                                                                                           |
| A47G 9/10                                                                                                            | United States of America                                                                                                                                 | (22) 04.11.2020                                                                                      |
| G04F 10/00                                                                                                           | United States of America                                                                                                                                 | (54) METHOD FOR PRODUCING BIOELECTRODE                                                               |
| A61H 1/02                                                                                                            | United States of America                                                                                                                                 | (73) NOK Corporation                                                                                 |
| A61H 1/00                                                                                                            | (51) G16H 50/00                                                                                                                                          | (72) FUTASHIMA, Ryo                                                                                  |
| G06Q 50/22                                                                                                           | A61B 5/377                                                                                                                                               | (31) 2019224772                                                                                      |
| (11) EP3735864                                                                                                       | (11) EP3685400                                                                                                                                           | (32) 12.12.2019                                                                                      |
| (21) EP17933759.7                                                                                                    | (21) EP18779579.4                                                                                                                                        | (33) Japan                                                                                           |
| (47) 18.12.2024                                                                                                      | (47) 18.12.2024                                                                                                                                          | (51) H01B 7/26                                                                                       |
| (87) KR2017015566                                                                                                    | (87) EP2018075208                                                                                                                                        | (11) EP3803910                                                                                       |
| 06.06.2019                                                                                                           | 21.03.2019                                                                                                                                               | (21) EP18728823.8                                                                                    |
| (22) 27.12.2017                                                                                                      | (22) 18.09.2018                                                                                                                                          | (47) 18.12.2024                                                                                      |
| (54) METHOD FOR OPERATING SMART MATTRESS SYSTEM ENABLING ALARM CONTROL                                               | (54) SYSTEM FOR GENERATING A SENSORIAL STIMULUS                                                                                                          | (87) EP2018063709                                                                                    |
| (73) BEREX Tech co., Ltd                                                                                             | (73) CYREBRO Technologies                                                                                                                                | 28.11.2019                                                                                           |
| (72) SHIN, Dong Wook                                                                                                 | (72) BARTHELEMY, Quentin                                                                                                                                 | (22) 24.05.2018                                                                                      |
| KIM, Seung Mo                                                                                                        | MAYAUD, Louis                                                                                                                                            | (54) METHOD FOR IMPROVING THE PERFORMANCES OF AN ARMoured AC CABLE WITH PERMANENTLY MAGNETIZED WIRES |
| LEE, Keon Yong                                                                                                       | (31) 201715707190                                                                                                                                        | (73) Prysmian S.p.A.                                                                                 |
| LEE, Dong Hun                                                                                                        | (32) 18.09.2017                                                                                                                                          | (72) MAIOLI, Paolo                                                                                   |
| YU, Young Jun                                                                                                        | (33) United States of America                                                                                                                            | RUZZIER, Marco                                                                                       |
| (31) 20170160945                                                                                                     | (51) G16H 50/20                                                                                                                                          | LUCARELLI, Monica                                                                                    |
|                                                                                                                      | G06N 99/00                                                                                                                                               | (51) H01B 7/282                                                                                      |
|                                                                                                                      |                                                                                                                                                          | H01B 7/14                                                                                            |
|                                                                                                                      |                                                                                                                                                          | G02B 6/44                                                                                            |
|                                                                                                                      |                                                                                                                                                          | H01B 11/22                                                                                           |

|                                            |                                   |                                        |
|--------------------------------------------|-----------------------------------|----------------------------------------|
| (11) EP4207217                             | (21) EP21718009.0                 | (33) United States of America          |
| (21) EP22819118.5                          | (47) 18.12.2024                   | (51) H01G 11/08                        |
| (47) 18.12.2024                            | (87) DE2021100305                 | H01G 4/38                              |
| (87) CN2022079743                          | 07.10.2021                        | C04B 28/04                             |
| 15.12.2022                                 | (22) 26.03.2021                   | C04B 111/94                            |
| (22) 08.03.2022                            | (54) ELECTROMAGNETIC ACTUATOR AND | H01G 11/30                             |
| (54) FLEXIBLE DIRECT-CURRENT               | ITS USE                           | (11) EP3737654                         |
| SUBMARINE CABLE                            | (73) Nakanishi Jaeger GmbH        | (21) EP19703457.2                      |
| (73) Zhongtian Technology Submarine Cable  | (72) ERTTEL, Rolf                 | (47) 18.12.2024                        |
| Co., Ltd.                                  | WOLFF, Frank                      | (87) US2019013304                      |
| (72) ZHANG, Hongliang                      | FISCHER, Axel                     | 18.07.2019                             |
| XIE, Shuhong                               | (31) 102020109120                 | (22) 11.01.2019                        |
| WANG, Liyuan                               | (32) 01.04.2020                   | (54) SUPERCAPACITOR COMPRISING         |
| YU, Hongmiao                               | (33) Germany                      | ELECTRON CONDUCTING CARBON-            |
| YAN, Yan                                   | (51) H01F 17/04                   | BASED CEMENTAND                        |
| WANG, Wenchao                              | H01F 41/02                        | (73) Centre National de la Recherche   |
| HU, Ming                                   | H01F 27/255                       | Scientifique (CNRS)                    |
| ZHAO, Youlin                               | H01F 27/28                        | Université de Bordeaux                 |
| YAN, Zhiyu                                 | (11) EP3716298                    | Massachusetts Institute of Technology  |
| XUE, Chi                                   | (21) EP20150443.8                 | (72) IOANNIDOU, Aikaterini             |
| (31) 202110633003                          | (47) 18.12.2024                   | BACKOV, Renal                          |
| (32) 07.06.2021                            | (22) 07.01.2020                   | DIVOUX, Thibaut                        |
| (33) China                                 | (54) CORE COMPONENT, METHOD OF    | ULM, Franz-Josef                       |
| (51) H01C 7/102                            | MANUFACTURING SAME, AND           | CHANUT, Nicolas                        |
| H01C 7/12                                  | INDUCTOR                          | PELLENQ, Roland, J. M.                 |
| (11) EP3716296                             | (73) Kyocera Corporation          | (31) 201862616693 P                    |
| (21) EP20174839.9                          | (72) TAKAYAMA, Mitsuya            | (32) 12.01.2018                        |
| (47) 18.12.2024                            | KITAGAWA, Yuki                    | (33) United States of America          |
| (22) 25.08.2018                            | SHINGU, Masamichi                 | (51) H01H 9/10                         |
| (54) OVERVOLTAGE PROTECTION DEVICE         | MORI, Hideki                      | H01H 33/666                            |
| INCLUDING MULTIPLE VARISTOR                | OCHIAI, Hitomi                    | H01H 85/20                             |
| WAFERS                                     | (31) 2019003550                   | H01H 85/54                             |
| (73) RIPD Research and IP Development Ltd. | (32) 11.01.2019                   | H01H 71/10                             |
| (72) TAVCAR, Tine                          | (33) Japan                        | (11) EP4109486                         |
| XEPAPAS, Fotis                             | (51) H01F 27/36                   | (21) EP21756447.5                      |
| CHOROZOGLU, Alexis                         | H01F 27/28                        | (47) 18.12.2024                        |
| PEPPAS, George                             | (11) EP3770931                    | (87) ES2021070119                      |
| RUSTJA, Sasa                               | (21) EP20187171.2                 | 26.08.2021                             |
| POLITIS, Zafiris G.                        | (47) 18.12.2024                   | (22) 18.02.2021                        |
| (31) 201715795986                          | (22) 22.07.2020                   | (54) SAFETY DEVICE AND THREE-POLE      |
| (32) 27.10.2017                            | (54) TRANSFORMER APPARATUS        | BASE                                   |
| (33) United States of America              | (73) Solaredge Technologies Ltd.  | (73) TALLERES ELECTROMECAÑICOS L.      |
| (51) H01F 5/06                             | (72) GLOVINSKI, Tzachi            | PINAZO S.A.                            |
| H01F 5/04                                  | TAL, Nikolay                      | (72) PAUNERO QUIJADA, Pablo            |
| H01F 27/32                                 | (31) 201962877687 P               | (31) 202030275 U                       |
| H01F 41/12                                 | (32) 23.07.2019                   | (32) 19.02.2020                        |
| B60L 13/03                                 | (33) United States of America     | (33) Spain                             |
| H02K 3/44                                  | (51) H01F 38/14                   | (51) H01H 9/26                         |
| H02K 15/04                                 | H01F 5/00                         | H01H 9/28                              |
| H02K 15/12                                 | H01F 27/28                        | (11) EP4027363                         |
| (11) EP3953953                             | H01F 27/36                        | (21) EP22150558.9                      |
| (21) EP20733186.9                          | H04B 5/79                         | (47) 18.12.2024                        |
| (47) 18.12.2024                            | (11) EP3968346                    | (22) 07.01.2022                        |
| (87) DE2020100272                          | (21) EP21203177.7                 | (54) LOCKING DEVICE FOR AN             |
| 15.10.2020                                 | (47) 18.12.2024                   | ELECTRICAL SWITCHBOARD                 |
| (22) 01.04.2020                            | (22) 30.05.2018                   | (73) Schneider Electric Industries SAS |
| (54) CLIMATE-PROOF MAGNETIC COIL           | (54) WIRELESS POWER TRANSFER THIN | (72) LEBEAU, Bernard                   |
| (73) VEM Sachsenwerk GmbH                  | PROFILE COIL ASSEMBLY             | BURNOT, Claude                         |
| (72) MORGENSTERN, Gert                     | (73) InductEV Inc.                | (31) 2100171                           |
| HÜBNER, Jürgen                             | (72) LONG, Bruce, Richard         | (32) 08.01.2021                        |
| KLOTZSCHE, Tom                             | SCHRAFEL, Peter, C.               | (33) France                            |
| (31) 102019109511                          | MCMAHON, Francis, J.              | (51) H01H 11/00                        |
| (32) 10.04.2019                            | WOLGEMUTH, John, M.               | H01H 33/56                             |
| (33) Germany                               | KEENER, Moses, M.                 | H01H 33/64                             |
| (51) H01F 7/16                             | DAGA, Andrew, W.                  | H01H 9/04                              |
| H01F 7/06                                  | COHEN, Benjamin, H.               | B29C 65/06                             |
| H01F 7/08                                  | (31) 201762512544 P               | (11) EP4117004                         |
| (11) EP4128291                             | (32) 30.05.2017                   | (21) EP21184655.5                      |

|                                                                                                                                                            |                                                                                                                                              |                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| (47) 18.12.2024                                                                                                                                            | (11) EP4026157                                                                                                                               | OSHIMA, Munekuni                                                                            |
| (22) 09.07.2021                                                                                                                                            | (21) EP20761617.8                                                                                                                            | KUWAHARA, Tetsuya                                                                           |
| (54) METHOD FOR MANUFACTURING<br>A SWITCHING APPARATUS FOR<br>ELECTRIC SYSTEMS                                                                             | (47) 18.12.2024                                                                                                                              | (31) 2018182584                                                                             |
| (73) ABB SCHWEIZ AG                                                                                                                                        | (87) EP2020074336                                                                                                                            | (32) 27.09.2018                                                                             |
| (72) Morelli, Emanuele                                                                                                                                     | 11.03.2021                                                                                                                                   | (33) Japan                                                                                  |
| Forlani, Giorgio                                                                                                                                           | (22) 01.09.2020                                                                                                                              | (51) H01L 21/683                                                                            |
| Rizzi, Corrado                                                                                                                                             | (54) RELAY MODULE                                                                                                                            | H02N 13/00                                                                                  |
| Chenet, Luciano                                                                                                                                            | (73) Phoenix Contact GmbH & Co. KG                                                                                                           | H01L 21/687                                                                                 |
| Bruni, Jacopo                                                                                                                                              | (72) HUDETZ, Hans-Peter                                                                                                                      | (11) EP4004973                                                                              |
| (51) H01H 23/04                                                                                                                                            | (31) 101387                                                                                                                                  | (21) EP20843974.5                                                                           |
| H01H 23/12                                                                                                                                                 | (32) 03.09.2019                                                                                                                              | (47) 18.12.2024                                                                             |
| (11) EP4033507                                                                                                                                             | (33) Luxembourg                                                                                                                              | (87) US2020043564                                                                           |
| (21) EP22153280.7                                                                                                                                          | (51) H01L 21/306                                                                                                                             | 28.01.2021                                                                                  |
| (47) 18.12.2024                                                                                                                                            | (11) EP3937209                                                                                                                               | (22) 24.07.2020                                                                             |
| (22) 25.01.2022                                                                                                                                            | (21) EP21183643.2                                                                                                                            | (54) GROUNDING MECHANISM FOR<br>MULTI-LAYER FOR ELECTROSTATIC<br>CHUCK, AND RELATED METHODS |
| (54) SWITCH FOR VEHICLE AND VEHICLE                                                                                                                        | (47) 18.12.2024                                                                                                                              | (73) Entegris, Inc.                                                                         |
| (73) Nio Technology (Anhui) Co., Ltd                                                                                                                       | (22) 05.07.2021                                                                                                                              | (72) LIU, Yan                                                                               |
| (72) Geng, Chenguang                                                                                                                                       | (54) PROCESS FOR MANUFACTURING A<br>SILICON CARBIDE SEMICONDUCTOR<br>DEVICE HAVING IMPROVED<br>CHARACTERISTICS                               | RYBCZYNSKI, Jakub                                                                           |
| Li, Lv                                                                                                                                                     | (73) STMicroelectronics S.r.l.                                                                                                               | DONNELL, Steven                                                                             |
| Zheng, Jiawen                                                                                                                                              | (72) RUSSO, Alfio                                                                                                                            | CHAN, Chun Wang                                                                             |
| Li, Rui                                                                                                                                                    | PILUSO, Nicolò                                                                                                                               | (31) 201962877919 P                                                                         |
| Mu, Lin                                                                                                                                                    | SEVERINO, Andrea                                                                                                                             | (32) 24.07.2019                                                                             |
| Zhang, Rui                                                                                                                                                 | FRANCO, Giovanni                                                                                                                             | (33) United States of America                                                               |
| (31) 202110097570                                                                                                                                          | MAZZEO, Angelo Annibale                                                                                                                      | (51) H01L 23/00                                                                             |
| (32) 25.01.2021                                                                                                                                            | RINALDI, Stefania                                                                                                                            | (11) EP2822029                                                                              |
| (33) China                                                                                                                                                 | BASSI, Anna                                                                                                                                  | (21) EP13754800.4                                                                           |
| (51) H01H 33/56                                                                                                                                            | CAUDO, Leonardo                                                                                                                              | (47) 18.12.2024                                                                             |
| H01H 11/00                                                                                                                                                 | (31) 202000016279                                                                                                                            | (87) JP2013054524                                                                           |
| G01R 31/12                                                                                                                                                 | (32) 06.07.2020                                                                                                                              | 06.09.2013                                                                                  |
| G01R 31/327                                                                                                                                                | (33) Italy                                                                                                                                   | (22) 22.02.2013                                                                             |
| H02B 13/065                                                                                                                                                | (51) H01L 21/329                                                                                                                             | (54) BONDING WIRE                                                                           |
| (11) EP3847680                                                                                                                                             | H01L 21/331                                                                                                                                  | (73) Nippon Micrometal Corporation                                                          |
| (21) EP19769037.3                                                                                                                                          | H01L 29/16                                                                                                                                   | WASEDA UNIVERSITY                                                                           |
| (47) 18.12.2024                                                                                                                                            | H01L 29/04                                                                                                                                   | (72) YAMADA, Takashi                                                                        |
| (87) EP2019072928                                                                                                                                          | H01L 29/06                                                                                                                                   | ODA, Daizo                                                                                  |
| 12.03.2020                                                                                                                                                 | H01L 29/32                                                                                                                                   | TATSUMI, Kohei                                                                              |
| (22) 28.08.2019                                                                                                                                            | H01L 29/732                                                                                                                                  | (31) 2012040116                                                                             |
| (54) GAS MONITORING SYSTEM FOR GAS-<br>INSULATED SWITCHGEARS                                                                                               | H01L 29/739                                                                                                                                  | (32) 27.02.2012                                                                             |
| (73) Siemens Energy Global GmbH & Co. KG                                                                                                                   | H01L 29/861                                                                                                                                  | (33) Japan                                                                                  |
| (72) COAPES, Graeme                                                                                                                                        | H01L 29/872                                                                                                                                  | (51) H01L 23/495                                                                            |
| (31) 18204735                                                                                                                                              | (11) EP4095888                                                                                                                               | H01L 21/56                                                                                  |
| 18193151                                                                                                                                                   | (21) EP21176547.4                                                                                                                            | H01L 21/48                                                                                  |
| (32) 06.11.2018                                                                                                                                            | (47) 18.12.2024                                                                                                                              | H01L 23/31                                                                                  |
| 07.09.2018                                                                                                                                                 | (22) 28.05.2021                                                                                                                              | (11) EP3422405                                                                              |
| (33) European Patent Office (EPO)                                                                                                                          | (54) SEMICONDUCTOR DEVICE HAVING<br>A REDUCED CONCENTRATION<br>OF CARBON VACANCIES AND<br>METHOD FOR MANUFACTURING A<br>SEMICONDUCTOR DEVICE | (21) EP17892751.3                                                                           |
| European Patent Office (EPO)                                                                                                                               | (73) Hitachi Energy Ltd                                                                                                                      | (47) 18.12.2024                                                                             |
| (51) H01H 37/54                                                                                                                                            | (72) ALFIERI, Giovanni                                                                                                                       | (87) CN2017072043                                                                           |
| (11) EP4310878                                                                                                                                             | KNOLL, Lars                                                                                                                                  | 26.07.2018                                                                                  |
| (21) EP23186032.1                                                                                                                                          | (51) H01L 21/677                                                                                                                             | (22) 22.01.2017                                                                             |
| (47) 18.12.2024                                                                                                                                            | H01L 21/67                                                                                                                                   | (54) FINGERPRINT SENSOR CHIP<br>PACKAGE                                                     |
| (22) 18.07.2023                                                                                                                                            | (11) EP3859771                                                                                                                               | (73) Shenzhen Goodix Technology Co., Ltd.                                                   |
| (54) TEMPERATURE-DEPENDENT<br>SWITCHING DEVICE, TEMPERATURE-<br>DEPENDENT SWITCH, AND METHOD<br>FOR PRODUCING A TEMPERATURE-<br>DEPENDENT SWITCHING DEVICE | (21) EP19865946.8                                                                                                                            | (72) LUO, Junping                                                                           |
| (73) Hofsaess, Marcel P.                                                                                                                                   | (47) 18.12.2024                                                                                                                              | ZENG, Shanshan                                                                              |
| (72) Hofsaess, Marcel P.                                                                                                                                   | (87) JP2019034120                                                                                                                            | WANG, Penghui                                                                               |
| (31) 102022118402                                                                                                                                          | 02.04.2020                                                                                                                                   | (51) H01L 23/498                                                                            |
| (32) 22.07.2022                                                                                                                                            | (22) 30.08.2019                                                                                                                              | H01L 23/00                                                                                  |
| (33) Germany                                                                                                                                               | (54) CONTROL METHOD, TRANSPORT<br>SYSTEM, AND COMMUNICATION<br>DEVICE                                                                        | H01L 21/48                                                                                  |
| (51) H01H 47/32                                                                                                                                            | (73) Murata Machinery, Ltd.                                                                                                                  | (11) EP4268277                                                                              |
| H01H 47/22                                                                                                                                                 | (72) ITO, Yasuhisa                                                                                                                           | (21) EP21844291.1                                                                           |
| H01H 50/08                                                                                                                                                 |                                                                                                                                              | (47) 18.12.2024                                                                             |
| H01H 50/04                                                                                                                                                 |                                                                                                                                              | (87) EP2021087194                                                                           |
|                                                                                                                                                            |                                                                                                                                              | 30.06.2022                                                                                  |
|                                                                                                                                                            |                                                                                                                                              | (22) 22.12.2021                                                                             |

|                                                                                                                  |                                                                                         |                                                                                                               |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| (54) DEVICE WITH A SEMI-EMBEDDED ELECTRICAL CONNECTION INSERT STEM                                               | (73) BOE Technology Group Co., Ltd.<br>Chengdu BOE Optoelectronics Technology Co., Ltd. | (54) SOLAR CELL SEALING MATERIAL, METHOD FOR MANUFACTURING SOLAR CELL SEALING MATERIAL, AND SOLAR CELL MODULE |
| (73) Commissariat à l'Energie Atomique et aux Energies Alternatives                                              | (72) YANG, Yixiang                                                                      | (73) Mitsui Chemicals ICT Materia, Inc.                                                                       |
| (72) CAPLET, Stéphane                                                                                            | ZHAO, Jiping                                                                            | (72) IKENAGA, Shigenobu                                                                                       |
| PERAY, Patrick                                                                                                   | WANG, Junxi                                                                             | WATANABE, Keiji                                                                                               |
| RAPHOZ, Natacha                                                                                                  | ZHANG, Bo                                                                               | TAKEUCHI, Fumito                                                                                              |
| (31) 2013975                                                                                                     | DU, Mengmeng                                                                            | ITO, Tomoaki                                                                                                  |
| (32) 22.12.2020                                                                                                  | DONG, Xiangdan                                                                          | (31) 2011178908                                                                                               |
| (33) France                                                                                                      | (51) H01L 27/146                                                                        | (32) 18.08.2011                                                                                               |
| (51) H01L 25/075                                                                                                 | H04N 25/46                                                                              | (33) Japan                                                                                                    |
| H01L 33/48                                                                                                       | H04N 25/583                                                                             | (51) H01L 31/048                                                                                              |
| H01L 33/50                                                                                                       | H04N 25/616                                                                             | H02S 40/36                                                                                                    |
| (11) EP3945575                                                                                                   | H04N 25/778                                                                             | (11) EP3427305                                                                                                |
| (21) EP21188162.8                                                                                                | H04N 25/13                                                                              | (21) EP17712219.9                                                                                             |
| (47) 18.12.2024                                                                                                  | H04N 25/704                                                                             | (47) 18.12.2024                                                                                               |
| (22) 28.07.2021                                                                                                  | (11) EP3662513                                                                          | (87) IB2017000172                                                                                             |
| (54) LIGHTING APPARATUS                                                                                          | (21) EP18760061.4                                                                       | 14.09.2017                                                                                                    |
| (73) LEEDARSON LIGHTING CO., LTD.                                                                                | (47) 18.12.2024                                                                         | (22) 23.02.2017                                                                                               |
| (72) XIE, Zhirong                                                                                                | (87) JP2018027844                                                                       | (54) PHOTOVOLTAIC ASSEMBLY                                                                                    |
| LIN, Ruixiang                                                                                                    | 07.02.2019                                                                              | (73) Flisom AG                                                                                                |
| ZHANG, Lei                                                                                                       | (22) 25.07.2018                                                                         | (72) NETTER, Thomas                                                                                           |
| WU, Yunbiao                                                                                                      | (54) IMAGING APPARATUS AND ELECTRONIC DEVICE                                            | KERN, Roland                                                                                                  |
| DONG, Yongzhe                                                                                                    | (73) Sony Semiconductor Solutions Corporation                                           | OLDRIDGE, John                                                                                                |
| (31) 202021576106 U                                                                                              | (72) TAKAHASHI, Keiichiro                                                               | (31) 201662305486 P                                                                                           |
| (32) 31.07.2020                                                                                                  | KOBAYASHI, Kazuhito                                                                     | (32) 08.03.2016                                                                                               |
| (33) China                                                                                                       | NISHIKORI, Katsumi                                                                      | (33) United States of America                                                                                 |
| (51) H01L 25/16                                                                                                  | TANAKA, Shoyu                                                                           | (51) H01L 31/052                                                                                              |
| H01L 25/075                                                                                                      | (31) 2018016077                                                                         | H01L 31/0525                                                                                                  |
| H01L 33/62                                                                                                       | 2017150744                                                                              | H02S 40/42                                                                                                    |
| H01L 33/00                                                                                                       | (32) 01.02.2018                                                                         | H02S 40/44                                                                                                    |
| H01L 27/12                                                                                                       | 03.08.2017                                                                              | (11) EP3111485                                                                                                |
| (11) EP3847699                                                                                                   | (33) Japan                                                                              | (21) EP15755838.8                                                                                             |
| (21) EP20756313.1                                                                                                | Japan                                                                                   | (47) 18.12.2024                                                                                               |
| (47) 18.12.2024                                                                                                  | (51) H01L 31/0216                                                                       | (87) US2015017440                                                                                             |
| (87) KR2020002013                                                                                                | H01L 31/18                                                                              | 03.09.2015                                                                                                    |
| 20.08.2020                                                                                                       | (11) EP4254518                                                                          | (22) 25.02.2015                                                                                               |
| (22) 13.02.2020                                                                                                  | (21) EP23186067.7                                                                       | (54) A HYBRID SUPPLEMENTAL SOLAR ENERGY COLLECTION AND DISSIPATION SYSTEM WITH ONE OR MORE HEAT PUMPS         |
| (54) DISPLAY MODULE HAVING GLASS SUBSTRATE ON WHICH SIDE WIRINGS ARE FORMED AND MANUFACTURING METHOD OF THE SAME | (47) 18.12.2024                                                                         | (73) SunDrum Solar LLC                                                                                        |
| (73) Samsung Electronics Co., Ltd.                                                                               | (22) 15.10.2021                                                                         | (72) NUNEZ, Albert                                                                                            |
| (72) HONG, Soonmin                                                                                               | (54) SOLAR CELL, METHOD FOR PREPARING SAME AND SOLAR CELL MODULE                        | INTRIERI, Michael                                                                                             |
| MOON, Youngjun                                                                                                   | (73) Shanghai Jinko Green Energy Enterprise Management Co., Ltd.                        | (31) 201514630201                                                                                             |
| JANG, Kyungwoon                                                                                                  | Zhejiang Jinko Solar Co., Ltd.                                                          | 201461944338 P                                                                                                |
| YOON, Jeonggen                                                                                                   | (72) LI, Wenqi                                                                          | (32) 24.02.2015                                                                                               |
| HEO, Gyun                                                                                                        | YANG, Jie                                                                               | 25.02.2014                                                                                                    |
| KIM, Gyuha                                                                                                       | ZHENG, Peiting                                                                          | (33) United States of America                                                                                 |
| LEE, Tackmo                                                                                                      | ZHANG, Xinyu                                                                            | United States of America                                                                                      |
| (31) 20190156922                                                                                                 | XU, Menglei                                                                             | (51) H01L 31/101                                                                                              |
| 20190016611                                                                                                      | JIN, Hao                                                                                | H01L 27/144                                                                                                   |
| (32) 29.11.2019                                                                                                  | (31) 202111064317                                                                       | H01L 31/12                                                                                                    |
| 13.02.2019                                                                                                       | (32) 10.09.2021                                                                         | (11) EP3308405                                                                                                |
| (33) Korea (Republic)                                                                                            | (33) China                                                                              | (21) EP16729834.8                                                                                             |
| Korea (Republic)                                                                                                 | (51) H01L 31/042                                                                        | (47) 18.12.2024                                                                                               |
| (51) H01L 27/12                                                                                                  | C08F 210/16                                                                             | (87) EP2016062865                                                                                             |
| H10K 59/131                                                                                                      | C08K 5/14                                                                               | 15.12.2016                                                                                                    |
| (11) EP4106000                                                                                                   | C08K 5/54                                                                               | (22) 07.06.2016                                                                                               |
| (21) EP20925673.4                                                                                                | C08L 23/08                                                                              | (54) DEVICE FOR THE DETECTION OF ELECTROMAGNETIC RADIATION                                                    |
| (47) 18.12.2024                                                                                                  | (11) EP2747150                                                                          | (73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.                                     |
| (87) CN2020080080                                                                                                | (21) EP12824181.7                                                                       | (72) FEHSE, Karsten                                                                                           |
| 23.09.2021                                                                                                       | (47) 18.12.2024                                                                         | JAHNEL, Matthias                                                                                              |
| (22) 18.03.2020                                                                                                  | (87) JP2012005170                                                                       | RICHTER, Bernd                                                                                                |
| (54) DISPLAY PANEL AND DISPLAY DEVICE                                                                            | 21.02.2013                                                                              | WARTENBERG, Philipp                                                                                           |
|                                                                                                                  | (22) 16.08.2012                                                                         |                                                                                                               |

|                                   |                                   |                                     |
|-----------------------------------|-----------------------------------|-------------------------------------|
| (31) 102015109044                 | (31) 2017124547                   | (72) CHUNG, Ju Ho                   |
| (32) 09.06.2015                   | (32) 26.06.2017                   | YOO, Seok Keun                      |
| (33) Germany                      | (33) Japan                        | MOON, Joon Hyung                    |
| (51) H01L 31/12                   | (51) H01L 33/60                   | PARK, Gwi Ok                        |
| G02F 1/015                        | (11) EP4160704                    | (31) 20210179924                    |
| (11) EP4292137                    | (21) EP22198070.9                 | (32) 15.12.2021                     |
| (21) EP22708840.8                 | (47) 18.12.2024                   | (33) Korea (Republic)               |
| (47) 18.12.2024                   | (22) 27.09.2022                   | (51) H01M 4/04                      |
| (87) EP2022053327                 | (54) LIGHT EMITTING DEVICE AND    | H01M 50/531                         |
| 18.08.2022                        | METHOD OF MANUFACTURING LIGHT     | H01M 10/04                          |
| (22) 11.02.2022                   | EMITTING DEVICE                   | B65H 19/10                          |
| (54) CONFINEMENT OF NEUTRAL       | (73) Nichia Corporation           | B65H 35/00                          |
| EXCITONS IN A SEMICONDUCTOR       | (72) KUSUSE, Takeshi              | B26F 1/12                           |
| LAYER STRUCTURE                   | YAMANOI, Takuya                   | (11) EP4135063                      |
| (73) ETH Zurich                   | OZEKI, Kenji                      | (21) EP22736880.0                   |
| (72) POPERT, Alexander            | TAMURA, Kazuya                    | (47) 18.12.2024                     |
| KRONER, Martin                    | KISHIKAWA, Daisuke                | (87) KR2022000292                   |
| ANANTHA MURTHY, Puneet            | TADA, Takaaki                     | 14.07.2022                          |
| IMAMOGLU, Atac                    | (31) 2022134625                   | (22) 07.01.2022                     |
| THUREJA, Deepankur                | 2021159175                        | (54) ELECTRODE CONNECTING           |
| (31) 21156970                     | (32) 26.08.2022                   | APPARATUS AND METHOD, AND           |
| (32) 12.02.2021                   | 29.09.2021                        | NOTCHING EQUIPMENT COMPRISING       |
| (33) European Patent Office (EPO) | (33) Japan                        | SAME                                |
| (51) H01L 33/00                   | Japan                             | (73) LG Energy Solution, Ltd.       |
| H01L 25/075                       | (51) H01M 4/02                    | (72) KIM, Yoong                     |
| H01L 33/62                        | H01M 4/04                         | PARK, Yun Ho                        |
| H01L 33/38                        | H01M 10/04                        | (31) 20220001809                    |
| H01L 33/44                        | H01M 10/0587                      | 20210003615                         |
| (11) EP3855494                    | H01M 10/0525                      | (32) 05.01.2022                     |
| (21) EP19861436.4                 | (11) EP3595047                    | 11.01.2021                          |
| (47) 18.12.2024                   | (21) EP18849036.1                 | (33) Korea (Republic)               |
| (87) KR2019003329                 | (47) 18.12.2024                   | Korea (Republic)                    |
| 26.03.2020                        | (87) KR2018009533                 | (51) H01M 4/133                     |
| (22) 21.03.2019                   | 28.02.2019                        | C01B 32/05                          |
| (54) METHOD FOR MANUFACTURING A   | (22) 20.08.2018                   | C01B 32/20                          |
| DISPLAY DEVICE                    | (54) SECONDARY BATTERY ELECTRODE, | C01B 32/205                         |
| (73) Samsung Display Co., Ltd.    | MANUFACTURING METHOD              | C01B 32/21                          |
| (72) SONG, Keun Kyu               | THEREFOR, AND ELECTRODE           | C01B 32/225                         |
| KIM, Myeong Hee                   | ASSEMBLY                          | H01M 4/36                           |
| KWAG, Jin Oh                      | (73) LG Energy Solution, Ltd.     | H01M 4/587                          |
| TAE, Chang Il                     | (72) JEONG, An Soo                | H01M 10/0525                        |
| KIM, Dae Hyun                     | YUN, Duck Joong                   | C01B 32/23                          |
| LIM, Bek Hyun                     | PARK, Pil Kyu                     | (11) EP4228034                      |
| CHO, Hyun Min                     | SONG, Han Gab                     | (21) EP22868696.0                   |
| YOO, Je Won                       | KIM, Dea Hyun                     | (47) 18.12.2024                     |
| (31) 20180114422                  | KIM, Nam Won                      | (87) CN2022093671                   |
| (32) 21.09.2018                   | (31) 20180093108                  | 23.03.2023                          |
| (33) Korea (Republic)             | 20170105613                       | (22) 18.05.2022                     |
| (51) H01L 33/20                   | (32) 09.08.2018                   | (54) COMPOSITE GRAPHITE MATERIAL    |
| H01L 33/00                        | 21.08.2017                        | AND PREPARATION METHOD              |
| H01L 33/58                        | (33) Korea (Republic)             | THEREFOR, NEGATIVE ELECTRODE        |
| H01L 33/32                        | Korea (Republic)                  | PLATE, SECONDARY BATTERY,           |
| (11) EP3648182                    | (51) H01M 4/04                    | BATTERY MODULE, BATTERY PACK,       |
| (21) EP18822830.8                 | H01M 4/36                         | AND POWERED DEVICE                  |
| (47) 18.12.2024                   | H01M 4/38                         | (73) Contemporary Ampere Technology |
| (87) JP2018022684                 | H01M 4/583                        | (Hong Kong) Limited                 |
| 03.01.2019                        | H01M 10/052                       | (72) HE, Libing                     |
| (22) 14.06.2018                   | H01M 50/105                       | KANG, Meng                          |
| (54) SEMICONDUCTOR LIGHT-EMITTING | H01M 4/02                         | (31) 202111079771                   |
| ELEMENT AND METHOD FOR            | (11) EP4199137                    | (32) 15.09.2021                     |
| MANUFACTURING SEMICONDUCTOR       | (21) EP22213491.8                 | (33) China                          |
| LIGHT-EMITTING ELEMENT            | (47) 18.12.2024                   | (51) H01M 4/38                      |
| (73) Nikkiso Co., Ltd.            | (22) 14.12.2022                   | H01M 10/052                         |
| (72) NAWATA Akifumi               | (54) ANODE FOR SECONDARY BATTERY, | H01M 10/0567                        |
| TANAKA Satoru                     | METHOD OF FABRICATING THE SAME    | H01M 10/0569                        |
| INAZU Tetsuhiko                   | AND LITHIUM SECONDARY BATTERY     | H01M 10/42                          |
| SUZAKI Yasumasa                   | INCLUDING THE SAME                | H01M 4/40                           |
| NIWA Noritaka                     | (73) SK On Co., Ltd.              | H01M 4/505                          |

|                                     |                                               |                                         |
|-------------------------------------|-----------------------------------------------|-----------------------------------------|
| H01M 10/0568                        | JIN, Chao                                     | (54) REFUELLING UNIT FOR REFUELLING     |
| (11) EP4241321                      | SHI, Haihao                                   | FUEL CELL OF HEARING AID                |
| (21) EP21789735.4                   | LI, Wei                                       | (73) WIDEX A/S                          |
| (47) 18.12.2024                     | XU, Jianbao                                   | (72) VALNERT, Boris                     |
| (87) EP2021077864                   | (31) 201811366437                             | BODVARSSON, Thorvaldur Oli              |
| 12.05.2022                          | (32) 16.11.2018                               | LARSEN, Michael Frydendal               |
| (22) 08.10.2021                     | (33) China                                    | SØRENSEN, Per Kokholm                   |
| (54) FLUORINATED ELECTROLYTE        | (51) H01M 4/86                                | (31) PA201800325                        |
| COMPOSITION FOR                     | H01M 4/88                                     | 201862694629 P                          |
| ELECTROCHEMICAL ELEMENT             | H01M 8/1213                                   | (32) 04.07.2018                         |
| COMPRISING A LITHIUM OR LITHIUM     | H01M 8/126                                    | 06.07.2018                              |
| ALLOY ANODE                         | C25B 11/04                                    | (33) Denmark                            |
| (73) SAFT                           | C25B 13/04                                    | United States of America                |
| (72) DEMEAUX, Julien                | H01M 8/124                                    | (51) H01M 8/18                          |
| OSWALD, Marlène                     | (11) EP3465807                                | H01M 8/04                               |
| (31) 2011417                        | (21) EP17803610.9                             | H01M 8/04186                            |
| (32) 06.11.2020                     | (47) 18.12.2024                               | H01M 8/04276                            |
| (33) France                         | (87) US2017034534                             | H01M 8/04746                            |
| (51) H01M 4/62                      | 30.11.2017                                    | (11) EP3719907                          |
| C08G 73/10                          | (22) 25.05.2017                               | (21) EP17894661.2                       |
| H01G 11/38                          | (54) ELECTRODE COMPRISING HEAVILY-            | (47) 18.12.2024                         |
| H01G 11/86                          | DOPED CERIA                                   | (87) JP2017042651                       |
| H01M 4/139                          | (73) Saint-Gobain Ceramics and Plastics, Inc. | 06.06.2019                              |
| H01M 4/38                           | Trustees of Boston University                 | (22) 28.11.2017                         |
| H01M 4/48                           | (72) GOPALAN, Srikanth                        | (54) REDOX FLOW BATTERY                 |
| H01M 4/58                           | POIZEAU, Sophie Marie Claire                  | (73) Sumitomo Electric Industries, Ltd. |
| H01M 4/04                           | CETIN, Deniz                                  | (72) IKEUCHI, Atsuo                     |
| H01M 4/131                          | (31) 201662341470 P                           | (51) H01M 8/18                          |
| H01M 4/133                          | (32) 25.05.2016                               | H01M 8/04                               |
| H01M 4/134                          | (33) United States of America                 | H01M 8/04537                            |
| H01M 4/1391                         | (51) H01M 8/04014                             | H01M 8/04858                            |
| H01M 4/1393                         | H01M 8/04089                                  | H01M 8/04955                            |
| H01M 4/1395                         | H01M 8/04746                                  | H01M 8/2483                             |
| H01M 10/0525                        | H01M 8/04119                                  | (11) EP3644424                          |
| C08K 3/04                           | H01M 8/18                                     | (21) EP18819891.5                       |
| C08K 3/08                           | H01M 8/04701                                  | (47) 18.12.2024                         |
| C08K 3/36                           | C25B 1/04                                     | (87) JP2018009834                       |
| C09D 129/04                         | C25B 15/021                                   | 27.12.2018                              |
| H01M 4/583                          | C25B 15/08                                    | (22) 14.03.2018                         |
| (11) EP3805294                      | H01M 8/12                                     | (54) REDOX FLOW BATTERY SYSTEM AND      |
| (21) EP19807891.7                   | (11) EP3869599                                | METHOD FOR OPERATING REDOX              |
| (47) 18.12.2024                     | (21) EP20777067.8                             | FLOW BATTERY SYSTEM                     |
| (87) JP2019020547                   | (47) 18.12.2024                               | (73) Sumitomo Electric Industries, Ltd. |
| 28.11.2019                          | (87) KR2020003047                             | (72) KUMAMOTO Takahiro                  |
| (22) 23.05.2019                     | 01.10.2020                                    | TSUTSUI Yasumitsu                       |
| (54) ELECTRODE BINDER RESIN         | (22) 04.03.2020                               | YAMANISHI Katsuya                       |
| COMPOSITION, ELECTRODE              | (54) REVERSIBLE WATER ELECTROLYSIS            | (31) 2017120659                         |
| MIXTURE PASTE, AND ELECTRODE        | SYSTEM AND METHOD FOR                         | (32) 20.06.2017                         |
| (73) UBE Corporation                | OPERATING SAME                                | (33) Japan                              |
| (72) MORISHITA, Masanori            | (73) Korea Institute of Machinery & Materials | (51) H01M 10/00                         |
| NAKAYAMA, Takeshige                 | (72) GIAP, Van Tien                           | (11) EP4305698                          |
| SAKAI, Tetsuo                       | KIM, Youngsang                                | (21) EP22710632.5                       |
| (31) 2018099611                     | AHN, Kook-Young                               | (47) 18.12.2024                         |
| (32) 24.05.2018                     | LEE, Youngduk                                 | (87) EP2022056185                       |
| (33) Japan                          | (31) 20190033833                              | 15.09.2022                              |
| (51) H01M 4/66                      | 20190033817                                   | (22) 10.03.2022                         |
| H01M 10/0525                        | (32) 25.03.2019                               | (54) POLYSACCHARIDE ELECTROLYTES        |
| (11) EP3654427                      | 25.03.2019                                    | (73) Fundación Centro de Investigación  |
| (21) EP19179973.3                   | (33) Korea (Republic)                         | Cooperativa de Energías Alternativas,   |
| (47) 18.12.2024                     | Korea (Republic)                              | CIC Energigune Fundazioa                |
| (22) 13.06.2019                     | (51) H01M 8/04082                             | (72) ORTIZ VITORIANO, Nagore            |
| (54) POSITIVE ELECTRODE PLATE AND   | H01M 8/1011                                   | MORANT MIÑANA, María Carmen             |
| ELECTROCHEMICAL DEVICE              | (11) EP3818581                                | GARCÍA GAITÁN, Estibaliz                |
| (73) Contemporary Ampere Technology | (21) EP19741980.7                             | (31) 21382198                           |
| (Hong Kong) Limited                 | (47) 18.12.2024                               | (32) 11.03.2021                         |
| (72) LI, Shisong                    | (87) EP2019067976                             | (33) European Patent Office (EPO)       |
| GUO, Chao                           | 09.01.2020                                    | (51) H01M 10/04                         |
| LIU, Huihui                         | (22) 04.07.2019                               | H01M 10/42                              |



|                                            |                                 |                                    |
|--------------------------------------------|---------------------------------|------------------------------------|
| H01M 10/54                                 | Jia, Hao                        | (32) 24.10.2019                    |
| H01M 50/517                                | Schmiegel, Jan-Patrick          | 26.10.2018                         |
| H01M 10/48                                 | Fan, Quan                       | (33) Korea (Republic)              |
| (11) EP4199163                             | Terborg, Lydia                  | Korea (Republic)                   |
| (21) EP21884385.2                          | Placke, Tobias                  | (51) H01M 10/42                    |
| (47) 18.12.2024                            | (51) H01M 10/0525               | H01M 10/058                        |
| (87) CN2021091661                          | H01M 50/109                     | H01M 10/052                        |
| 05.05.2022                                 | H01M 50/184                     | H01M 50/105                        |
| (22) 30.04.2021                            | H01M 50/171                     | H01M 10/0525                       |
| (54) AUTOMATIC PRODUCTION LINE FOR         | H01M 50/186                     | (11) EP3826098                     |
| CASCADE UTILIZATION OF POWER               | H01M 50/193                     | (21) EP20851401.8                  |
| BATTERIES                                  | H01M 10/30                      | (47) 18.12.2024                    |
| (73) Hunan Brunp Recycling Technology Co., | H01M 10/34                      | (87) KR2020008261                  |
| Ltd.                                       | H01M 12/06                      | 25.02.2021                         |
| Hunan Brunp EV Recycling Co., Ltd.         | (11) EP3742515                  | (22) 25.06.2020                    |
| Guangdong Brunp Recycling Technology       | (21) EP19176097.4               | (54) METHOD FOR RECOVERING LITHIUM |
| Co., Ltd                                   | (47) 18.12.2024                 | BATTERY CELL BY HEAT TREATMENT     |
| (72) XIE, Yinghao                          | (22) 23.05.2019                 | AND METHOD FOR MANUFACTURING       |
| YU, Haijun                                 | (54) BUTTON CELL AND METHOD FOR | LITHIUM BATTERY CELL COMPRISING    |
| ZHANG, Xuemei                              | THE PRODUCTION OF BUTTON        | THE SAME                           |
| WU, Jindong                                | CELLS                           | (73) LG Energy Solution, Ltd.      |
| (31) 202011190072                          | (73) VARTA Microbattery GmbH    | (72) KIM, Youngdeok                |
| (32) 30.10.2020                            | (72) KREIDLER, Bernd            | KIM, Daesoo                        |
| (33) China                                 | KOHL, Ulrich                    | CHOI, Hyunjun                      |
| (51) H01M 10/04                            | (51) H01M 10/0566               | (31) 20190101266                   |
| H01M 50/107                                | H01M 10/0587                    | (32) 19.08.2019                    |
| H01M 50/317                                | H01M 50/291                     | (33) Korea (Republic)              |
| H01M 50/533                                | H01M 10/0525                    | (51) H01M 10/42                    |
| H01M 50/543                                | H01M 50/103                     | H01M 10/633                        |
| H01M 50/147                                | H01M 50/119                     | H01M 10/6571                       |
| (11) EP4080653                             | H01M 50/209                     | H01M 50/213                        |
| (21) EP21827164.1                          | (11) EP4040525                  | H01M 50/244                        |
| (47) 18.12.2024                            | (21) EP20872472.4               | H01M 50/258                        |
| (87) CN2021077510                          | (47) 18.12.2024                 | H01M 50/519                        |
| 01.09.2022                                 | (87) JP2020034400               | H01M 50/574                        |
| (22) 23.02.2021                            | 08.04.2021                      | H01M 10/48                         |
| (54) BATTERY CELL, BATTERY, ELECTRIC       | (22) 11.09.2020                 | (11) EP4189766                     |
| DEVICE, AND METHOD AND DEVICE              | (54) BATTERY PACK               | (21) EP21752003.0                  |
| FOR PREPARING BATTERY CELL                 | (73) SANYO Electric Co., Ltd.   | (47) 18.12.2024                    |
| (73) Contemporary Amperex Technology       | (72) OGISHIMA, Yuji             | (87) EP2021070670                  |
| (Hong Kong) Limited                        | TAKENO, Kazuki                  | 03.02.2022                         |
| (72) CHAI, Zhisheng                        | MINAMI, Keisuke                 | (22) 23.07.2021                    |
| FANG, Kun                                  | (31) 2019180210                 | (54) MODULAR SERIES-CONNECTED      |
| CHI, Qingkui                               | (32) 30.09.2019                 | BATTERY PACK (BLMOSE)              |
| JIN, Haizu                                 | (33) Japan                      | (73) Limatech                      |
| SUN, Dongsheng                             | (51) H01M 10/42                 | (72) ROBIN, Florence               |
| (51) H01M 10/052                           | H01M 10/052                     | POUYADOU, Luc                      |
| H01M 10/0567                               | H01M 50/403                     | DI MEGLIO, Maxime                  |
| H01M 10/0568                               | H01M 50/431                     | (31) 2007906                       |
| C07F 7/30                                  | H01M 50/449                     | (32) 27.07.2020                    |
| H01M 10/0569                               | H01M 50/457                     | (33) France                        |
| (11) EP3948998                             | (11) EP3780149                  | (51) H01M 10/54                    |
| (21) EP19714652.5                          | (21) EP19876010.0               | (11) EP4322283                     |
| (47) 18.12.2024                            | (47) 18.12.2024                 | (21) EP22189740.8                  |
| (87) EP2019058024                          | (87) KR2019014189               | (47) 18.12.2024                    |
| 08.10.2020                                 | 30.04.2020                      | (22) 10.08.2022                    |
| (22) 29.03.2019                            | (22) 25.10.2019                 | (54) MOBILE DEVICE FOR TREATING    |
| (54) LITHIUM BATTERY AND USE OF            | (54) FUNCTIONAL SEPARATOR,      | LITHIUM-ION BATTERIES AND          |
| A GERMANIUM ORGANYL-BASED                  | MANUFACTURING METHOD            | METHOD FOR TREATING LITHIUM-ION    |
| ELECTROLYTE ADDITIVE AS AN                 | THEREFOR, AND LITHIUM           | BATTERIES                          |
| ELECTROLYTE ADDITIVE THEREIN               | SECONDARY BATTERY COMPRISING    | (73) RIEDHAMMER GMBH               |
| (73) Contemporary Amperex Technology Co.,  | SAME                            | (72) UHL, Matthias                 |
| Limited                                    | (73) LG Energy Solution, Ltd.   | BIRD, Dennis                       |
| Bayerische Motoren Werke                   | (72) KIM, Kihyun                | (51) H01M 10/54                    |
| Aktiengesellschaft                         | LEE, Jangsoo                    | B02C 23/36                         |
| (72) Klein, Sven                           | YANG, Seungbo                   | B03B 9/06                          |
| Winter, Martin                             | (31) 20190132731                | B02C 23/38                         |
| Reiter, Jakub                              | 20180129174                     | C22B 7/00                          |

|                                     |                                         |                                  |
|-------------------------------------|-----------------------------------------|----------------------------------|
| C22B 26/12                          | H01M 50/497                             | (87) EP2019061436                |
| C22B 1/00                           | H01M 50/446                             | 21.11.2019                       |
| H01M 10/0525                        | H01M 50/403                             | (22) 03.05.2019                  |
| C01D 15/02                          | H01M 50/46                              | (54) RADIO FREQUENCY MULTIPLEXER |
| (11) EP4050702                      | H01M 10/0525                            | (73) RF360 Singapore Pte. Ltd.   |
| (21) EP22160940.7                   | (11) EP3863110                          | (72) BERTL, Sebastian            |
| (47) 18.12.2024                     | (21) EP21165431.4                       | (31) 102018111428                |
| (22) 30.05.2018                     | (47) 18.12.2024                         | (32) 14.05.2018                  |
| (54) A PROCESS, APPARATUS, AND      | (22) 22.12.2005                         | (33) Germany                     |
| SYSTEM FOR RECOVERING               | (54) ORGANIC/INORGANIC COMPOSITE        | (51) H01P 3/12                   |
| MATERIALS FROM BATTERIES            | MICROPOROUS MEMBRANE AND                | H05K 1/09                        |
| (73) Li-Cycle Corp.                 | ELECTROCHEMICAL DEVICE                  | H05K 1/02                        |
| (72) KOCHHAR, Ajay                  | PREPARED THEREBY                        | H05K 3/24                        |
| JOHNSTON, Timothy                   | (73) LG Energy Solution, Ltd.           | (11) EP3534456                   |
| (31) 201862669205 P                 | Toray Industries, Inc.                  | (21) EP17874546.9                |
| 201762512460 P                      | (72) LEE, Sang-Young                    | (47) 18.12.2024                  |
| (32) 09.05.2018                     | YONG, Hyun-hang                         | (87) JP2017041167                |
| 30.05.2017                          | HONG, Jang-Hyuk                         | 31.05.2018                       |
| (33) United States of America       | SUK, Jung-Don                           | (22) 15.11.2017                  |
| United States of America            | KIM, Seok-Koo                           | (54) TRANSMISSION LINE           |
| (51) H01M 50/147                    | AHN, Soon-Ho                            | (73) Furukawa Electric Co., Ltd. |
| H01M 50/30                          | (31) 20040110402                        | (72) YAMAGUCHI, Fumie            |
| H01M 50/375                         | 20040110400                             | TORIMITSU, Satoru                |
| H01M 50/342                         | (32) 22.12.2004                         | (31) 2016229606                  |
| H01M 50/155                         | 22.12.2004                              | 2016229605                       |
| H01M 10/04                          | (33) Korea (Republic)                   | (32) 25.11.2016                  |
| (11) EP4071896                      | Korea (Republic)                        | 25.11.2016                       |
| (21) EP20959082.7                   | (51) H01M 50/50                         | (33) Japan                       |
| (47) 18.12.2024                     | (11) EP3935679                          | Japan                            |
| (87) CN2020124528                   | (21) EP20708404.7                       | (51) H01P 5/107                  |
| 05.05.2022                          | (47) 18.12.2024                         | H01Q 21/00                       |
| (22) 28.10.2020                     | (87) AT2020060054                       | (11) EP3631892                   |
| (54) COVER ASSEMBLY, BATTERY CELL,  | 17.09.2020                              | (21) EP18806322.6                |
| BATTERY AND ELECTRIC DEVICE         | (22) 25.02.2020                         | (47) 18.12.2024                  |
| (73) Contemporary Ampere Technology | (54) APPARATUS FOR CONNECTING IN        | (87) US2018030914                |
| (Hong Kong) Limited                 | PARALLEL A PLURALITY OF BATTERY         | 29.11.2018                       |
| (72) MENG, Wanqiu                   | CELLS WHICH ARE ARRANGED                | (22) 03.05.2018                  |
| LIU, Qian                           | PARALLEL TO ONE ANOTHER WITH            | (54) BROADBAND WAVEGUIDE LAUNCH  |
| YE, Yonghuang                       | RESPECT TO A JOINING AXIS               | DESIGNS ON SINGLE LAYER PCB      |
| (51) H01M 50/342                    | (73) John Deere Electric Powertrain LLC | (73) Waymo LLC                   |
| H01M 50/15                          | (72) KASTLER, Helmut                    | (72) MCCLOSKEY, Edward           |
| H01M 50/103                         | SCHMUDERMAIER, Wolfgang                 | BROWN, Adam                      |
| H01M 10/0525                        | WALDSCHÜTZ, Gerhard                     | PAN, Helen, K.                   |
| H01M 50/105                         | DREXLER, Florian                        | (31) 201715603978                |
| H01M 50/119                         | (31) 501882019                          | (32) 24.05.2017                  |
| H01M 50/124                         | (32) 08.03.2019                         | (33) United States of America    |
| H01M 50/24                          | (33) Austria                            | (51) H01Q 1/12                   |
| H01M 50/557                         | (51) H01P 1/12                          | (11) EP4266487                   |
| H01M 10/04                          | (11) EP3188307                          | (21) EP22169303.9                |
| H01M 50/55                          | (21) EP16206593.2                       | (47) 18.12.2024                  |
| (11) EP4145612                      | (47) 18.12.2024                         | (22) 21.04.2022                  |
| (21) EP21938136.5                   | (22) 23.12.2016                         | (54) COMMUNICATION DEVICE AND    |
| (47) 18.12.2024                     | (54) HIGH PERFORMANCE SWITCH FOR        | ASSOCIATED METHOD                |
| (87) CN2021107586                   | MICROWAVE MEMS                          | (73) AGC Glass Europe            |
| 26.01.2023                          | (73) Synergy Microwave Corporation      | (72) SALME, Günther              |
| (22) 21.07.2021                     | (72) Koul, Shibani K.                   | YOUSSEFBEIKI, Mohsen             |
| (54) BATTERY CELL AND               | Poddar, Ajay Kumar                      | ADDACI, Rafik                    |
| MANUFACTURING METHOD                | Rohde, Ulrich, Prof. Dr. Dr.            | (51) H01Q 1/12                   |
| AND MANUFACTURING SYSTEM            | Dey, Sukomal                            | H01Q 1/38                        |
| THEREFOR, BATTERY, AND              | (31) 201562272280 P                     | H01Q 9/04                        |
| ELECTRICAL DEVICE                   | (32) 29.12.2015                         | H01Q 1/42                        |
| (73) Contemporary Ampere Technology | (33) United States of America           | H01Q 1/00                        |
| (Hong Kong) Limited                 | (51) H01P 1/213                         | (11) EP4244932                   |
| (72) CHEN, Xinxiang                 | H03H 9/70                               | (21) EP21815160.3                |
| ZHENG, Yulian                       | H03H 9/72                               | (47) 18.12.2024                  |
| (51) H01M 50/451                    | (11) EP3794672                          | (87) EP2021081827                |
| H01M 50/489                         | (21) EP19723053.5                       | 19.05.2022                       |
| H01M 50/491                         | (47) 18.12.2024                         | (22) 16.11.2021                  |

|                                    |                                        |                                         |
|------------------------------------|----------------------------------------|-----------------------------------------|
| (54) ANTENNA ARRANGEMENT           | (21) EP15759483.9                      | (54) CONNECTION BOX FOR AT LEAST        |
| (73) AGC Inc.                      | (47) 18.12.2024                        | ONE DATA CABLE                          |
| AGC Vidros do Brasil Ltda.         | (87) EP2015070639                      | (73) METZ CONNECT TECH GmbH             |
| AGC Glass Europe                   | 17.03.2016                             | (72) Müller, Hartmut                    |
| AGC Flat Glass North America, Inc. | (22) 09.09.2015                        | Nopper, Tobias                          |
| (72) ADDACI, Rafik                 | (54) ANTENNA MODULE                    | (31) 102022133969                       |
| YOUSEFBEIKI, Mohsen                | (73) Hirschmann Car Communication GmbH | (32) 19.12.2022                         |
| (31) 20207878                      | (72) GERNETH, Christian                | (33) Germany                            |
| (32) 16.11.2020                    | SILVA, David                           | (51) H01R 13/11                         |
| (33) European Patent Office (EPO)  | (31) 102014013070                      | H01R 43/16                              |
| (51) H01Q 1/12                     | (32) 09.09.2014                        | (11) EP3437160                          |
| H01Q 1/38                          | (33) Germany                           | (21) EP16737831.4                       |
| H01Q 9/04                          | (51) H01Q 7/06                         | (47) 18.12.2024                         |
| H01Q 1/42                          | (11) EP3955389                         | (87) US2016013283                       |
| H01Q 1/00                          | (21) EP21187674.3                      | 21.07.2016                              |
| (11) EP4244933                     | (47) 18.12.2024                        | (22) 28.03.2016                         |
| (21) EP21815168.6                  | (22) 26.07.2021                        | (54) ELECTRICAL CONTACT HAVING          |
| (47) 18.12.2024                    | (54) ELORAN RECEIVER WITH TUNED        | TINES WITH EDGES OF DIFFERENT           |
| (87) EP2021081871                  | ANTENNA AND RELATED METHODS            | LENGTHS                                 |
| 19.05.2022                         | (73) Eagle Technology, LLC             | (73) Amphenol Corporation               |
| (22) 16.11.2021                    | (72) Parsche, Francis Eugene           | (72) LJUBJANKIC, Zlatan                 |
| (54) ANTENNA SYSTEM                | (31) 202016990151                      | (51) H01R 13/514                        |
| (73) AGC Inc.                      | (32) 11.08.2020                        | H01R 25/00                              |
| AGC Flat Glass North America, Inc. | (33) United States of America          | (11) EP4122054                          |
| AGC Glass Europe                   | (51) H01Q 15/16                        | (21) EP21714305.6                       |
| AGC Vidros do Brasil Ltda.         | H01Q 1/28                              | (47) 18.12.2024                         |
| (72) ADDACI, Rafik                 | H01Q 15/14                             | (87) DE2021100234                       |
| YOUSEFBEIKI, Mohsen                | (11) EP3772136                         | 23.09.2021                              |
| SALME, Günther                     | (21) EP20186379.2                      | (22) 08.03.2021                         |
| (31) 20207890                      | (47) 18.12.2024                        | (54) MODULAR HIGH-CURRENT               |
| (32) 16.11.2020                    | (22) 17.07.2020                        | CONNECTOR SYSTEM                        |
| (33) European Patent Office (EPO)  | (54) ARTICLES COMPRISING A MESH        | (73) HARTING Electric Stiftung & Co. KG |
| (51) H01Q 1/28                     | FORMED OF A CARBON NANOTUBE            | (72) ZIER, Sergej                       |
| H01Q 15/16                         | YARN                                   | BEISCHER, Thomas                        |
| (11) EP4160814                     | (73) Eagle Technology, LLC             | HOPPE, Nando                            |
| (21) EP22174300.8                  | (72) ROMMEL, Monica                    | KROPIEWNICKI, Norbert                   |
| (47) 18.12.2024                    | SORRELL, Rodney                        | KRÜGER, Benjamin                        |
| (22) 19.05.2022                    | NORTON, David                          | SPIILKER, Nicole                        |
| (54) DEPLOYABLE ANTENNA REFLECTOR  | PARKHURST, Maria R.                    | (31) 102020107396                       |
| (73) Eagle Technology, LLC         | (31) 201916524698                      | (32) 18.03.2020                         |
| (72) PETERSON, Ian D.              | (32) 29.07.2019                        | (33) Germany                            |
| BUCOSSA, Andrew                    | (33) United States of America          | (51) H01R 13/52                         |
| (31) 202117489951                  | (51) H01R 4/2437                       | H01R 12/77                              |
| (32) 30.09.2021                    | H01R 11/09                             | H01R 12/85                              |
| (33) United States of America      | H01R 9/24                              | H01R 103/00                             |
| (51) H01Q 1/28                     | (11) EP4106108                         | H01R 13/506                             |
| H01Q 15/16                         | (21) EP22176606.6                      | H01R 13/24                              |
| H01Q 19/19                         | (47) 18.12.2024                        | (11) EP3846291                          |
| H01P 5/107                         | (22) 01.06.2022                        | (21) EP20216773.0                       |
| (11) EP3767744                     | (54) CLAMP                             | (47) 18.12.2024                         |
| (21) EP20184681.3                  | (73) Electro Terminal GmbH & Co KG     | (22) 23.12.2020                         |
| (47) 18.12.2024                    | (72) EDER, Armin                       | (54) WATERTIGHT ELECTRICAL              |
| (22) 08.07.2020                    | (31) 202021103278 U                    | CONNECTOR FOR CONNECTING                |
| (54) SATELLITE SYSTEM HAVING       | (32) 18.06.2021                        | TO FLAT-WIRE CONDUCTORS OF A            |
| RADIO FREQUENCY ASSEMBLY           | (33) Germany                           | FLEXIBLE CIRCUIT                        |
| WITH SIGNAL COUPLING PIN AND       | (51) H01R 4/44                         | (73) Aptiv Technologies AG              |
| ASSOCIATED METHODS                 | H01R 9/05                              | (72) DEMONICA, Michael J.               |
| (73) Eagle Technology, LLC         | H02G 3/00                              | BRANTINGHAM, Duane Lee                  |
| (72) Rego, Stephen                 | H02G 3/12                              | (31) 202017124597                       |
| Lizana, Daniel C.                  | H01R 13/58                             | 202062956887 P                          |
| Sartin, Joey D                     | H01R 25/00                             | (32) 17.12.2020                         |
| Deju, Hector                       | H01R 24/64                             | 03.01.2020                              |
| (31) 201916516324                  | H01R 13/66                             | (33) United States of America           |
| (32) 19.07.2019                    | (11) EP4391235                         | United States of America                |
| (33) United States of America      | (21) EP23200854.0                      | (51) H01R 13/523                        |
| (51) H01Q 1/32                     | (47) 18.12.2024                        | H02G 15/14                              |
| H01Q 1/12                          | (22) 29.09.2023                        | H02G 1/10                               |
| (11) EP3192126                     |                                        | H01R 33/94                              |

|                                          |                                     |                                            |
|------------------------------------------|-------------------------------------|--------------------------------------------|
| H01R 13/00                               | Springston, Eric Douglas II         | 16.12.2021                                 |
| G02B 6/38                                | Walton, Scott Eric                  | (22) 11.06.2020                            |
| E21B 17/02                               | (31) 202016830581                   | (54) LIGHT SOURCE GENERATION               |
| H01R 13/6585                             | (32) 26.03.2020                     | APPARATUS, LIGHT SOURCE                    |
| (11) EP4022721                           | (33) United States of America       | GENERATING METHOD, AND                     |
| (21) EP20771454.4                        | (51) H01R 13/6471                   | RELATED DEFECT DETECTION                   |
| (47) 18.12.2024                          | H01R 13/6587                        | SYSTEM                                     |
| (87) EP2020073915                        | H05K 1/14                           | (73) National Tsing Hua University         |
| 04.03.2021                               | H01R 12/71                          | (72) LU, Chih-Hsuan                        |
| (22) 27.08.2020                          | H01R 13/6473                        | HUANG, Pei-Chi                             |
| (54) SUBSEA CONNECTOR                    | H05K 1/02                           | KUNG, Andrew Hing Cheong                   |
| (73) Siemens Energy Global GmbH & Co. KG | H01R 24/60                          | CHEN, Ming-Chang                           |
| (72) SPENCER, Scott                      | H01R 12/73                          | (51) H01S 5/042                            |
| BURROW, Christopher                      | H01R 13/502                         | (11) EP3683905                             |
| WALTON, Daniel                           | H01R 13/6599                        | (21) EP19305053.1                          |
| (31) 201912501                           | (11) EP3886268                      | (47) 18.12.2024                            |
| (32) 30.08.2019                          | (21) EP21163857.2                   | (22) 16.01.2019                            |
| (33) United Kingdom                      | (47) 18.12.2024                     | (54) APPARATUS FOR COMPENSATING            |
| (51) H01R 13/629                         | (22) 22.03.2021                     | PARASITIC IMPEDANCE FOR                    |
| H01R 13/627                              | (54) MODULAR ELECTRICAL CONNECTOR   | INTEGRATED CIRCUITS                        |
| H01R 13/523                              | WITH CONDUCTIVE COATING TO          | (73) STMicroelectronics (Grenoble 2) SAS   |
| H01R 13/6591                             | REDUCE CROSS-TALK                   | STMicroelectronics (Research &             |
| H01R 13/6582                             | (73) TE Connectivity Solutions GmbH | Development) Limited                       |
| H01R 13/6471                             | (72) Annis, Kyle Gary               | (72) LEE, Denise                           |
| (11) EP4060825                           | Miller, Keith Edwin                 | ANDRIOT-BALLET, Jérôme                     |
| (21) EP22162014.9                        | (31) 202016830687                   | DUTTON, Neale                              |
| (47) 18.12.2024                          | (32) 26.03.2020                     | MOENECLAHEY, Nicolas                       |
| (22) 15.03.2022                          | (33) United States of America       | (51) H01S 5/042                            |
| (54) SUBSEA CONNECTOR                    | (51) H01R 31/06                     | H01S 5/183                                 |
| (73) Siemens Energy Global GmbH & Co. KG | H01R 13/502                         | H01S 5/42                                  |
| (72) Turner, Kelly                       | H01R 13/52                          | (11) EP4084242                             |
| (31) 202103667                           | H01R 13/625                         | (21) EP21750147.7                          |
| 202103669                                | H01R 24/62                          | (47) 18.12.2024                            |
| 202103668                                | H01R 103/00                         | (87) JP2021002636                          |
| 202103666                                | G03B 17/55                          | 12.08.2021                                 |
| 202103664                                | H04N 23/50                          | (22) 26.01.2021                            |
| 202103663                                | H04N 23/51                          | (54) LIGHT-EMITTING DEVICE                 |
| (32) 17.03.2021                          | H04N 23/57                          | (73) Sony Semiconductor Solutions          |
| 17.03.2021                               | G08B 13/196                         | Corporation                                |
| 17.03.2021                               | (11) EP3952273                      | (72) ARAKIDA, Takahiro                     |
| 17.03.2021                               | (21) EP21198034.7                   | (31) 2020019567                            |
| 17.03.2021                               | (47) 18.12.2024                     | (32) 07.02.2020                            |
| 17.03.2021                               | (22) 13.07.2017                     | (33) Japan                                 |
| (33) United Kingdom                      | (54) CAMERA ASSEMBLY                | (51) H01S 5/10                             |
| United Kingdom                           | (73) Google LLC                     | H01S 5/042                                 |
| United Kingdom                           | (72) GOULDEN, Jason Evans           | H01S 5/12                                  |
| United Kingdom                           | WEBB, Nicholas                      | H01S 5/22                                  |
| United Kingdom                           | DONG, William Raeming               | H01S 5/50                                  |
| United Kingdom                           | (31) 201615209749                   | H01S 5/20                                  |
| (51) H01R 13/6471                        | 201615209746                        | H01S 5/022                                 |
| H01R 13/6587                             | 201615209744                        | (11) EP4283802                             |
| H01P 5/02                                | 201615209740                        | (21) EP23203171.6                          |
| H05K 1/02                                | 201615209735                        | (47) 18.12.2024                            |
| H05K 1/11                                | (32) 13.07.2016                     | (22) 18.02.2016                            |
| H05K 3/34                                | 13.07.2016                          | (54) LASER DIODE WITH IMPROVED             |
| H01R 12/58                               | 13.07.2016                          | ELECTRICAL CONDUCTION                      |
| H05K 3/32                                | 13.07.2016                          | PROPERTIES                                 |
| (11) EP3886270                           | 13.07.2016                          | (73) Ferdinand-Braun-Institut gGmbH,       |
| (21) EP21163861.4                        | (33) United States of America       | Leibniz-Institut für Höchstfrequenztechnik |
| (47) 18.12.2024                          | United States of America            | (72) Fricke, Jörg                          |
| (22) 22.03.2021                          | United States of America            | Decker, Jonathan                           |
| (54) MODULAR CONNECTOR WITH              | United States of America            | Erbert, Götz                               |
| PRINTED CIRCUIT BOARD WAFER TO           | United States of America            | Crump, Paul                                |
| REDUCE CROSS-TALK                        | (51) H01S 3/10                      | (31) 102015203113                          |
| (73) TE Connectivity Solutions GmbH      | (11) EP4165739                      | (32) 20.02.2015                            |
| (72) Tsang, Albert                       | (21) EP20940066.2                   | (33) Germany                               |
| Martin, Andrew M.                        | (47) 18.12.2024                     | (51) H01S 5/183                            |
| Miller, Keith Edwin                      | (87) US2020037128                   | H01S 5/0234                                |

|                                           |                                           |                                           |
|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| H01S 5/042                                | WONG, Ivan H.                             | (11) EP4057480                            |
| H01S 5/187                                | (31) 201514729925                         | (21) EP22161447.2                         |
| H01S 5/343                                | (32) 03.06.2015                           | (47) 18.12.2024                           |
| H01S 5/11                                 | (33) United States of America             | (22) 10.03.2022                           |
| (11) EP3872939                            | (51) H02J 3/38                            | (54) LAWNMOWERS                           |
| (21) EP19876358.3                         | (11) EP3961845                            | (73) Techtronic Cordless GP               |
| (47) 18.12.2024                           | (21) EP21191952.7                         | (72) FENG, Michael                        |
| (87) JP2019041568                         | (47) 18.12.2024                           | HOLLAND, Steve                            |
| 30.04.2020                                | (22) 18.08.2021                           | KONDRO, Grzegorz                          |
| (22) 23.10.2019                           | (54) SYSTEM AND METHOD FOR                | HOFFMAN, Ron                              |
| (54) LIGHT-EMITTING ELEMENT AND           | MANAGING OUTPUT FLICKER                   | HOGG, Ashlyn                              |
| LIGHT-EMITTING DEVICE                     | GENERATED BY A WIND FARM                  | MCCAMMON, Maxwell                         |
| (73) Hamamatsu Photonics K.K.             | (73) General Electric Renovables España,  | VARGAS, Fernando                          |
| (72) KANZAKI, Takeshi                     | S.L.                                      | LAMBERT, Matt                             |
| MIYACHI, Hiroki                           | (72) Hardwicke, Jr., Edward Wayne         | MIKA, Nikolas                             |
| WATANABE, Akiyoshi                        | Gandhi, Jignesh Govindlal                 | (31) 202217670696                         |
| KASHIRO, Ryoichi                          | (31) 202016998034                         | 202163288958 P                            |
| SUGIYAMA, Takahiro                        | (32) 20.08.2020                           | 202163159256 P                            |
| (31) 2018201039                           | (33) United States of America             | (32) 14.02.2022                           |
| (32) 25.10.2018                           | (51) H02J 4/00                            | 13.12.2021                                |
| (33) Japan                                | H02G 3/00                                 | 10.03.2021                                |
| (51) H01S 5/183                           | H02J 13/00                                | (33) United States of America             |
| H01S 5/20                                 | H02J 3/32                                 | United States of America                  |
| H01S 5/42                                 | H02J 7/00                                 | United States of America                  |
| (11) EP3497758                            | (11) EP3811487                            | (51) H02J 7/00                            |
| (21) EP17754935.9                         | (21) EP19740636.6                         | B60L 53/30                                |
| (47) 18.12.2024                           | (47) 18.12.2024                           | B60L 53/65                                |
| (87) US2017045965                         | (87) FR2019051326                         | G06F 21/44                                |
| 15.02.2018                                | 12.12.2019                                | (11) EP4270720                            |
| (22) 08.08.2017                           | (22) 04.06.2019                           | (21) EP22170888.6                         |
| (54) ETCHED PLANARIZED VCSEL              | (54) ELECTRICAL SYSTEM COMPRISING         | (47) 18.12.2024                           |
| (73) Finisar Corporation                  | SWITCHED CELLS AND METHOD FOR             | (22) 29.04.2022                           |
| (72) GRAHAM, Luke                         | CONTROLLING SUCH A SYSTEM                 | (54) AUTOMATIC, SECURE AND BULK           |
| MACINNES, Andy                            | (73) Commissariat à l'Energie Atomique et | ONBOARDING OF DEVICES                     |
| (31) 201662372126 P                       | aux Energies Alternatives                 | (73) Siemens Aktiengesellschaft           |
| (32) 08.08.2016                           | (72) DESPESSE, Ghislain                   | (72) BEHERA, Jitendra                     |
| (33) United States of America             | LOPEZ, Yan                                | (51) H02J 7/00                            |
| (51) H02J 1/06                            | FERNANDEZ, Eric                           | G06F 30/20                                |
| G06F 1/3234                               | CASSARINO, Leandro                        | G06F 111/06                               |
| H02J 7/00                                 | THOMAS, Remy                              | (11) EP4246763                            |
| (11) EP4027473                            | BACQUET, Sylvain                          | (21) EP23159095.1                         |
| (21) EP21150383.4                         | (31) 1800573                              | (47) 18.12.2024                           |
| (47) 18.12.2024                           | (32) 06.06.2018                           | (22) 28.02.2023                           |
| (22) 06.01.2021                           | (33) France                               | (54) METHOD AND DEVICE FOR                |
| (54) ADAPTIVE POWER CONTROL FOR           | (51) H02J 7/00                            | COMBINING CELL CORES,                     |
| INDIRECT POWER MODE                       | (11) EP4388631                            | ELECTRONIC APPARATUS AND                  |
| (73) Infineon Technologies AG             | (21) EP21791346.6                         | STORAGE MEDIUM                            |
| (72) WEE, Tue Fatt David                  | (47) 18.12.2024                           | (73) Guangzhou Xiaopeng Motors Technology |
| CHOONG, Kwan Siong                        | (87) EP2021078373                         | Co., Ltd.                                 |
| LIM, Siak Pin                             | 20.04.2023                                | (72) YU, Li                               |
| TAN, Kiat How                             | (22) 13.10.2021                           | (31) 202210264157                         |
| (51) H02J 1/10                            | (54) AN ARRANGEMENT COMPRISING            | (32) 17.03.2022                           |
| H02J 3/38                                 | ENERGY STORAGE UNITS AND A                | (33) China                                |
| H02J 4/00                                 | RELATED METHOD                            | (51) H02J 7/14                            |
| H02J 13/00                                | (73) Hitachi Energy Ltd                   | H02J 7/00                                 |
| (11) EP3304674                            | (72) HASLER, Jean-Philippe                | B60L 50/53                                |
| (21) EP16724795.6                         | ASOODAR, Mohsen                           | (11) EP3610553                            |
| (47) 18.12.2024                           | KARREBY, Per                              | (21) EP18725909.8                         |
| (87) US2016031748                         | MENG, Lexuan                              | (47) 18.12.2024                           |
| 08.12.2016                                | TENERZ, Mikael                            | (87) IB2018052523                         |
| (22) 11.05.2016                           | (51) H02J 7/00                            | 18.10.2018                                |
| (54) AIRCRAFT DC POWER DISTRIBUTION       | A01D 34/00                                | (22) 10.04.2018                           |
| SYSTEMS AND METHODS                       | H02J 7/34                                 | (54) DIRECT CURRENT TO ALTERNATING        |
| (73) Northrop Grumman Systems Corporation | A01D 34/63                                | CURRENT POWER SUPPLY                      |
| (72) CLEEK, Keith J.                      | A01D 34/64                                | BIDIRECTIONAL SYSTEM FOR                  |
| THENO, Tad W.                             | A01D 34/71                                | VEHICLES OR CONTAINERS WITH               |
| KNOWLES, Jeffrey A.                       | A01D 34/81                                | ELECTRICAL EQUIPMENT HAVING AN            |
| LEE, Chris K.                             | A01D 34/82                                | ELECTRICAL GRID CONNECTION                |

|                                               |                                            |                                       |
|-----------------------------------------------|--------------------------------------------|---------------------------------------|
| (73) ADDVOLT, S.A.                            | C08K 3/22                                  | (51) H02M 1/32                        |
| (72) AZEVEDO COSTA, Bruno Filipe              | C08L 101/12                                | H02M 7/483                            |
| SOUSA SOARES, José Ricardo                    | C08K 9/06                                  | H02M 1/00                             |
| FORTUNA ARAÚJO, José Pedro                    | C08K 9/08                                  | (11) EP3920393                        |
| MARINHO PIRES, Rodrigo Manuel                 | C08L 63/00                                 | (21) EP20275100.4                     |
| DE NETO SOUSA, Justino Miguel                 | C08L 79/08                                 | (47) 18.12.2024                       |
| (31) 2017110420                               | (11) EP3747940                             | (22) 04.06.2020                       |
| 2017110020                                    | (21) EP19747193.1                          | (54) IMPROVEMENTS IN OR RELATING TO   |
| (32) 21.11.2017                               | (47) 18.12.2024                            | CHAIN-LINK CONVERTERS                 |
| 10.04.2017                                    | (87) KR2019001527                          | (73) General Electric Technology GmbH |
| (33) Portugal                                 | 08.08.2019                                 | (72) Nolan, Andrew                    |
| Portugal                                      | (22) 07.02.2019                            | (51) H02M 1/42                        |
| (51) H02J 50/12                               | (54) CURABLE COMPOSITION                   | H02M 3/158                            |
| H02J 50/80                                    | (73) LG CHEM, LTD.                         | H02M 1/00                             |
| (11) EP4388636                                | (72) LEE, Jin Kyu                          | (11) EP4106167                        |
| (21) EP22764682.5                             | AHN, Sang Bum                              | (21) EP22178920.9                     |
| (47) 18.12.2024                               | (31) 20180013303                           | (47) 18.12.2024                       |
| (87) EP2022072292                             | (32) 02.02.2018                            | (22) 14.06.2022                       |
| 23.02.2023                                    | (33) Korea (Republic)                      | (54) CONTROL CIRCUIT AND AC-DC        |
| (22) 09.08.2022                               | (51) H02K 7/00                             | POWER SUPPLY APPLYING THE             |
| (54) A POWER TRANSFER APPARATUS               | H02K 7/116                                 | SAME                                  |
| AND METHOD THEREFOR                           | H02K 7/18                                  | (73) Silergy Semiconductor Technology |
| (73) Koninklijke Philips N.V.                 | (11) EP3469690                             | (Hangzhou) Ltd                        |
| (72) AGAFONOV, Aleksei                        | (21) EP17739750.2                          | (72) HUANG, Qiukai                    |
| STARING, Antonius Adriaan Maria               | (47) 18.12.2024                            | DAI, Jiandong                         |
| (31) 21191466                                 | (87) US2017036501                          | (31) 202110662333                     |
| (32) 16.08.2021                               | 14.12.2017                                 | (32) 15.06.2021                       |
| (33) European Patent Office (EPO)             | (22) 08.06.2017                            | (33) China                            |
| (51) H02J 50/60                               | (54) A VEHICLE COMPRISING A WHEEL          | (51) H02M 7/00                        |
| B60L 53/124                                   | DRIVEN GENERATOR FOR CHARGING              | H02M 7/487                            |
| (11) EP3734801                                | A BATTERY                                  | H02M 7/493                            |
| (21) EP19172545.6                             | (73) Carrier Corporation                   | (11) EP3902133                        |
| (47) 18.12.2024                               | (72) VAN WIJK, Rudolf Johannes             | (21) EP21163825.9                     |
| (22) 03.05.2019                               | (31) 2016936                               | (47) 18.12.2024                       |
| (54) A SENSOR ARRANGEMENT FOR                 | (32) 10.06.2016                            | (22) 19.03.2021                       |
| A FOREIGN OBJECT DETECTION                    | (33) Netherlands                           | (54) INVERTER, AND POWER UNIT AND     |
| DEVICE                                        | (51) H02K 7/108                            | POWER MODULE APPLIED THERETO          |
| (73) Delta Electronics (Thailand) Public Co., | H02K 7/10                                  | (73) Sungrow Power Supply Co., Ltd.   |
| Ltd.                                          | (11) EP3427371                             | (72) Qiyao, Zhu                       |
| (72) RICHTER, Ulrich                          | (21) EP17708394.6                          | Hao, Zheng                            |
| ENDERLIN, Jonas                               | (47) 18.12.2024                            | Jin, Zhang                            |
| (51) H02K 1/24                                | (87) US2017018436                          | (31) 202020585403 U                   |
| H02K 19/14                                    | 14.09.2017                                 | (32) 20.04.2020                       |
| H02K 29/03                                    | (22) 17.02.2017                            | (33) China                            |
| H02K 1/26                                     | (54) HVAC ACTUATOR WITH ONE-WAY            | (51) H02M 7/48                        |
| (11) EP3989401                                | CLUTCH MOTOR                               | H02M 1/08                             |
| (21) EP19933656.1                             | (73) Johnson Controls Technology Company   | (11) EP4243260                        |
| (47) 18.12.2024                               | (72) JENKS, Russell T.                     | (21) EP20960735.7                     |
| (87) CN2019128234                             | (31) 201615065719                          | (47) 18.12.2024                       |
| 24.12.2020                                    | (32) 09.03.2016                            | (87) IB2020000926                     |
| (22) 25.12.2019                               | (33) United States of America              | 12.05.2022                            |
| (54) ROTOR STRUCTURE OF DIRECT                | (51) H02K 9/06                             | (22) 06.11.2020                       |
| START-UP SYNCHRONOUS                          | H02K 5/20                                  | (54) RESONANCE-TYPE POWER             |
| RELUCTANCE MOTOR AND MOTOR                    | H02K 11/33                                 | CONVERSION DEVICE                     |
| (73) Gree Electric Appliances, Inc. of Zhuhai | H02K 21/22                                 | (73) NISSAN MOTOR CO., LTD.           |
| (72) HU, Yusheng                              | H02K 1/32                                  | Renault s.a.s                         |
| LI, Xia                                       | H02K 1/2791                                | (72) NUMAKURA, Keiichiro              |
| CHEN, Bin                                     | (11) EP3890168                             | OKUBO, Akinori                        |
| YU, Qinrong                                   | (21) EP21166570.8                          | SHIMOMURA, Taku                       |
| SHI, Jinfei                                   | (47) 18.12.2024                            | (51) H02N 2/10                        |
| XIAO, Yong                                    | (22) 01.04.2021                            | G03B 15/00                            |
| (31) 201910533174                             | (54) MOTOR WITH OUTER ROTOR                | G03B 17/56                            |
| (32) 19.06.2019                               | (73) Shandong Dingfeng Aviation Technology | G01C 21/18                            |
| (33) China                                    | Co., Ltd.                                  | H04N 23/51                            |
| (51) H02K 3/30                                | (72) TIAN, Yu                              | H04N 23/54                            |
| H02K 3/34                                     | (31) 202020467898 U                        | H04N 23/57                            |
| H02K 15/10                                    | (32) 02.04.2020                            | (11) EP3410597                        |
| C08K 9/04                                     | (33) China                                 | (21) EP18174711.4                     |

|                                      |                                          |                                   |
|--------------------------------------|------------------------------------------|-----------------------------------|
| (47) 18.12.2024                      | (21) EP20754618.5                        | (33) China                        |
| (22) 29.05.2018                      | (47) 18.12.2024                          | China                             |
| (54) IMAGE PICKUP APPARATUS          | (87) EP2020070611                        | China                             |
| COMPRISING DRIVEN BODY DRIVEN        | 25.02.2021                               | China                             |
| BY ACTUATOR, AND MOVING BODY         | (22) 22.07.2020                          | (51) H03B 5/36                    |
| (73) CANON KABUSHIKI KAISHA          | (54) PRODUCING A MOTOR VOLTAGE FOR       | (11) EP3961918                    |
| (72) OBANA, Shinji                   | A SWITCH DRIVE                           | (21) EP21173900.8                 |
| NEMOTO, Ayumu                        | (73) Siemens Energy Global GmbH & Co. KG | (47) 18.12.2024                   |
| (31) 2017110103                      | (72) HILKER, Thomas                      | (22) 14.05.2021                   |
| (32) 02.06.2017                      | BRUMMUND, David                          | (54) CRYSTAL OSCILLATOR AND PHASE |
| (33) Japan                           | (31) 102019212519                        | NOISE REDUCTION METHOD            |
| (51) H02P 9/30                       | (32) 21.08.2019                          | THEREOF                           |
| H02P 9/26                            | (33) Germany                             | (73) MediaTek Inc.                |
| H02P 9/08                            | (51) H02P 27/14                          | (72) CHEN, Chien-Wei              |
| (11) EP3866328                       | H02P 29/50                               | CHANG, Keng-Meng                  |
| (21) EP21156890.2                    | H02M 1/12                                | LIU, Sen-You                      |
| (47) 18.12.2024                      | H02M 1/42                                | WANG, Yao-Chi                     |
| (22) 12.02.2021                      | (11) EP4057500                           | (31) 202117306960                 |
| (54) DIRECT CURRENT POWER SUPPLY     | (21) EP21162188.3                        | 202063070347 P                    |
| EXCITER MANAGEMENT                   | (47) 18.12.2024                          | (32) 04.05.2021                   |
| (73) Hamilton Sundstrand Corporation | (22) 12.03.2021                          | 26.08.2020                        |
| (72) DUESTERHOEFT, Kurt W.           | (54) INVERTER AND METHOD FOR THE         | (33) United States of America     |
| (31) 202016788952                    | OPERATION OF SAME                        | United States of America          |
| (32) 12.02.2020                      | (73) Siemens Energy Global GmbH & Co. KG | (51) H03B 28/00                   |
| (33) United States of America        | (72) Schön, Andre                        | (11) EP4054074                    |
| (51) H02P 21/28                      | (51) H02S 30/20                          | (21) EP21160551.4                 |
| H02P 6/32                            | H01L 31/048                              | (47) 18.12.2024                   |
| H02P 21/30                           | H02S 40/34                               | (22) 03.03.2021                   |
| H02P 21/14                           | (11) EP4346093                           | (54) TERAHERTZ FERROELECTRIC      |
| (11) EP4283862                       | (21) EP23187476.9                        | RESONATOR                         |
| (21) EP22175167.0                    | (47) 18.12.2024                          | (73) Terra Quantum AG             |
| (47) 18.12.2024                      | (22) 25.07.2023                          | (72) Vinokour, Valerii            |
| (22) 24.05.2022                      | (54) PHOTOVOLTAIC MODULE AND             | Razumnaya, Anna                   |
| (54) STATOR FLUX ASSISTANCE AND      | METHOD FOR PREPARING THE SAME            | Lukyanchuk, Igor                  |
| OVEREXCITATION FOR EXTERNALLY        | (73) Jinko Solar (Haining) Co., Ltd.     | (51) H03F 1/02                    |
| EXCITED SYNCHRONOUS MACHINES         | Zhejiang Jinko Solar Co., Ltd.           | H01L 23/66                        |
| (73) ABB Schweiz AG                  | (72) GONG, Yuanqi                        | H01L 23/00                        |
| (72) Kostianen, Mikko                | DAI, Zhigang                             | H03F 3/21                         |
| Kuunsäde, Sina                       | LI, Ning                                 | H01L 23/057                       |
| Heikkilä, Joni                       | XIAO, Pengjun                            | H01L 25/07                        |
| (51) H02P 27/08                      | LI, Bo                                   | H01L 23/552                       |
| F04B 17/03                           | YIN, Jiaxiang                            | (11) EP3723282                    |
| B21D 24/14                           | TAO, Chunhua                             | (21) EP19305473.1                 |
| H02P 25/00                           | YANG, Sen                                | (47) 18.12.2024                   |
| H02P 23/16                           | (31) 202211214419                        | (22) 12.04.2019                   |
| F04B 49/06                           | (32) 30.09.2022                          | (54) POWER AMPLIFIER PACKAGES AND |
| (11) EP4000174                       | (33) China                               | SYSTEMS INCORPORATING DESIGN-     |
| (21) EP20743110.7                    | (51) H02S 40/34                          | FLEXIBLE PACKAGE PLATFORMS        |
| (47) 18.12.2024                      | (11) EP4346096                           | (73) NXP USA, Inc.                |
| (87) EP2020070146                    | (21) EP22217028.4                        | (72) DOUGHERTY, David             |
| 21.01.2021                           | (47) 18.12.2024                          | MAARSHALL, Scott                  |
| (22) 16.07.2020                      | (22) 28.12.2022                          | NANAN, Jean-Christophe            |
| (54) DEVICE AND METHOD FOR OPEN-     | (54) PHOTOVOLTAIC MODULE AND             | HUE, Xavier                       |
| LOOP OR CLOSED-LOOP CONTROL          | METHOD FOR PRODUCING THE                 | VISWANATHAN, Lakshminarayan       |
| OF A MOVEMENT OF A DIE CUSHION       | SAME                                     | (51) H03F 1/02                    |
| OF A DIE CUSHION PRESS               | (73) JINKO SOLAR CO., LTD                | H01L 23/66                        |
| (73) MOOG GmbH                       | Zhejiang Jinko Solar Co., Ltd.           | H01P 5/12                         |
| (72) HELBIG, Achim                   | (72) HU, Yidong                          | H03F 1/56                         |
| HÄNDLE, Werner                       | YAO, Yichao                              | H03F 3/195                        |
| (31) 102019119392                    | GUO, Zhiqiu                              | H03F 3/24                         |
| (32) 17.07.2019                      | (31) 202211255736                        | (11) EP3577757                    |
| (33) Germany                         | 202211255687                             | (21) EP17732555.2                 |
| (51) H02P 27/08                      | 202222714739 U                           | (47) 18.12.2024                   |
| H01H 3/26                            | 202222621633 U                           | (87) IB2017000727                 |
| H02M 3/156                           | (32) 13.10.2022                          | 09.08.2018                        |
| H02M 1/00                            | 13.10.2022                               | (22) 02.02.2017                   |
| H01H 3/30                            | 13.10.2022                               |                                   |
| (11) EP3991291                       | 30.09.2022                               |                                   |

|                                                                                                                                                       |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) 90-DEGREE LUMPED AND DISTRIBUTED DOHERTY IMPEDANCE INVERTER                                                                                      | H03K 17/082<br>H03K 17/284<br>H02M 1/08                                                                                                                                                                                                                                   | RAHAMIM, Guy<br>(31) 202217653730<br>202163262264 P                                                                                                                                                                                                                                                                      |
| (73) MACOM Technology Solutions Holdings, Inc.                                                                                                        | H03K 17/14<br>H02M 1/32                                                                                                                                                                                                                                                   | (32) 07.03.2022<br>08.10.2021                                                                                                                                                                                                                                                                                            |
| (72) BOUISSE, Gerard<br>ALEXANDER, Andrew<br>PATTERSON, Andrew                                                                                        | H02M 7/5387<br>(11) EP4117182<br>(21) EP22183327.0                                                                                                                                                                                                                        | (33) United States of America<br>United States of America                                                                                                                                                                                                                                                                |
| (51) H03F 1/32<br>H03F 3/189<br>H03F 3/24<br>H03F 3/68<br>H04B 1/04                                                                                   | (47) 18.12.2024<br>(22) 06.07.2022<br>(54) GATE DRIVE CIRCUIT AND POWER CONVERTER                                                                                                                                                                                         | (51) H03K 17/22<br>G06F 1/24<br>G06F 1/28<br>H03K 17/14<br>G05F 3/30                                                                                                                                                                                                                                                     |
| (11) EP3480947<br>(21) EP18202360.6<br>(47) 18.12.2024<br>(22) 24.10.2018                                                                             | (73) Toshiba Infrastructure Systems & Solutions Corporation<br>(72) Kuzumaki, Atsuhiko<br>Matsushita, Akihisa<br>Mochikawa, Hiroshi<br>Takimoto, Kazuyasu                                                                                                                 | (11) EP4027521<br>(21) EP22150320.4<br>(47) 18.12.2024<br>(22) 05.01.2022                                                                                                                                                                                                                                                |
| (54) PHASED ARRAY AMPLIFIER LINEARIZATION                                                                                                             | (31) 2021113061<br>(32) 07.07.2021<br>(33) Japan                                                                                                                                                                                                                          | (54) SEMICONDUCTOR DEVICE<br>(73) Renesas Electronics Corporation                                                                                                                                                                                                                                                        |
| (73) Analog Devices International Unlimited Company                                                                                                   | (51) H03K 17/16<br>H03K 17/10                                                                                                                                                                                                                                             | (72) KASHIMA, Issei<br>TSUDA, Atsushi<br>(31) 2021000625<br>(32) 06.01.2021<br>(33) Japan                                                                                                                                                                                                                                |
| (72) PRATT, Patrick<br>KHALIL, Ahmed<br>(31) 201715801232<br>(32) 01.11.2017<br>(33) United States of America                                         | (11) EP3895313<br>(21) EP19829159.3<br>(47) 18.12.2024<br>(87) EP2019086185<br>13.08.2020<br>(22) 19.12.2019<br>(54) SWITCHING DEVICE FOR SEPARATING A CURRENT PATH                                                                                                       | (51) H03K 17/687<br>(11) EP4096096<br>(21) EP22173424.7<br>(47) 18.12.2024<br>(22) 16.05.2022<br>(54) BULK SWITCHING CIRCUITRY<br>(73) Nordic Semiconductor ASA<br>(72) Väänänen, Jarmo<br>Mioni, Daniel Pasti<br>(31) 20215614<br>(32) 25.05.2021<br>(33) Finland                                                       |
| (54) SYSTEM AND METHOD FOR OPTIMIZING INTERMODULATION PERFORMANCE OF RECEIVERS                                                                        | (31) 19155486<br>(32) 05.02.2019<br>(33) European Patent Office (EPO)                                                                                                                                                                                                     | (51) H03K 17/955<br>B25J 13/08                                                                                                                                                                                                                                                                                           |
| (73) Eagle Technology, LLC<br>(72) Prosser, Nathan T.<br>Hartless, Mac Lamar<br>Ericson, Daniel W<br>Royster, Catherine D.<br>Layne, Dennis R.        | (51) H03K 17/18<br>G06F 1/28<br>H03K 19/003<br>G06F 11/16<br>G06F 1/3287<br>(11) EP3972131<br>(21) EP21175460.1<br>(47) 18.12.2024<br>(22) 21.05.2021<br>(54) SEMICONDUCTOR DEVICE                                                                                        | (11) EP4088381<br>(21) EP20842236.0<br>(47) 18.12.2024<br>(87) EP2020087949<br>15.07.2021<br>(22) 29.12.2020<br>(54) CAPACITIVE DETECTION DEVICE COMPRISING A MODULE FOR BIASING BY INDUCTION                                                                                                                            |
| (31) 202016737582<br>(32) 08.01.2020<br>(33) United States of America                                                                                 | (21) EP21175460.1<br>(47) 18.12.2024<br>(22) 21.05.2021<br>(54) SEMICONDUCTOR DEVICE<br>(73) Renesas Electronics Corporation<br>(72) FUKUOKA, Kazuki<br>MORI, Ryo<br>SHIMADA, Kenichi<br>(31) 2020090225<br>(32) 25.05.2020<br>(33) Japan                                 | (73) FOGALE SENSORS<br>(72) DAVID-GRIGNOT, Stéphane<br>ROZIERE, Didier<br>NEEL, Christian<br>(31) 2000113<br>(32) 08.01.2020<br>(33) France                                                                                                                                                                              |
| (51) H03K 17/06<br>(11) EP4094359<br>(21) EP21704398.3<br>(47) 18.12.2024<br>(87) EP2021051023<br>29.07.2021<br>(22) 19.01.2021                       | (51) H03K 17/18<br>H03K 17/082<br>G01R 31/327<br>(11) EP4164129<br>(21) EP22195506.5<br>(47) 18.12.2024<br>(22) 14.09.2022<br>(54) GATE DRIVER<br>(73) Semiconductor Components Industries, LLC<br>(72) ANGHEL, Vlad<br>SONG, Kinam<br>KUBAN, Michal<br>CONSTANTINO, John | (51) H03K 19/00<br>H04L 25/02<br>H03K 19/003<br>(11) EP3520219<br>(21) EP17856979.4<br>(47) 18.12.2024<br>(87) US2017046140<br>05.04.2018<br>(22) 09.08.2017<br>(54) HIGH SPEED DRIVER WITH ADAPTIVE TERMINATION IMPEDANCE<br>(73) Intel Corporation<br>(72) KHOO, Lay Hock<br>SRIVASTAVA, Amit Kumar<br>TEAR, Chin Boon |
| (54) SUPERJUNCTION TRANSISTOR DEVICE                                                                                                                  |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                          |
| (73) Infineon Technologies Austria AG<br>(72) KUTSCHAK, Matteo-Alessandro<br>FISCHER, Björn<br>WEBER, Hans<br>HIRLER, Franz<br>RIEGLER, Andreas       |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                          |
| (31) PCT/EP2020/051245<br>20194876<br>(32) 20.01.2020<br>07.09.2020<br>(33) World Intellectual Property Office (WIPO)<br>European Patent Office (EPO) |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                          |
| (51) H03K 17/16                                                                                                                                       |                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                          |



|                                    |                                         |                                                |
|------------------------------------|-----------------------------------------|------------------------------------------------|
| MOHD YUSOF, Siti Suhaila           | Hartless, Mac Lamar                     | (31) PCT/CN2018/100478                         |
| (31) 201615279273                  | Layne, Dennis                           | (32) 14.08.2018                                |
| (32) 28.09.2016                    | Daniel W., Ericson                      | (33) World Intellectual Property Office (WIPO) |
| (33) United States of America      | (31) 201916510650                       | (51) H04B 7/0417                               |
| (51) H03K 19/0175                  | (32) 12.07.2019                         | H04B 7/0456                                    |
| H03K 19/0185                       | (33) United States of America           | H04B 7/0452                                    |
| H04B 3/04                          | (51) H04B 1/403                         | H04B 7/06                                      |
| H03K 19/00                         | H04B 1/00                               | H04B 7/10                                      |
| (11) EP3841671                     | (11) EP3127245                          | H04L 1/00                                      |
| (21) EP19766132.5                  | (21) EP15773357.7                       | H04W 28/06                                     |
| (47) 18.12.2024                    | (47) 18.12.2024                         | (11) EP3954056                                 |
| (87) US2019047725                  | (87) KR2015003245                       | (21) EP20787925.5                              |
| 27.02.2020                         | 08.10.2015                              | (47) 18.12.2024                                |
| (22) 22.08.2019                    | (22) 01.04.2015                         | (87) FI2020050220                              |
| (54) BIDIRECTIONAL INTERFACE       | (54) ELECTRONIC DEVICE AND METHOD       | 15.10.2020                                     |
| APPARATUS AND METHOD FOR           | FOR PROVIDING COMMUNICATION             | (22) 03.04.2020                                |
| OPERATING THE SAME                 | SERVICE                                 | (54) IMPROVING COMMUNICATION                   |
| (73) Xilinx, Inc.                  | (73) Samsung Electronics Co., Ltd.      | EFFICIENCY                                     |
| (72) TURKER MELEK, Didem Z.        | (72) JANG, Joon-Won                     | (73) Nokia Technologies Oy                     |
| MA, Shaojun                        | OH, Ki-Young                            | (72) TOSATO, Filippo                           |
| UPADHYAYA, Parag                   | LIM, Yeong-Seob                         | MASO, Marco                                    |
| (31) 201816110937                  | CHO, Ryan                               | NHAN, Nhat-Quang                               |
| (32) 23.08.2018                    | (31) 20140038621                        | (31) 201962830870 P                            |
| (33) United States of America      | (32) 01.04.2014                         | (32) 08.04.2019                                |
| (51) H03M 13/11                    | (33) Korea (Republic)                   | (33) United States of America                  |
| (11) EP3566316                     | (51) H04B 7/024                         | (51) H04B 7/06                                 |
| (21) EP17890117.9                  | H04B 7/06                               | (11) EP3593463                                 |
| (47) 18.12.2024                    | H04B 7/08                               | (21) EP18714895.2                              |
| (87) CN2017070377                  | H04L 5/00                               | (47) 18.12.2024                                |
| 12.07.2018                         | (11) EP3726737                          | (87) US2018021709                              |
| (22) 06.01.2017                    | (21) EP20178863.5                       | 13.09.2018                                     |
| (54) METHOD AND APPARATUS FOR      | (47) 18.12.2024                         | (22) 09.03.2018                                |
| VECTOR BASED LDPC BASE MATRIX      | (22) 02.03.2017                         | (54) ENHANCED FRAGMENTED SECTOR                |
| USAGE AND GENERATION               | (54) METHODS AND APPARATUS FOR          | LEVEL SWEEP PROCEDURE IN MMW                   |
| (73) Nokia Technologies Oy         | BEAM CONTROL IN BEAMFORMED              | WLAN SYSTEMS                                   |
| (72) JIANG, Wei                    | SYSTEMS                                 | (73) InterDigital Patent Holdings, Inc.        |
| ZHANG, Yi                          | (73) InterDigital Patent Holdings, Inc. | (72) LOU, Hanqing                              |
| ZENG, Xiangnian                    | (72) PRAGADA, Ravikumar V.              | OTERI, Oghenekome                              |
| JAYASINGHE, Keeth Saliya           | DEENOO, Yugeswar                        | WANG, Xiaofei                                  |
| DU, Dongyang                       | BELURI, Mihaela C.                      | YANG, Rui                                      |
| SUN, Jingyuan                      | LEE, Moon-Il                            | SUN, Li-Hsiang                                 |
| (51) H04B 1/10                     | STERN-BERKOWITZ, Janet A                | (31) 201762469859 P                            |
| (11) EP3692638                     | DENG, Tao                               | (32) 10.03.2017                                |
| (21) EP18800254.7                  | (31) 201662302962 P                     | (33) United States of America                  |
| (47) 18.12.2024                    | (32) 03.03.2016                         | (51) H04B 7/06                                 |
| (87) GB2018052822                  | (33) United States of America           | H04B 7/08                                      |
| 11.04.2019                         | (51) H04B 7/0413                        | H04L 5/00                                      |
| (22) 03.10.2018                    | H04B 7/06                               | H04W 16/28                                     |
| (54) SIGNAL PROCESSING SYSTEMS AND | H04B 1/10                               | H04W 76/19                                     |
| METHODS                            | H04L 5/00                               | (11) EP4140057                                 |
| (73) Surewave Technology Limited   | (11) EP3837772                          | (21) EP21811750.5                              |
| (72) SHAW, Philip                  | (21) EP19850249.4                       | (47) 18.12.2024                                |
| (31) 201716120                     | (47) 18.12.2024                         | (87) FI2021050173                              |
| (32) 03.10.2017                    | (87) CN2019100318                       | 02.12.2021                                     |
| (33) United Kingdom                | 20.02.2020                              | (22) 10.03.2021                                |
| (51) H04B 1/10                     | (22) 13.08.2019                         | (54) M-TRP BEAM FAILURE INDICATION             |
| H04B 1/12                          | (54) INTERFERENCE LAYER                 | (73) Nokia Technologies Oy                     |
| H03G 3/20                          | CATEGORIZATION AND NON                  | (72) TURPINEN, Samuli, Heikki                  |
| (11) EP3764553                     | ZERO POWER INTERFERENCE                 | KOSKELA, Timo                                  |
| (21) EP20184429.7                  | MEASUREMENT RESOURCE FOR                | (31) 202063030523 P                            |
| (47) 18.12.2024                    | NON LINEAR PRECODING                    | (32) 27.05.2020                                |
| (22) 07.07.2020                    | (73) QUALCOMM INCORPORATED              | (33) United States of America                  |
| (54) SYSTEM AND METHOD FOR         | (72) XU, Hao                            | (51) H04B 7/06                                 |
| MITIGATING BROADBAND               | ZHANG, Yu                               | H04L 5/00                                      |
| INTERFERENCE                       | CHEN, Wanshi                            | H04W 48/02                                     |
| (73) Eagle Technology, LLC         | WU, Liangming                           | H04W 74/08                                     |
| (72) Royster, Catherine D.         | HAO, Chenxi                             | H04W 74/02                                     |
| Prosser, Nathan T.                 | GAAL, Peter                             | H04W 36/00                                     |

|                                                                                  |                                                                                  |                                                                      |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------|
| H04W 74/0833                                                                     | 11.09.2017                                                                       | H04W 84/06                                                           |
| (11) EP4236460                                                                   | (33) United States of America                                                    | H04W 36/00                                                           |
| (21) EP23177619.6                                                                | World Intellectual Property Office (WIPO)                                        | (11) EP3763056                                                       |
| (47) 18.12.2024                                                                  | (51) H04B 7/14                                                                   | (21) EP19708856.0                                                    |
| (22) 05.10.2018                                                                  | H04L 5/00                                                                        | (47) 18.12.2024                                                      |
| (54) RANDOM ACCESS CHANNEL                                                       | (11) EP3439197                                                                   | (87) EP2019055863                                                    |
| RESOURCE SELECTION IN MULTI-BEAM ENVIRONMENT                                     | (21) EP18191713.9                                                                | 12.09.2019                                                           |
| (73) Sharp Kabushiki Kaisha                                                      | (47) 18.12.2024                                                                  | (22) 08.03.2019                                                      |
| (72) CHEN, Hungchen                                                              | (22) 18.08.2010                                                                  | (54) PREDICTIVE MEASUREMENT FOR NON-TERRESTRIAL COMMUNICATION        |
| CHENG, Yuhsin                                                                    | (54) METHOD OF RELAY NODE USING REFERENCE SIGNAL AND RELAY NODE USING THE METHOD | (73) ICom GmbH & Co. KG                                              |
| SHIH, Meiju                                                                      | (73) LG Electronics Inc.                                                         | (72) HANS, Martin                                                    |
| CHOU, Chieming                                                                   | (72) NOH, Yu Jin                                                                 | SCHMIDT, Andreas                                                     |
| (31) 201762568900 P                                                              | SEO, Han Byul                                                                    | BIENAS, Maik                                                         |
| (32) 06.10.2017                                                                  | LEE, Dae Won                                                                     | (31) 18160962                                                        |
| (33) United States of America                                                    | KIM, Byoung Hoon                                                                 | (32) 09.03.2018                                                      |
| (51) H04B 7/06                                                                   | KIM, Hak Seong                                                                   | (33) European Patent Office (EPO)                                    |
| H04W 88/06                                                                       | (31) 20100076740                                                                 | (51) H04B 10/114                                                     |
| (11) EP3998713                                                                   | 357513 P                                                                         | H04B 10/116                                                          |
| (21) EP20837857.0                                                                | 334582 P                                                                         | (11) EP3942711                                                       |
| (47) 18.12.2024                                                                  | 325353 P                                                                         | (21) EP20765327.0                                                    |
| (87) CN2020099717                                                                | 322908 P                                                                         | (47) 18.12.2024                                                      |
| 14.01.2021                                                                       | 322816 P                                                                         | (87) GB2020050738                                                    |
| (22) 01.07.2020                                                                  | 307409 P                                                                         | 24.09.2020                                                           |
| (54) TRANSMITTING ANTENNA SWITCHING METHOD AND TERMINAL DEVICE                   | 256272 P                                                                         | (22) 19.03.2020                                                      |
| (73) Vivo Mobile Communication Co., Ltd.                                         | 254744 P                                                                         | (54) OPTICAL WIRELESS COMMUNICATION SYSTEM AND METHOD                |
| (72) ZHANG, Sha                                                                  | 235322 P                                                                         | (73) PureLiFi Limited                                                |
| (31) 201910609648                                                                | (32) 10.08.2010                                                                  | (72) WALKER, Duncan John William                                     |
| (32) 08.07.2019                                                                  | 22.06.2010                                                                       | CSAJAGHY, Istvan Phillipe Bernard                                    |
| (33) China                                                                       | 14.05.2010                                                                       | TATE, Christopher Nigel                                              |
| (51) H04B 7/08                                                                   | 18.04.2010                                                                       | CARRARO, Luca                                                        |
| H04L 1/00                                                                        | 11.04.2010                                                                       | (31) 201903867                                                       |
| H04L 27/26                                                                       | 09.04.2010                                                                       | (32) 21.03.2019                                                      |
| H04W 52/02                                                                       | 23.02.2010                                                                       | (33) United Kingdom                                                  |
| H04W 72/0453                                                                     | 29.10.2009                                                                       | (51) H04B 10/116                                                     |
| H04L 5/00                                                                        | 25.10.2009                                                                       | H04B 10/50                                                           |
| (11) EP4080959                                                                   | 19.08.2009                                                                       | (11) EP4302434                                                       |
| (21) EP19958301.4                                                                | (33) Korea (Republic)                                                            | (21) EP22711502.9                                                    |
| (47) 18.12.2024                                                                  | United States of America                                                         | (47) 18.12.2024                                                      |
| (87) CN2019130534                                                                | United States of America                                                         | (87) EP2022054232                                                    |
| 08.07.2021                                                                       | United States of America                                                         | 09.09.2022                                                           |
| (22) 31.12.2019                                                                  | United States of America                                                         | (22) 21.02.2022                                                      |
| (54) SWITCHING METHOD, TERMINAL DEVICE, NETWORK DEVICE, AND COMMUNICATION SYSTEM | United States of America                                                         | (54) ACCELERATED KEYING FOR AN OPTICAL WIRELESS COMMUNICATION SYSTEM |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                        | United States of America                                                         | (73) Signify Holding B.V.                                            |
| (72) SHI, Cong                                                                   | (51) H04B 7/155                                                                  | (72) LINNARTZ, Johan, Paul, Marie, Gerard                            |
| XU, Weijie                                                                       | H04B 1/00                                                                        | VAN VOORTHUISEN, Paul, Henricus, Johannes, Maria                     |
| (51) H04B 7/08                                                                   | (11) EP3968541                                                                   | (31) 21160601                                                        |
| H04L 25/02                                                                       | (21) EP21204821.9                                                                | (32) 04.03.2021                                                      |
| H04B 17/345                                                                      | (47) 18.12.2024                                                                  | (33) European Patent Office (EPO)                                    |
| H04B 7/06                                                                        | (22) 31.12.2019                                                                  | (51) H04B 17/00                                                      |
| (11) EP3454477                                                                   | (54) ACTIVE MULTIPLEXER REPEATER ACCESSORY                                       | H04B 17/15                                                           |
| (21) EP18193816.8                                                                | (73) Wilson Electronics, LLC                                                     | H04B 17/29                                                           |
| (47) 18.12.2024                                                                  | (72) Ashworth, Christopher Ken                                                   | (11) EP4280480                                                       |
| (22) 11.09.2018                                                                  | Anderson, Dale Robert                                                            | (21) EP22174040.0                                                    |
| (54) INTERFERENCE MEASUREMENTS IN NEW RADIO SYSTEMS                              | Mouser, Michael James                                                            | (47) 18.12.2024                                                      |
| (73) Apple Inc.                                                                  | (31) 201916729007                                                                | (22) 18.05.2022                                                      |
| (72) Zhang, Yushu                                                                | 201862787176 P                                                                   | (54) APPARATUS, SYSTEM AND METHOD FOR TESTING A COMMUNICATION DEVICE |
| Davydov, Alexei                                                                  | (32) 27.12.2019                                                                  | (73) FenztraQ GmbH                                                   |
| Wang, Guotong                                                                    | 31.12.2018                                                                       | (72) Grützun-Davey, Mark                                             |
| (31) 201762583883 P                                                              | (33) United States of America                                                    | (51) H04B 17/29                                                      |
| PCT/CN2017/101239                                                                | United States of America                                                         | H04B 17/23                                                           |
| (32) 09.11.2017                                                                  | (51) H04B 7/185                                                                  |                                                                      |
|                                                                                  | H04W 36/30                                                                       |                                                                      |

|                                               |                                       |                                          |
|-----------------------------------------------|---------------------------------------|------------------------------------------|
| H04B 17/309                                   | (54) USER-SPECIFIC SCRAMBLING FOR     | United States of America                 |
| (11) EP3917041                                | POLAR CODES                           | (51) H04L 1/00                           |
| (21) EP19911465.3                             | (73) QUALCOMM Incorporated            | H04L 5/00                                |
| (47) 18.12.2024                               | (72) SARKIS, Gabi                     | H04W 52/34                               |
| (87) JP2019002040                             | XU, Changlong                         | (11) EP3896878                           |
| 30.07.2020                                    | JIANG, Jing                           | (21) EP21177107.6                        |
| (22) 23.01.2019                               | XU, Hao                               | (47) 18.12.2024                          |
| (54) TERMINAL APPARATUS AND METHOD            | CHEN, Kai                             | (22) 06.04.2016                          |
| (73) Sony Group Corporation                   | (51) H04L 1/00                        | (54) METHODS AND APPARATUSES FOR         |
| (72) GOTO, Jungo                              | H04B 1/00                             | RESOURCE CONFIGURATION FOR AN            |
| KUBO, Yasuo                                   | (11) EP3739781                        | UPLINK CONTROL CHANNEL                   |
| (51) H04H 20/63                               | (21) EP20156758.3                     | (73) Samsung Electronics Co., Ltd.       |
| H04H 40/90                                    | (47) 18.12.2024                       | (72) Papasakellariou, Aris               |
| (11) EP3821549                                | (22) 11.02.2020                       | (31) 201615089314                        |
| (21) EP18743711.6                             | (54) CLOSED-LOOP TRANSMISSION RATE    | 201562191309 P                           |
| (47) 18.12.2024                               | CONTROL                               | 201562172946 P                           |
| (87) EP2018068826                             | (73) L3Harris Technologies, Inc.      | 201562143603 P                           |
| 16.01.2020                                    | (72) Zarubica, Radivoje               | (32) 01.04.2016                          |
| (22) 11.07.2018                               | Hall, Eric K.                         | 10.07.2015                               |
| (54) SATELLITE DISH LNB, SATELLITE            | Yaskoff, Nicholas T.                  | 09.06.2015                               |
| BROADCAST SIGNAL RECEIVER AND                 | Giallorenzi, Thomas R.                | 06.04.2015                               |
| METHODS OF OPERATION                          | Kingston, Samuel C.                   | (33) United States of America            |
| (73) Vestel Elektronik Sanayi ve Ticaret A.S. | (31) 201916412116                     | United States of America                 |
| (72) YILMAZLAR, İsmail                        | (32) 14.05.2019                       | United States of America                 |
| (51) H04J 14/02                               | (33) United States of America         | United States of America                 |
| H04B 10/077                                   | (51) H04L 1/00                        | (51) H04L 1/00                           |
| H04B 10/079                                   | H04L 1/18                             | H04W 40/00                               |
| (11) EP3579459                                | (11) EP3881460                        | (11) EP3523903                           |
| (21) EP18305689.4                             | (21) EP19836209.7                     | (21) EP17785124.3                        |
| (47) 18.12.2024                               | (47) 18.12.2024                       | (47) 18.12.2024                          |
| (22) 06.06.2018                               | (87) US2019061012                     | (87) US2017054810                        |
| (54) COMMUNICATION SYSTEM                     | 22.05.2020                            | 19.04.2018                               |
| EMPLOYING SELF-TUNING OPTICAL                 | (22) 12.11.2019                       | (22) 03.10.2017                          |
| TRANSCEIVERS                                  | (54) TRANSMISSIONS IN A HALF DUPLEX   | (54) COLLABORATIVE COMMUNICATIONS        |
| (73) Alcatel Submarine Networks               | BASED WIRELESS COMMUNICATION          | (73) Microsoft Technology Licensing, LLC |
| (72) TERNIER, Eric                            | SYSTEM                                | (72) HASSAN, Amer                        |
| MOUGIN, Christophe                            | (73) QUALCOMM Incorporated            | MITCHELL, Paul                           |
| (51) H04L 1/00                                | (72) BHARADWAJ, Arjun                 | (31) 201615289954                        |
| (11) EP4091272                                | BAGHEL, Sudhir Kumar                  | (32) 10.10.2016                          |
| (21) EP21704110.2                             | NGUYEN, Tien Viet                     | (33) United States of America            |
| (47) 18.12.2024                               | GULATI, Kapil                         | (51) H04L 1/1607                         |
| (87) US2021013252                             | (31) 201916680110                     | H04W 8/00                                |
| 22.07.2021                                    | 201862760812 P                        | H04L 5/00                                |
| (22) 13.01.2021                               | (32) 11.11.2019                       | H04W 52/02                               |
| (54) REFERENCE MODULATION AND                 | 13.11.2018                            | H04L 47/122                              |
| CODING SCHEME TABLE IN SIDELINK               | (33) United States of America         | G06F 9/48                                |
| SIGNALING                                     | United States of America              | H04L 1/1829                              |
| (73) QUALCOMM Incorporated                    | (51) H04L 1/00                        | H04L 1/1867                              |
| (72) SARKIS, Gabi                             | H04L 1/18                             | H04W 28/02                               |
| BAGHEL, Sudhir Kumar                          | (11) EP4221013                        | H04W 92/20                               |
| GULATI, Kapil                                 | (21) EP23165935.0                     | (11) EP3050345                           |
| (31) 202117146972                             | (47) 18.12.2024                       | (21) EP14849203.6                        |
| 202062961016 P                                | (22) 12.03.2015                       | (47) 18.12.2024                          |
| (32) 12.01.2021                               | (54) RESPONSE TIME RELAXATION FOR     | (87) US2014057440                        |
| 14.01.2020                                    | HIGH EFFICIENCY WLAN                  | 02.04.2015                               |
| (33) United States of America                 | (73) QUALCOMM Incorporated            | (22) 25.09.2014                          |
| United States of America                      | (72) VAN NEE, Didier Johannes Richard | (54) METHODS FOR APERIODIC CSI           |
| (51) H04L 1/00                                | VAN ZELST, Albert                     | REPORT TRIGGERING FOR FLEXIBLE           |
| H03M 13/09                                    | TIAN, Bin                             | SUBFRAMES IN LTE TDD EIMTA               |
| H03M 13/29                                    | VERMANI, Sameer                       | SYSTEMS WITH DYNAMIC UL-DL               |
| H03M 13/37                                    | (31) 201514645044                     | RECONFIGURATION                          |
| (11) EP3711204                                | 201462034673 P                        | (73) Apple Inc.                          |
| (21) EP17932455.3                             | 201461951989 P                        | (72) HAN, Seunghee                       |
| (47) 18.12.2024                               | (32) 11.03.2015                       | FWU, Jong-Kae                            |
| (87) CN2017111630                             | 07.08.2014                            | CHOI, Gi Wan                             |
| 23.05.2019                                    | 12.03.2014                            | KHORYAEV, Alexey                         |
| (22) 17.11.2017                               | (33) United States of America         | (31) 201361883127 P                      |
|                                               | United States of America              | (32) 26.09.2013                          |

|                                   |                                            |                                 |
|-----------------------------------|--------------------------------------------|---------------------------------|
| (33) United States of America     | 22.07.2021                                 | 201662418080 P                  |
| (51) H04L 1/18                    | (22) 16.01.2020                            | (32) 02.11.2017                 |
| (11) EP4088403                    | (54) MONITORING FOR A COMBINATION          | 04.11.2016                      |
| (21) EP20723510.2                 | DOWNLINK CONTROL INFORMATION               | (33) United States of America   |
| (47) 18.12.2024                   | (DCI) FOR SCHEDULING                       | United States of America        |
| (87) IB2020000162                 | TRANSMISSIONS IN MULTIPLE CELLS            | (51) H04L 5/00                  |
| 15.07.2021                        | (73) QUALCOMM INCORPORATED                 | (11) EP4027569                  |
| (22) 13.02.2020                   | (72) REN, Yuwei                            | (21) EP22158146.5               |
| (54) CONSECUTIVE DATA PACKET      | XU, Huilin                                 | (47) 18.12.2024                 |
| FEEDBACK                          | MA, Ruifeng                                | (22) 10.05.2018                 |
| (73) Lenovo (Singapore) Pte. Ltd. | (51) H04L 5/00                             | (54) METHOD FOR TRANSMITTING    |
| (72) BHAMRI, Ankit                | (11) EP3665791                             | UPLINK SIGNAL IN WIRELESS       |
| CHOI, Hyung-Nam                   | (21) EP17921371.5                          | COMMUNICATION SYSTEM AND        |
| ALI, Ali, Ramadan                 | (47) 18.12.2024                            | APPARATUS THEREFORE             |
| GANESAN, Karthikeyan              | (87) CN2017097186                          | (73) LG Electronics Inc.        |
| KUCHIBHOTLA, Ravi                 | 14.02.2019                                 | (72) YI, Yunjung                |
| LOEHR, Joachim                    | (22) 11.08.2017                            | HWANG, Daesung                  |
| BASU MALLICK, Prateek             | (54) METHOD AND APPARATUS FOR              | LEE, Hyunho                     |
| (31) 202016740319                 | DMRS TRANSMISSION                          | (31) 201762586142 P             |
| (32) 10.01.2020                   | (73) Lenovo (Beijing) Limited              | 201762541105 P                  |
| (33) United States of America     | (72) SUN, Zhennian                         | 201762519863 P                  |
| (51) H04L 5/00                    | ZHU, Chenxi                                | 201762518511 P                  |
| (11) EP3811554                    | LEI, Haipeng                               | 201762503944 P                  |
| (21) EP19852775.6                 | LI, Hongchao                               | (32) 14.11.2017                 |
| (47) 18.12.2024                   | LIU, Hongmei                               | 04.08.2017                      |
| (87) US2019047339                 | (51) H04L 5/00                             | 14.06.2017                      |
| 27.02.2020                        | (11) EP4005131                             | 12.06.2017                      |
| (22) 20.08.2019                   | (21) EP20736357.3                          | 10.05.2017                      |
| (54) CONTROL RESOURCE SET         | (47) 18.12.2024                            | (33) United States of America   |
| SELECTION FOR CHANNEL STATE       | (87) EP2020069305                          | United States of America        |
| INFORMATION REFERENCE SIGNAL-     | 28.01.2021                                 | United States of America        |
| BASED RADIO LINK MONITORING       | (22) 08.07.2020                            | United States of America        |
| (73) Apple Inc.                   | (54) CORESET GROUPING                      | United States of America        |
| (72) CUI, Jie                     | (73) Fraunhofer-Gesellschaft zur Förderung | (51) H04L 5/00                  |
| RAGHAVAN, Manasa                  | der angewandten Forschung e.V.             | H04L 1/00                       |
| TANG, Yang                        | (72) FEHRENBACH, Thomas                    | H04W 72/0446                    |
| HUA, Li                           | NIEMANN, Bernhard                          | H04W 72/044                     |
| YU, Zhibin                        | HASSAN HUSSEIN, Khaled Shawky              | H04W 72/04                      |
| (31) 201862720025 P               | GÖKTEPE, Baris                             | H04W 72/12                      |
| (32) 20.08.2018                   | POPP, Julian                               | H04B 7/06                       |
| (33) United States of America     | HEYN, Thomas                               | (11) EP3761549                  |
| (51) H04L 5/00                    | HELLGE, Cornelius                          | (21) EP19757789.3               |
| (11) EP3993303                    | SRINIVASAN, Nithin                         | (47) 18.12.2024                 |
| (21) EP21205530.5                 | WIRTH, Thomas                              | (87) CN2019076207               |
| (47) 18.12.2024                   | SCHIERL, Thomas                            | 29.08.2019                      |
| (22) 29.10.2021                   | LEYH, Martin                               | (22) 26.02.2019                 |
| (54) SUBCARRIER INDICES FOR       | (31) 19207928                              | (54) METHOD AND APPARATUS FOR   |
| DISTRIBUTED-TONE RESOURCE         | 19187864                                   | RECEIVING CONTROL SIGNALING     |
| UNITS IN 6GHZ LOW-POWER INDOOR    | (32) 08.11.2019                            | AND FOR DETERMINING INFORMATION |
| SYSTEMS                           | 23.07.2019                                 | (73) ZTE Corporation            |
| (73) MediaTek Singapore Pte. Ltd. | (33) European Patent Office (EPO)          | (72) ZHANG, Shujuan             |
| (72) PARE, Jr., Thomas Edward     | European Patent Office (EPO)               | WU, Hao                         |
| HU, Shengquan                     | (51) H04L 5/00                             | JIANG, Chuangxin                |
| LIU, Jianhan                      | (11) EP3926884                             | ZHANG, Nan                      |
| (31) 202117511801                 | (21) EP21190214.3                          | LI, Yu Ngok                     |
| 202163150154 P                    | (47) 18.12.2024                            | LU, Zhaohua                     |
| 202063107551 P                    | (22) 03.11.2017                            | GAO, Bo                         |
| (32) 27.10.2021                   | (54) DYNAMIC REFERENCE SIGNAL              | (31) 201810160248               |
| 17.02.2021                        | CONFIGURATION FOR SHORTENED                | (32) 26.02.2018                 |
| 30.10.2020                        | TRANSMISSION TIME INTERVAL                 | (33) China                      |
| (33) United States of America     | WIRELESS COMMUNICATIONS                    | (51) H04L 5/00                  |
| United States of America          | (73) QUALCOMM Incorporated                 | H04L 5/14                       |
| United States of America          | (72) SUN, Jing                             | (11) EP4409814                  |
| (51) H04L 5/00                    | HOSSEINI, Seyedkianoush                    | (21) EP22790055.2               |
| (11) EP4091284                    | PATEL, Shimmam Arvind                      | (47) 18.12.2024                 |
| (21) EP20913387.5                 | CHEN, Wanshi                               | (87) IB2022059347               |
| (47) 18.12.2024                   | GAAL, Peter                                | 06.04.2023                      |
| (87) CN2020072432                 | (31) 201715802349                          | (22) 30.09.2022                 |

|                                                     |                                      |                                    |
|-----------------------------------------------------|--------------------------------------|------------------------------------|
| (54) FREQUENCY HOPPING FOR JOINT CHANNEL ESTIMATION | (87) US2017053240                    | (31) 2017052867                    |
| (73) Telefonaktiebolaget LM Ericsson (publ)         | 17.05.2018                           | (32) 17.03.2017                    |
| (72) AXNÄS, Johan                                   | (22) 25.09.2017                      | (33) Japan                         |
| SU, Ling                                            | (54) SYNCHRONIZATION SIGNAL          | (51) H04L 5/00                     |
| HE, Anqi                                            | TRANSMISSION TECHNIQUES FOR          | H04W 52/18                         |
| ZHANG, Chunhui                                      | PEAK-TO-AVERAGE POWER RATIO          | H04W 52/50                         |
| HARRISON, Robert Mark                               | REDUCTION                            | H04B 17/10                         |
| LIN, Zhipeng                                        | (73) QUALCOMM Incorporated           | H04W 52/14                         |
| (31) PCT/CN2021/122497                              | (72) ISLAM, Muhammad Nazmul          | H04W 52/24                         |
| (32) 02.10.2021                                     | CEZANNE, Juergen                     | H04W 52/34                         |
| (33) World Intellectual Property Office (WIPO)      | SAMPATH, Ashwin                      | (11) EP4046319                     |
| (51) H04L 5/00                                      | LI, Junyi                            | (21) EP20804104.6                  |
| H04L 25/02                                          | ABEDINI, Navid                       | (47) 18.12.2024                    |
| (11) EP4231580                                      | SUBRAMANIAN, Sundar                  | (87) US2020056125                  |
| (21) EP23184680.9                                   | SADIQ, Bilal                         | 22.04.2021                         |
| (47) 18.12.2024                                     | (31) 201715713225                    | (22) 16.10.2020                    |
| (22) 20.04.2022                                     | 201662421630 P                       | (54) PATHLOSS REFERENCE SIGNAL     |
| (54) WIRELESS COMMUNICATION                         | (32) 22.09.2017                      | INFORMATION FOR MULTIPLE           |
| OPERATING METHOD SUPPORTING                         | 14.11.2016                           | COMPONENT CARRIERS                 |
| CARRIER AGGREGATION                                 | (33) United States of America        | (73) QUALCOMM INCORPORATED         |
| (73) Samsung Electronics Co., Ltd.                  | United States of America             | (72) LUO, Tao                      |
| (72) KIM, Jinho                                     | (51) H04L 5/00                       | WANG, Xiao Feng                    |
| PARK, Jungmin                                       | H04L 27/26                           | PEZESHKI, Hamed                    |
| (31) 20210054633                                    | G01S 1/04                            | ZHOU, Yan                          |
| (32) 27.04.2021                                     | G01S 5/00                            | (31) 202017071911                  |
| (33) Korea (Republic)                               | G01S 5/02                            | 201962923469 P                     |
| (51) H04L 5/00                                      | H04W 4/02                            | (32) 15.10.2020                    |
| H04L 27/26                                          | H04W 64/00                           | 18.10.2019                         |
| (11) EP3836474                                      | G01S 5/10                            | (33) United States of America      |
| (21) EP21155679.0                                   | H04B 7/08                            | United States of America           |
| (47) 18.12.2024                                     | H04B 7/06                            | (51) H04L 5/00                     |
| (22) 11.05.2017                                     | (11) EP3881616                       | H04W 72/04                         |
| (54) SYSTEM AND METHOD FOR                          | (21) EP19836177.6                    | (11) EP3981097                     |
| BANDWIDTH UTILIZATION                               | (47) 18.12.2024                      | (21) EP19735296.6                  |
| (73) Huawei Technologies Co., Ltd.                  | (87) US2019060901                    | (47) 18.12.2024                    |
| (72) ZHANG, Liqing                                  | 22.05.2020                           | (87) EP2019067411                  |
| AU, Kelvin Kar Kin                                  | (22) 12.11.2019                      | 30.12.2020                         |
| MA, Jianglei                                        | (54) STAGGERED CHANNEL STATE         | (22) 28.06.2019                    |
| TONG, Wen                                           | INFORMATION REFERENCE SIGNAL         | (54) DEVICE AND METHOD FOR         |
| (31) 201715454758                                   | RESOURCE SETS FOR TRACKING           | ENHANCED PREEMPTION OF             |
| 201662336232 P                                      | USED FOR POSITIONING                 | TRANSMISSIONS                      |
| (32) 09.03.2017                                     | (73) QUALCOMM INCORPORATED           | (73) Huawei Technologies Co., Ltd. |
| 13.05.2016                                          | (72) LUO, Tao                        | (72) GONG, Xitao                   |
| (33) United States of America                       | MANOLAKOS, Alexandros                | CASTANEDA, Mario                   |
| United States of America                            | AKKARAKARAN, Sony                    | LI, Zhongfeng                      |
| (51) H04L 5/00                                      | SORIAGA, Joseph Binamira             | STIRLING-GALLACHER, Richard        |
| H04L 27/26                                          | (31) 20180100516                     | (51) H04L 5/00                     |
| (11) EP3282632                                      | 201916680201                         | H04W 72/04                         |
| (21) EP17185705.5                                   | (32) 12.11.2018                      | H04B 1/713                         |
| (47) 18.12.2024                                     | 11.11.2019                           | (11) EP3721573                     |
| (22) 10.08.2017                                     | (33) Greece                          | (21) EP18804858.1                  |
| (54) METHOD AND APPARATUS FOR                       | United States of America             | (47) 18.12.2024                    |
| DETERMINING NUMEROLOGY                              | (51) H04L 5/00                       | (87) US2018058920                  |
| BANDWIDTH FOR MEASUREMENT                           | H04L 27/26                           | 13.06.2019                         |
| IN A WIRELESS COMMUNICATION                         | H04W 72/04                           | (22) 02.11.2018                    |
| SYSTEM                                              | H04W 72/12                           | (54) NARROWBAND FREQUENCY          |
| (73) ASUSTek Computer Inc.                          | H04W 72/23                           | HOPPING MECHANISMS TO              |
| (72) LIN, Ko-Chiang                                 | H04W 88/08                           | OVERCOME BANDWIDTH                 |
| LI, Ming-Che                                        | (11) EP3934153                       | RESTRICTIONS IN THE UNLICENSED     |
| (31) 201662374392 P                                 | (21) EP21192296.8                    | FREQUENCY SPECTRUM                 |
| (32) 12.08.2016                                     | (47) 18.12.2024                      | (73) Qualcomm Incorporated         |
| (33) United States of America                       | (22) 19.01.2018                      | (72) KADOUS, Tamer                 |
| (51) H04L 5/00                                      | (54) BASE STATION, TERMINAL, AND     | YERRAMALLI, Srinivas               |
| H04L 27/26                                          | COMMUNICATION METHOD                 | LIU, Chih-Hao                      |
| (11) EP3539243                                      | (73) Panasonic Intellectual Property | (31) 201816128154                  |
| (21) EP17784096.4                                   | Corporation of America               | 201762594470 P                     |
| (47) 18.12.2024                                     | (72) HORIUCHI, Ayako                 | (32) 11.09.2018                    |
|                                                     | SUZUKI, Hidetoshi                    | 04.12.2017                         |

|                                                                                                                                        |                                                                                                                                                                                  |                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>United States of America                                                                              | (22) 02.03.2020                                                                                                                                                                  | (11) EP3817275                                                                                                                                    |
| (51) H04L 5/00                                                                                                                         | (54) METHODS AND APPARATUS TO FACILITATE MULTIPLEXING WAKE-UP SIGNALS WITH OTHER RESOURCES                                                                                       | (21) EP20201020.3                                                                                                                                 |
| H04W 72/23                                                                                                                             | (73) Qualcomm Incorporated                                                                                                                                                       | (47) 18.12.2024                                                                                                                                   |
| H04W 72/044                                                                                                                            | (72) AWONIYI-OTERI, Olufunmilola Omolade                                                                                                                                         | (22) 09.10.2020                                                                                                                                   |
| H04W 16/10                                                                                                                             | NAM, Wooseok                                                                                                                                                                     | (54) QUANTUM COMMUNICATION SYSTEM HAVING QUANTUM KEY DISTRIBUTION AND USING A MIDPOINT OF THE TALBOT EFFECT IMAGE POSITION AND ASSOCIATED METHODS |
| H04W 84/04                                                                                                                             | SARKIS, Gabi                                                                                                                                                                     | (73) Eagle Technology, LLC                                                                                                                        |
| H04W 36/18                                                                                                                             | ANG, Peter Pui Lok                                                                                                                                                               | (72) Logan, Catheryn D.                                                                                                                           |
| H04W 76/15                                                                                                                             | LUO, Tao                                                                                                                                                                         | Lange, Michael R                                                                                                                                  |
| (11) EP4135451                                                                                                                         | CHENDAMARAI KANNAN, Arumugam                                                                                                                                                     | Bucklew, Victor G.                                                                                                                                |
| (21) EP21785181.5                                                                                                                      | (31) 202016804922                                                                                                                                                                | Garrett, Michael C.                                                                                                                               |
| (47) 18.12.2024                                                                                                                        | 201962813709 P                                                                                                                                                                   | Nagel, James A.                                                                                                                                   |
| (87) KR2021004266                                                                                                                      | (32) 28.02.2020                                                                                                                                                                  | Burt, Timothy C.                                                                                                                                  |
| 14.10.2021                                                                                                                             | 04.03.2019                                                                                                                                                                       | Plansinis, Brent W.                                                                                                                               |
| (22) 06.04.2021                                                                                                                        | (33) United States of America                                                                                                                                                    | (31) 201916668025                                                                                                                                 |
| (54) METHOD FOR OPERATING IAB NODE CONNECTED TO PLURALITY OF PARENT NODES IN WIRELESS COMMUNICATION SYSTEM, AND APPARATUS USING METHOD | United States of America                                                                                                                                                         | (32) 30.10.2019                                                                                                                                   |
| (73) LG Electronics, Inc.                                                                                                              | (51) H04L 9/00                                                                                                                                                                   | (33) United States of America                                                                                                                     |
| (72) YANG, Suckchel                                                                                                                    | G06F 21/64                                                                                                                                                                       | (51) H04L 9/08                                                                                                                                    |
| KO, Hyunsoo                                                                                                                            | G06Q 30/018                                                                                                                                                                      | (11) EP3813294                                                                                                                                    |
| KIM, Seonwook                                                                                                                          | G06Q 30/06                                                                                                                                                                       | (21) EP20200995.7                                                                                                                                 |
| YOU, Hyangsun                                                                                                                          | (11) EP4311157                                                                                                                                                                   | (47) 18.12.2024                                                                                                                                   |
| SHIM, Jaenam                                                                                                                           | (21) EP22185737.8                                                                                                                                                                | (22) 09.10.2020                                                                                                                                   |
| PARK, Haewook                                                                                                                          | (47) 18.12.2024                                                                                                                                                                  | (54) QUANTUM COMMUNICATION SYSTEM THAT SWITCHES BETWEEN QUANTUM KEY DISTRIBUTION (QKD) PROTOCOLS AND ASSOCIATED METHODS                           |
| (31) 20210007245                                                                                                                       | (22) 19.07.2022                                                                                                                                                                  | (73) Eagle Technology, LLC                                                                                                                        |
| 20200042361                                                                                                                            | (54) METHOD FOR GENERATING AN NFT ASSOCIATED WITH A DIGITAL ASSET, METHOD FOR VERIFYING A SIMILARITY BETWEEN DIGITAL ASSETS, CORRESPONDING COMPUTER PROGRAM PRODUCTS AND DEVICES | (72) Lange, Michael R                                                                                                                             |
| (32) 19.01.2021                                                                                                                        | (73) Nagravision Sarl                                                                                                                                                            | Nagel, James A.                                                                                                                                   |
| 07.04.2020                                                                                                                             | (72) STRANSKY-HEILKRON, Philippe                                                                                                                                                 | Bucklew, Victor G.                                                                                                                                |
| (33) Korea (Republic)                                                                                                                  | (51) H04L 9/06                                                                                                                                                                   | (31) 201916658398                                                                                                                                 |
| Korea (Republic)                                                                                                                       | G06F 21/32                                                                                                                                                                       | (32) 21.10.2019                                                                                                                                   |
| (51) H04L 5/00                                                                                                                         | H04L 9/32                                                                                                                                                                        | (33) United States of America                                                                                                                     |
| H04W 72/30                                                                                                                             | G10L 17/00                                                                                                                                                                       | (51) H04L 9/08                                                                                                                                    |
| H04W 48/12                                                                                                                             | H04L 9/40                                                                                                                                                                        | G06F 21/45                                                                                                                                        |
| H04L 27/00                                                                                                                             | G10L 19/018                                                                                                                                                                      | G06F 21/31                                                                                                                                        |
| H04W 48/16                                                                                                                             | (11) EP3790220                                                                                                                                                                   | H04L 9/32                                                                                                                                         |
| (11) EP3959929                                                                                                                         | (21) EP20192495.8                                                                                                                                                                | (11) EP3824592                                                                                                                                    |
| (21) EP20726994.5                                                                                                                      | (47) 18.12.2024                                                                                                                                                                  | (21) EP19837000.9                                                                                                                                 |
| (47) 18.12.2024                                                                                                                        | (22) 24.08.2020                                                                                                                                                                  | (47) 18.12.2024                                                                                                                                   |
| (87) US2020029552                                                                                                                      | (54) ELECTRONIC APPARATUS AND CONTROL METHOD THEREOF                                                                                                                             | (87) US2019035407                                                                                                                                 |
| 29.10.2020                                                                                                                             | (73) Samsung Electronics Co., Ltd.                                                                                                                                               | 23.01.2020                                                                                                                                        |
| (22) 23.04.2020                                                                                                                        | (72) PARK, Junhyen                                                                                                                                                               | (22) 04.06.2019                                                                                                                                   |
| (54) CELL ACQUISITION SUBFRAME ENHANCEMENTS FOR CELLULAR BROADCAST SERVICES                                                            | BAE, Jaehyun                                                                                                                                                                     | (54) PUBLIC-PRIVATE KEY PAIR PROTECTED PASSWORD MANAGER                                                                                           |
| (73) QUALCOMM INCORPORATED                                                                                                             | (31) 20190109484                                                                                                                                                                 | (73) VISA INTERNATIONAL SERVICE ASSOCIATION                                                                                                       |
| (72) RICO ALVARINO, Alberto                                                                                                            | (32) 04.09.2019                                                                                                                                                                  | (72) CHUMBLEY, Robert                                                                                                                             |
| SENGUPTA, Ayan                                                                                                                         | (33) Korea (Republic)                                                                                                                                                            | (31) 201816038011                                                                                                                                 |
| CATOVIC, Amer                                                                                                                          | (51) H04L 9/06                                                                                                                                                                   | (32) 17.07.2018                                                                                                                                   |
| (31) 202016855721                                                                                                                      | H04L 9/12                                                                                                                                                                        | (33) United States of America                                                                                                                     |
| 201962838205 P                                                                                                                         | (11) EP4075718                                                                                                                                                                   | (51) H04L 9/08                                                                                                                                    |
| (32) 22.04.2020                                                                                                                        | (21) EP22166111.9                                                                                                                                                                | H04L 9/40                                                                                                                                         |
| 24.04.2019                                                                                                                             | (47) 18.12.2024                                                                                                                                                                  | (11) EP3771176                                                                                                                                    |
| (33) United States of America                                                                                                          | (22) 31.03.2022                                                                                                                                                                  | (21) EP20184685.4                                                                                                                                 |
| United States of America                                                                                                               | (54) SELF-SYNCHRONIZING MODE OF OPERATION FOR AN ENCRYPTION/ DECRYPTION ALGORITHM                                                                                                | (47) 18.12.2024                                                                                                                                   |
| (51) H04L 5/00                                                                                                                         | (73) Harris Global Communications, Inc.                                                                                                                                          | (22) 08.07.2020                                                                                                                                   |
| H04W 74/0816                                                                                                                           | (72) Kurdziel, Michael Thomas                                                                                                                                                    | (54) CROSS-DOMAIN INFORMATION TRANSFER SYSTEM AND ASSOCIATED METHODS                                                                              |
| H04W 52/02                                                                                                                             | Farris, Steven M.                                                                                                                                                                | (73) Harris Global Communications, Inc.                                                                                                           |
| H04L 1/00                                                                                                                              | (31) 202117229608                                                                                                                                                                | (72) Bajorski, Peter                                                                                                                              |
| H04W 76/28                                                                                                                             | (32) 13.04.2021                                                                                                                                                                  | Radziszowski, Stanislaw P.                                                                                                                        |
| H04W 72/23                                                                                                                             | (33) United States of America                                                                                                                                                    |                                                                                                                                                   |
| (11) EP3935913                                                                                                                         | (51) H04L 9/08                                                                                                                                                                   |                                                                                                                                                   |
| (21) EP20714437.9                                                                                                                      |                                                                                                                                                                                  |                                                                                                                                                   |
| (47) 18.12.2024                                                                                                                        |                                                                                                                                                                                  |                                                                                                                                                   |
| (87) US2020020690                                                                                                                      |                                                                                                                                                                                  |                                                                                                                                                   |
| 10.09.2020                                                                                                                             |                                                                                                                                                                                  |                                                                                                                                                   |

|                                                |                                    |                                          |
|------------------------------------------------|------------------------------------|------------------------------------------|
| Farris, Steven M.                              | (47) 18.12.2024                    | (31) 201410154998                        |
| Kurziel, Michael Thomas                        | (87) KR2020012396                  | (32) 17.04.2014                          |
| Lukowiak, Marcin                               | 15.04.2021                         | (33) China                               |
| Kaminsky, Alan R.                              | (22) 14.09.2020                    | (51) H04L 9/40                           |
| (31) 201916519098                              | (54) SIMPLE AUTHENTICATION METHOD  | G06F 21/31                               |
| (32) 23.07.2019                                | AND SYSTEM USING WEB STORAGE       | (11) EP4054119                           |
| (33) United States of America                  | OF BROWSER                         | (21) EP22158385.9                        |
| (51) H04L 9/14                                 | (73) Swempire Co., Ltd.            | (47) 18.12.2024                          |
| H04L 9/32                                      | (72) CHOI, Myoung Soo              | (22) 24.02.2022                          |
| H04L 41/122                                    | PEE, Seung Ryul                    | (54) VIRTUAL CONFERENCE VOTING           |
| H04L 41/082                                    | (31) 20190125977                   | SYSTEM                                   |
| H04L 41/0895                                   | 20190125976                        | (73) Bundesdruckerei GmbH                |
| (11) EP3729764                                 | 20190125975                        | (72) PETERS, Florian                     |
| (21) EP17935592.0                              | (32) 11.10.2019                    | (31) 102021105434                        |
| (47) 18.12.2024                                | 11.10.2019                         | (32) 05.03.2021                          |
| (87) SE2017051295                              | 11.10.2019                         | (33) Germany                             |
| 27.06.2019                                     | (33) Korea (Republic)              | (51) H04L 9/40                           |
| (22) 19.12.2017                                | Korea (Republic)                   | G06F 21/55                               |
| (54) METHOD AND MANAGEMENT NODE                | Korea (Republic)                   | (11) EP4305808                           |
| IN A COMMUNICATION NETWORK,                    | (51) H04L 9/40                     | (21) EP22711410.5                        |
| FOR SUPPORTING MANAGEMENT OF                   | (11) EP4233334                     | (47) 18.12.2024                          |
| NETWORK NODES BASED ON LLDP                    | (21) EP21811113.6                  | (87) US2022018588                        |
| MESSAGES                                       | (47) 18.12.2024                    | 15.09.2022                               |
| (73) Telefonaktiebolaget LM Ericsson (publ)    | (87) FR2021051829                  | (22) 03.03.2022                          |
| (72) VARGA, Balázs                             | 28.04.2022                         | (54) USING WEIGHTED PEER GROUPS TO       |
| GAÁL, Géza                                     | (22) 20.10.2021                    | SELECTIVELY TRIGGER A SECURITY           |
| (51) H04L 9/32                                 | (54) METHODS AND DEVICES FOR       | ALERT                                    |
| (11) EP4241418                                 | PROTECTING A STREAM OF             | (73) Microsoft Technology Licensing, LLC |
| (21) EP21802668.0                              | PACKETS                            | (72) HEN, Idan                           |
| (47) 18.12.2024                                | (73) ORANGE                        | ARGOETY, Itay                            |
| (87) EP2021080185                              | (72) ATHIAS, Isabelle              | COHEN, Dror                              |
| 12.05.2022                                     | DECRAENE, Bruno                    | (31) 202117197480                        |
| (22) 29.10.2021                                | (31) 2010856                       | (32) 10.03.2021                          |
| (54) MANUFACTURER CLONEABLE                    | (32) 22.10.2020                    | (33) United States of America            |
| PHYSICAL UNCLONEABLE                           | (33) France                        | (51) H04L 9/40                           |
| FUNCTIONS                                      | (51) H04L 9/40                     | G06F 21/55                               |
| (73) British Telecommunications public limited | (11) EP3871396                     | G05B 19/418                              |
| company                                        | (21) EP20726616.4                  | (11) EP3864546                           |
| (72) CATER, Samuel                             | (47) 18.12.2024                    | (21) EP19790093.9                        |
| WHITE, Catherine                               | (87) US2020030131                  | (47) 18.12.2024                          |
| (31) 202017392                                 | 04.02.2021                         | (87) SE2019050962                        |
| (32) 03.11.2020                                | (22) 27.04.2020                    | 16.04.2020                               |
| (33) United Kingdom                            | (54) DATA AGGREGATION APPLYING     | (22) 03.10.2019                          |
| (51) H04L 9/32                                 | CREDENTIALS FROM PROXY             | (54) DEPARTURE-BASED PROCESS-LEVEL       |
| H04L 9/00                                      | ENTRIES                            | DETECTION OF STEALTHY ATTACKS            |
| H04L 9/40                                      | (73) Intuit Inc.                   | ON CONTROL SYSTEMS                       |
| (11) EP4238274                                 | (72) ASTHANA, Prashant             | (73) OMEN Technologies AB                |
| (21) EP21773977.0                              | SAMAYAVEL, Muniyaraj               | (72) Almgren, Magnus                     |
| (47) 18.12.2024                                | (31) 201921030707                  | Aoudi, Wissam                            |
| (87) US2021048148                              | (32) 30.07.2019                    | (31) 1851335                             |
| 05.05.2022                                     | (33) India                         | 1851255                                  |
| (22) 30.08.2021                                | (51) H04L 9/40                     | (32) 26.10.2018                          |
| (54) METHODS AND SYSTEMS FOR                   | G06F 16/955                        | 12.10.2018                               |
| EXCHANGING CONFIDENTIAL                        | (11) EP3132385                     | (33) Sweden                              |
| INFORMATION VIA A BLOCKCHAIN                   | (21) EP15780070.7                  | Sweden                                   |
| (73) CCH Incorporated                          | (47) 18.12.2024                    | (51) H04L 9/40                           |
| (72) BAGATIN, Fabio                            | (87) CN2015076861                  | G06F 21/55                               |
| ROWE, Cathy                                    | 22.10.2015                         | G06F 21/33                               |
| (31) 202017085404                              | (22) 17.04.2015                    | H04L 9/32                                |
| (32) 30.10.2020                                | (54) METHODS AND SYSTEMS FOR       | (11) EP4397005                           |
| (33) United States of America                  | GENERATING AND READING 2D          | (21) EP22800977.5                        |
| (51) H04L 9/32                                 | BARCODES                           | (47) 18.12.2024                          |
| H04L 9/08                                      | (73) Tencent Technology (Shenzhen) | (87) US2022077966                        |
| G06F 21/31                                     | Company Limited                    | 27.04.2023                               |
| H04L 9/40                                      | (72) TANG, Wenning                 | (22) 12.10.2022                          |
| H04L 9/00                                      | YANG, Haisong                      | (54) CONFINING LATERAL TRAVERSAL         |
| (11) EP4044499                                 | BU, Manzhao                        | WITHIN A COMPUTER NETWORK                |
| (21) EP20873442.6                              | HUANG, Ping                        | (73) Microsoft Technology Licensing, LLC |

|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) DAWSON, Daniel James<br>STATIA, Jeromy Scott<br>BACON, Jeffrey Ryan<br>CURTIS, Darrin Earl<br>RINGER, George Kenneth<br>PHIPPEN, Elizabeth Anne<br>DAVIS, Aaron Richard<br>RASLER, Douglas Anthony<br>DEVAN, Satish<br>JUNG, Bum Su                                                                                                                                                                               | (51) H04L 9/40<br>H04L 9/00<br>G06Q 20/06<br>G06Q 20/32<br>G06Q 20/36<br>H04L 9/32<br>(11) EP3814967<br>(21) EP19830831.4<br>(47) 18.12.2024<br>(87) US2019040194<br>09.01.2020<br>(22) 01.07.2019<br>(54) SYSTEMS AND METHODS FOR<br>IMPLEMENTING BLOCKCHAIN-<br>BASED CONTENT ENGAGEMENT<br>PLATFORMS UTILIZING MEDIA<br>WALLETS<br>(73) Vijayan, Madhu<br>(72) Vijayan, Madhu<br>(31) 201962846465 P<br>201862692848 P<br>(32) 10.05.2019<br>01.07.2018<br>(33) United States of America<br>United States of America              | (22) 19.08.2022<br>(54) METHOD, PRODUCT, AND SYSTEM<br>FOR NETWORK SECURITY<br>MANAGEMENT USING SOFTWARE<br>REPRESENTATION THAT EMBODIES<br>NETWORK CONFIGURATION AND<br>POLICY DATA<br>(73) Vectra AI, Inc.<br>(72) Kazerounian, Sohrob<br>Finlayson IV, William Stow<br>Lynn, Karl Matthew<br>Beauchesne, Nicolas<br>(31) 202217711903<br>202217711884<br>202217711868<br>202217711850<br>202217711811<br>(32) 01.04.2022<br>01.04.2022<br>01.04.2022<br>01.04.2022<br>01.04.2022<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 |
| (31) 500755<br>(32) 19.10.2021<br>(33) Luxembourg                                                                                                                                                                                                                                                                                                                                                                      | (51) H04L 9/40<br>G06F 21/62<br>(11) EP4143717<br>(21) EP21723576.1<br>(47) 18.12.2024<br>(87) US2021027455<br>09.12.2021<br>(22) 15.04.2021<br>(54) PRIVACY PRESERVING<br>UNIDIRECTIONAL COMMUNICATION<br>DEVICE<br>(73) Siemens Mobility GmbH<br>(72) PFLEGER DE AGUIAR, Leandro<br>METEL, Omer<br>RAHMAT, Safia                                                                                                                                                                                                                   | (31) 202016894163<br>(32) 05.06.2020<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (31) 202016894163<br>(32) 05.06.2020<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                  | (51) H04L 9/40<br>G06F 21/64<br>H04L 9/32<br>(11) EP3913886<br>(21) EP21173466.0<br>(47) 18.12.2024<br>(22) 12.05.2021<br>(54) ISSUE OF DIGITAL DOCUMENTS WITH<br>A BLOCKCHAIN<br>(73) Bundesdruckerei GmbH<br>(72) RÜCKRIEMEN, Jörg                                                                                                                                                                                                                                                                                                 | (31) 102020113057<br>(32) 14.05.2020<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (51) H04L 9/40<br>G06Q 20/10<br>G06Q 20/20<br>G06F 21/45<br>G06F 21/31<br>G06Q 20/40<br>(11) EP4179699<br>(21) EP21837569.9<br>(47) 18.12.2024<br>(87) US2021040968<br>13.01.2022<br>(22) 08.07.2021<br>(54) ENGINE FOR CONFIGURING<br>AUTHENTICATION OF ACCESS<br>REQUESTS<br>(73) Visa International Service Association<br>(72) CHAMSEDDINE, Ali<br>KOENIGSBRUECK, Andrew John Bruno<br>Naumann Zu<br>SIDDENS, Cory | (51) H04L 9/40<br>H04L 9/32<br>H04L 67/14<br>H04L 43/0811<br>(11) EP3654612<br>(21) EP19204080.6<br>(47) 18.12.2024<br>(22) 16.09.2014<br>(54) NETWORK CONNECTION<br>AUTOMATION<br>(73) Amazon Technologies, Inc.<br>(72) ARLLEN, Christian Arthur<br>STALZER, Mark Edward<br>(31) 201314029496<br>(32) 17.09.2013<br>(33) United States of America                                                                                                                                                                                  | (31) 201811063947<br>(32) 12.09.2018<br>(33) China                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| (31) 202063050573 P<br>(32) 10.07.2020<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                | (51) H04L 9/40<br>H04L 41/14<br>G06F 21/55<br>G06F 21/57<br>(11) EP4254865<br>(21) EP22191317.1<br>(47) 18.12.2024                                                                                                                                                                                                                                                                                                                                                                                                                   | (51) H04L 9/40<br>H04L 67/02<br>H04L 67/10<br>H04L 67/14<br>(11) EP4210277<br>(21) EP22305005.5<br>(47) 18.12.2024<br>(22) 05.01.2022<br>(54) METHOD FOR CREATING A<br>COMMUNICATION CHANNEL<br>BETWEEN A LOCAL APPLICATION<br>AND AN SAAS APPLICATION,<br>AND METHOD AND SYSTEM FOR<br>COMMUNICATION BETWEEN SAID<br>APPLICATIONS<br>(73) Bull SAS<br>(72) GUIONNEAU, Christophe                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) H04L 9/40<br>H04L 67/53<br>H04L 12/18<br>G06F 21/62<br>G06F 21/41<br>(11) EP4123965<br>(21) EP22196034.7<br>(47) 18.12.2024<br>(22) 12.02.2019<br>(54) APPARATUS, METHOD, AND<br>COMPUTING DEVICE FOR<br>SELECTIVELY GRANTING<br>PERMISSIONS TO GROUP-BASED<br>OBJECTS IN A GROUP-BASED<br>COMMUNICATION SYSTEM<br>(73) Salesforce, Inc.<br>(72) BENSON, Buster<br>SULLIVAN, Christopher<br>REDMAN, Benjamin William Scholey<br>GAMACHE, Meagan<br>JENNINGS, Paul Matthew<br>XIE, Kefan<br>BRITO, Diogenes<br>(31) 201815894821 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



|                                  |                                  |                                          |
|----------------------------------|----------------------------------|------------------------------------------|
| (32) 12.02.2018                  | (51) H04L 9/40                   | (11) EP4290814                           |
| (33) United States of America    | H04W 12/06                       | (21) EP23175311.2                        |
| (51) H04L 9/40                   | (11) EP3607722                   | (47) 18.12.2024                          |
| H04L 67/55                       | (21) EP18721142.0                | (22) 25.05.2023                          |
| H04L 67/562                      | (47) 18.12.2024                  | (54) METHOD AND DEVICE FOR               |
| (11) EP4211888                   | (87) IB2018052282                | SYNCHRONIZING A DIGITAL RADIO            |
| (21) EP21790329.3                | 11.10.2018                       | SIGNAL                                   |
| (47) 18.12.2024                  | (22) 03.04.2018                  | (73) Continental Automotive Technologies |
| (87) US2021049681                | (54) ONLINE VERIFICATION METHOD  | GmbH                                     |
| 17.03.2022                       | AND SYSTEM FOR VERIFYING THE     | (72) HIVERT, Grégoire                    |
| (22) 09.09.2021                  | IDENTITY OF A SUBJECT            | LIN, Chao                                |
| (54) METHOD AND APPARATUS FOR    | (73) CRIF S.p.A.                 | (31) 2205193                             |
| INTERNET OF THINGS (IOT) DYNAMIC | (72) MINOSI, Antonio             | (32) 31.05.2022                          |
| POLICY MANAGEMENT                | CINELLI, Andrea                  | (33) France                              |
| (73) Mutualink, Inc.             | GAROFFOLO, Alberto               |                                          |
| (72) SETLUR, Anand               | (31) 201700036968                | (51) H04L 27/26                          |
| MAZZARELLA, Joseph R.            | (32) 04.04.2017                  | H04B 7/0456                              |
| WENGROVITZ, Michael S.           | (33) Italy                       | H04L 5/00                                |
| (31) 202017018064                | (51) H04L 9/40                   | (11) EP3873046                           |
| (32) 11.09.2020                  | H04W 12/065                      | (21) EP19876133.0                        |
| (33) United States of America    | H04W 12/71                       | (47) 18.12.2024                          |
| (51) H04L 9/40                   | H04W 12/68                       | (87) CN2019112929                        |
| H04W 12/02                       | (11) EP4298761                   | 30.04.2020                               |
| G06F 21/53                       | (21) EP22710467.6                | (22) 24.10.2019                          |
| G06F 21/62                       | (47) 18.12.2024                  | (54) PARAMETER CONFIGURATION AND         |
| (11) EP2681687                   | (87) US2022017507                | PARAMETER RECEIVING METHODS              |
| (21) EP12752381.9                | 01.09.2022                       | AND APPARATUS, AND STORAGE               |
| (47) 18.12.2024                  | (22) 23.02.2022                  | MEDIUM                                   |
| (87) FI2012050168                | (54) ESTABLISHING AUTHENTICATION | (73) ZTE Corporation                     |
| 07.09.2012                       | PERSISTENCE                      | (72) LI, Yong                            |
| (22) 22.02.2012                  | (73) Capital One Services, LLC   | LU, Zhaohua                              |
| (54) METHOD AND APPARATUS FOR    | (72) POOLE, Thomas               | JIANG, Chuangxin                         |
| ENFORCING DATA PRIVACY           | MORETON, Paul                    | ZHANG, Shujuan                           |
| (73) Nokia Technologies Oy       | RULE, Jeffrey                    | XIAO, Huahua                             |
| (72) KUJALA, Henri Tapani        | (31) 202117183888                | (31) 201811247396                        |
| NIVA, Mikko Antero               | (32) 24.02.2021                  | (32) 24.10.2018                          |
| OLIVER, Ian Justin               | (33) United States of America    | (33) China                               |
| VÄHÄ-SIPILÄ, Antti Oskari        | (51) H04L 12/14                  |                                          |
| (31) 201113071209                | H04M 15/00                       | (51) H04L 27/26                          |
| 201161447206 P                   | H04W 4/24                        | H04L 5/00                                |
| (32) 24.03.2011                  | (11) EP4018598                   | H04W 72/04                               |
| 28.02.2011                       | (21) EP19761979.4                | H04J 11/00                               |
| (33) United States of America    | (47) 18.12.2024                  | (11) EP3512171                           |
| United States of America         | (87) SE2019050770                | (21) EP17830415.0                        |
| (51) H04L 9/40                   | 25.02.2021                       | (47) 18.12.2024                          |
| H04W 12/033                      | (22) 22.08.2019                  | (87) CN2017092830                        |
| H04W 12/041                      | (54) METHOD AND PACKET CORE      | 25.01.2018                               |
| H04W 12/069                      | SYSTEM FOR COMMON CHARGING       | (22) 13.07.2017                          |
| H04W 12/02                       | OF NETWORK CONNECTIVITY AND      | (54) SYNCHRONIZATION SIGNAL SENDING      |
| (11) EP3619905                   | CLOUD RESOURCE UTILIZATION       | AND RECEIVING METHOD AND                 |
| (21) EP18725091.5                | (73) TELEFONAKTIEBOLAGET LM      | APPARATUS, AND TRANSMISSION              |
| (47) 18.12.2024                  | ERICSSON (PUBL)                  | SYSTEM                                   |
| (87) US2018030143                | (72) WESTBERG, Lars              | (73) ZTE Corporation                     |
| 08.11.2018                       | ERIKSSON, Hans                   | (72) BI, Feng                            |
| (22) 30.04.2018                  | (51) H04L 12/40                  | GOU, Wei                                 |
| (54) PRIVACY INDICATORS FOR      | (11) EP4290810                   | ZHANG, Junfeng                           |
| CONTROLLING AUTHENTICATION       | (21) EP23205811.5                | HAO, Peng                                |
| REQUESTS                         | (47) 18.12.2024                  | (31) 201610567483                        |
| (73) Nokia Technologies Oy       | (22) 17.03.2021                  | (32) 18.07.2016                          |
| (72) JERICHOW, Anja              | (54) LOW LATENCY COMMAND         | (33) China                               |
| SEEFELDT, Annett                 | PROPAGATION PROTOCOL             |                                          |
| NAIR, Suresh                     | (73) INOVA Semiconductors GmbH   | (51) H04L 27/26                          |
| (31) 201715794856                | (72) Hoffmann, Stefan            | H04W 72/04                               |
| 201762502266 P                   | Li, Yanqin                       | H04L 5/00                                |
| (32) 26.10.2017                  | Neumann, Roland                  | (11) EP3890259                           |
| 05.05.2017                       | Riedel, Michael                  | (21) EP21156732.6                        |
| (33) United States of America    | (51) H04L 25/02                  | (47) 18.12.2024                          |
| United States of America         | H04L 27/26                       | (22) 15.06.2018                          |
|                                  |                                  | (54) METHOD AND APPARATUS FOR            |
|                                  |                                  | DETERMINING RESOURCE BLOCK               |
|                                  |                                  | GROUP SIZE                               |

|                                             |                                  |                                         |
|---------------------------------------------|----------------------------------|-----------------------------------------|
| (73) Huawei Technologies Co., Ltd.          | (73) Hitachi Energy Ltd          | (54) SYSTEM AND METHOD FOR              |
| (72) LI, Yuanjie                            | (72) TIAHJONO, Danurahardjo      | MULTIPATH TRANSMISSION WITH             |
| WANG, Ting                                  | REGMI, Prabhat                   | EFFICIENT ADJUSTABLE RELIABILITY        |
| WANG, Yi                                    | (31) 201615175100                | (73) Deutsche Telekom AG                |
| LI, Hua                                     | (32) 07.06.2016                  | (72) KASSLER, Andreas                   |
| LIU, Zhe                                    | (33) United States of America    | AMEND, Markus                           |
| TANG, Zhenfei                               | (51) H04L 45/02                  | BOGENFELD, Eckard                       |
| TANG, Hao                                   | H04L 45/50                       | PIESKA, Marcus                          |
| CAO, Yongzhao                               | (11) EP3984176                   | BRUNSTROM, Anna                         |
| (31) 201711149071                           | (21) EP20822094.7                | (51) H04L 51/046                        |
| 201710459135                                | (47) 18.12.2024                  | (11) EP3939217                          |
| (32) 17.11.2017                             | (87) IL2020050556                | (21) EP20727875.5                       |
| 16.06.2017                                  | 17.12.2020                       | (47) 18.12.2024                         |
| (33) China                                  | (22) 21.05.2020                  | (87) US2020028483                       |
| China                                       | (54) A METHOD AND A DEVICE FOR   | 03.12.2020                              |
| (51) H04L 41/0654                           | ROUTING TRAFFIC ALONG AN IGP     | (22) 16.04.2020                         |
| H04L 41/14                                  | SHORTCUT PATH                    | (54) INITIATING A BUSINESS MESSAGING    |
| H04L 41/147                                 | (73) Drivenets Ltd.              | SESSION                                 |
| H04L 41/16                                  | (72) SHMIDT, Eliyahu             | (73) Apple Inc.                         |
| H04L 41/149                                 | STARETZ-ARIE, Ilana              | (72) MALLICK, Malay                     |
| H04L 41/5009                                | GELBERGER, Alexander             | KUMAR, Mithilesh                        |
| H04L 43/0817                                | GAL, Tamir                       | CHANG, Jae Woo                          |
| H04L 41/142                                 | (31) 201962859747 P              | YE, Zhaoyuan                            |
| (11) EP4140098                              | (32) 11.06.2019                  | MEEHAN, John N.                         |
| (21) EP20723539.1                           | (33) United States of America    | VAN OS, Marcel                          |
| (47) 18.12.2024                             | (51) H04L 45/125                 | BAPAT, Akshay                           |
| (87) IB2020053888                           | (11) EP4373049                   | PETRENCO, Elmira                        |
| 28.10.2021                                  | (21) EP24167238.5                | RITCHIE, Grant C.                       |
| (22) 24.04.2020                             | (47) 18.12.2024                  | PODSTAWCZYNSKI, Adam R.                 |
| (54) AUTOMATED REASONING FOR                | (22) 03.10.2006                  | KOLLURU, Sampath Sree Kumar             |
| EVENT MANAGEMENT IN CLOUD                   | (54) ROUTE SELECTION WITH        | MARUSCO, Austin A.                      |
| PLATFORMS                                   | BANDWIDTH SHARING OPTIMIZATION   | (31) 201916428897                       |
| (73) Telefonaktiebolaget LM Ericsson (publ) | OVER RINGS                       | (32) 31.05.2019                         |
| (72) MOURADIAN, Carla                       | (73) ORCKIT IP, LLC              | (33) United States of America           |
| SQUALHIA, Mbarka                            | (72) AGMON, Gideon               | (51) H04L 51/214                        |
| LI, Wubin                                   | BAR SHESHET, Yossi               | G06F 9/54                               |
| (51) H04L 41/0897                           | (31) 339148                      | G06F 16/245                             |
| H04L 41/122                                 | (32) 24.01.2006                  | (11) EP4315795                          |
| H04L 41/50                                  | (33) United States of America    | (21) EP22720811.3                       |
| (11) EP3857821                              | (51) H04L 45/128                 | (47) 18.12.2024                         |
| (21) EP18789258.3                           | H04W 40/08                       | (87) US2022022102                       |
| (47) 18.12.2024                             | H04W 40/24                       | 06.10.2022                              |
| (87) SE2018050978                           | H04W 40/00                       | (22) 28.03.2022                         |
| 02.04.2020                                  | H04W 40/32                       | (54) ASYNCHRONOUS EVENT-BASED           |
| (22) 26.09.2018                             | (11) EP4084441                   | DISTRIBUTED MESSAGING SERVICE           |
| (54) METHOD, FIRST AGENT AND                | (21) EP22166083.0                | (73) Google LLC                         |
| COMPUTER PROGRAM PRODUCT                    | (47) 18.12.2024                  | (72) PERALEZ, Phillip, Wayne            |
| CONTROLLING COMPUTING                       | (22) 31.03.2022                  | MISTRY, Shaunak                         |
| RESOURCES IN A CLOUD NETWORK                | (54) GATEWAY LINK MANAGEMENT     | (31) 202117216608                       |
| FOR ENABLING A MACHINE                      | BETWEEN DISJOINT SUBNETWORKS     | (32) 29.03.2021                         |
| LEARNING OPERATION                          | IN A CDMA MANET                  | (33) United States of America           |
| (73) Telefonaktiebolaget LM Ericsson (publ) | (73) L3Harris Technologies, Inc. | (51) H04L 67/06                         |
| (72) REIJONEN, Joel                         | (72) THORP, Bryan J.             | H04L 67/52                              |
| OPSENICA, Miljenko                          | REIMANN, Matthew J.              | H04L 69/24                              |
| (51) H04L 45/00                             | NEWBOLD, Patrick L.              | H04L 67/10                              |
| H04L 45/02                                  | KENNEY, Brent A.                 | (11) EP4207710                          |
| H04L 45/745                                 | BENCH, Jeffrey B.                | (21) EP22214567.4                       |
| H04L 45/247                                 | (31) 202117246023                | (47) 18.12.2024                         |
| H04L 12/44                                  | (32) 30.04.2021                  | (22) 19.12.2022                         |
| H04L 12/46                                  | (33) United States of America    | (54) LOCATION AWARE LEARNING            |
| H04L 9/40                                   | (51) H04L 47/52                  | SYSTEM FOR CONTENT                      |
| (11) EP3466027                              | H04L 47/34                       | DISPENSATION FOR RESOURCE-              |
| (21) EP17729738.9                           | H04L 47/25                       | CONSTRAINED EDGE DEVICES                |
| (47) 18.12.2024                             | (11) EP4075742                   | (73) Accenture Global Solutions Limited |
| (87) US2017036080                           | (21) EP21168248.9                | (72) Subramaniam, Venkatesh             |
| 14.12.2017                                  | (47) 18.12.2024                  | Mallaiah, Yogesh                        |
| (22) 06.06.2017                             | (22) 14.04.2021                  | Sai Srinivas, Satya                     |
| (54) NETWORK ISOLATION                      |                                  | Podder, Sanjay                          |

|                                    |                                                |                                               |
|------------------------------------|------------------------------------------------|-----------------------------------------------|
| Kuntagod, Nataraj                  | (31) 201862668131 P                            | H04L 67/1034                                  |
| (31) 202141059903                  | (32) 07.05.2018                                | H04N 21/234                                   |
| 202217744325                       | (33) United States of America                  | H04N 21/44                                    |
| (32) 22.12.2021                    | (51) H04L 67/51                                | H04N 21/6405                                  |
| 13.05.2022                         | H04L 67/561                                    | (11) EP4254911                                |
| (33) India                         | H04L 67/04                                     | (21) EP22305380.2                             |
| United States of America           | H04L 41/5051                                   | (47) 18.12.2024                               |
| (51) H04L 67/1021                  | H04L 41/50                                     | (22) 28.03.2022                               |
| H04L 67/563                        | H04L 41/0668                                   | (54) METHOD FOR ENSURING SERVICE              |
| (11) EP3968610                     | H04L 43/065                                    | CONTINUITY WHEN DELIVERING AN                 |
| (21) EP20806492.3                  | H04L 43/0817                                   | AUDIO AND/OR VIDEO CONTENT IN A               |
| (47) 18.12.2024                    | (11) EP4029198                                 | MOBILE NETWORK                                |
| (87) CN2020086398                  | (21) EP20862143.3                              | (73) Broadpeak                                |
| 19.11.2020                         | (47) 18.12.2024                                | (72) Bichot, Guillaume                        |
| (22) 23.04.2020                    | (87) CN2020114262                              | Richard, Vincent                              |
| (54) METHOD, DEVICE, AND SYSTEM    | 18.03.2021                                     | Tran, Tuan                                    |
| FOR SELECTING MOBILE EDGE          | (22) 09.09.2020                                | (51) H04L 67/61                               |
| COMPUTING NODE                     | (54) METHOD AND APPARATUS FOR                  | (11) EP4274197                                |
| (73) Tencent Technology (Shenzhen) | SERVICE MANAGEMENT                             | (21) EP22171584.0                             |
| Company Limited                    | (73) Telefonaktiebolaget LM Ericsson (publ)    | (47) 18.12.2024                               |
| (72) LOU, Jiajia                   | (72) LI, Peng                                  | (22) 04.05.2022                               |
| YOU, Zhiqiang                      | (31) PCT/CN2019/105744                         | (54) DATA COMMUNICATION                       |
| (31) 201910387587                  | (32) 12.09.2019                                | MANAGING COMPONENT AND                        |
| (32) 10.05.2019                    | (33) World Intellectual Property Office (WIPO) | METHOD FOR PERFORMING                         |
| (33) China                         | (51) H04L 67/51                                | GUARANTEED PERFORMANCE DATA                   |
| (51) H04L 67/12                    | H04L 67/562                                    | COMMUNICATION                                 |
| H04L 67/1014                       | H04L 67/02                                     | (73) NTT DOCOMO, INC.                         |
| H04L 61/4511                       | H04L 69/22                                     | (72) KUNO, Yuya                               |
| H04W 4/48                          | (11) EP4189864                                 | TRIAY MARQUES, Joan                           |
| H04W 12/03                         | (21) EP21735308.5                              | KATSALIS, Kostas                              |
| H04L 9/40                          | (47) 18.12.2024                                | (51) H04M 1/02                                |
| (11) EP3965394                     | (87) EP2021067507                              | G06F 1/16                                     |
| (21) EP20194841.1                  | 03.02.2022                                     | H04M 1/72454                                  |
| (47) 18.12.2024                    | (22) 25.06.2021                                | (11) EP4228230                                |
| (22) 07.09.2020                    | (54) NETWORK FUNCTIONALITY (NF)                | (21) EP22830350.9                             |
| (54) METHOD FOR CONTROLLING AN     | AWARE SERVICE PROVISION BASED                  | (47) 18.12.2024                               |
| INTERNET-BASED COMMUNICATION       | ON SERVICE COMMUNICATION                       | (87) CN2022116202                             |
| (73) VOLKSWAGEN AG                 | PROXY (SCP)                                    | 06.07.2023                                    |
| (72) van Kasteren, Jarno           | (73) Telefonaktiebolaget LM Ericsson (publ)    | (22) 31.08.2022                               |
| (51) H04L 67/125                   | (72) HALLENSTAL, Magnus                        | (54) METHOD FOR DETERMINING                   |
| H04L 67/025                        | RODRIGO, Maria Cruz Bartolome                  | INCLUDED ANGLE OF FOLDING                     |
| H04L 67/12                         | (31) 20382709                                  | SCREEN AND RELATED DEVICE                     |
| H04Q 9/00                          | (32) 31.07.2020                                | THEREOF                                       |
| (11) EP3993345                     | (33) European Patent Office (EPO)              | (73) Honor Device Co., Ltd.                   |
| (21) EP20204451.7                  | (51) H04L 67/53                                | (72) DI, Haoxuan                              |
| (47) 18.12.2024                    | H04L 67/50                                     | ZHANG, Xiaowu                                 |
| (22) 28.10.2020                    | H04L 67/562                                    | LI, Danhong                                   |
| (54) APPARATUS AND METHOD FOR      | H04L 67/306                                    | CHEN, Zheng                                   |
| REMOTE MONITORING                  | H04M 3/51                                      | (31) 202111633647                             |
| (73) Furuno Hellas S.A.            | (11) EP4241437                                 | (32) 28.12.2021                               |
| (72) STAVROU, Nikolaos             | (21) EP21820376.8                              | (33) China                                    |
| (51) H04L 67/306                   | (47) 18.12.2024                                | (51) H04M 1/02                                |
| H04L 67/125                        | (87) US2021058128                              | H01Q 1/24                                     |
| H04L 67/51                         | 12.05.2022                                     | H01Q 1/44                                     |
| H04L 67/50                         | (22) 04.11.2021                                | H02J 7/00                                     |
| G06F 3/16                          | (54) SYSTEMS FOR PROVIDING                     | H02J 50/00                                    |
| H04L 12/28                         | PERSONALIZED CONTEXT                           | H02J 50/20                                    |
| (11) EP3783867                     | (73) Genesys Cloud Services, Inc.              | (11) EP3945712                                |
| (21) EP20200530.2                  | (72) ZHAO, William                             | (21) EP21170871.4                             |
| (47) 18.12.2024                    | HUNG, Colin Kum-teng                           | (47) 18.12.2024                               |
| (22) 01.02.2019                    | JOHN-CHUAN, Clive                              | (22) 28.04.2021                               |
| (54) PROVIDING COMPOSITE GRAPHICAL | CULBERT, Robert J.                             | (54) ELECTRONIC DEVICE                        |
| ASSISTANT INTERFACES               | JIANG, John Bohan                              | (73) Beijing Xiaomi Mobile Software Co., Ltd. |
| FOR CONTROLLING VARIOUS            | (31) 202063109413 P                            | (72) LI, Yueliang                             |
| CONNECTED DEVICES                  | (32) 04.11.2020                                | (31) 202010751661                             |
| (73) Google LLC                    | (33) United States of America                  | (32) 30.07.2020                               |
| (72) NI, Yuzhao                    | (51) H04L 67/568                               | (33) China                                    |
| SCHAIERER, David Roy               | H04N 21/60                                     | (51) H04M 1/02                                |

|                                    |                                                |                                              |
|------------------------------------|------------------------------------------------|----------------------------------------------|
| H01R 12/71                         | (47) 18.12.2024                                | (47) 18.12.2024                              |
| H01R 24/50                         | (87) KR2020004404                              | (22) 21.11.2018                              |
| H05K 1/14                          | 07.10.2021                                     | (54) METHOD FOR OMNI-CHANNEL                 |
| (11) EP3726821                     | (22) 31.03.2020                                | NOTIFICATION AND SELECTION                   |
| (21) EP19746761.6                  | (54) MOBILE TERMINAL FOR DISPLAYING            | (73) Genesys Cloud Services Holdings II, LLC |
| (47) 18.12.2024                    | IMAGE AND CONTROL METHOD                       | (72) SIVAKUMAR, Venkatesh                    |
| (87) KR2019001349                  | THEREFOR                                       | ANANDADOSS, Praveen Kumar                    |
| 08.08.2019                         | (73) LG Electronics Inc.                       | SUBRAMANIAN, Rajeshkumar                     |
| (22) 31.01.2019                    | (72) KIM, Chang Mok                            | (31) 201816028972                            |
| (54) ELECTRONIC APPARATUS          | (51) H04M 3/42                                 | (32) 06.07.2018                              |
| COMPRISING CONNECTOR OF            | H04M 1/57                                      | (33) United States of America                |
| STACKED STRUCTURE                  | H04M 1/725                                     | (51) H04M 3/51                               |
| (73) Samsung Electronics Co., Ltd. | H04M 3/436                                     | H04M 3/523                                   |
| (72) SON, Dongil                   | H04M 1/663                                     | H04M 1/725                                   |
| PARK, Junghoon                     | (11) EP3991396                                 | (11) EP4243391                               |
| LEE, Hyangbok                      | (21) EP20832835.1                              | (21) EP23182509.2                            |
| KIM, Yonghwa                       | (47) 18.12.2024                                | (47) 18.12.2024                              |
| (31) 20180011726                   | (87) US2020039562                              | (22) 21.11.2018                              |
| (32) 31.01.2018                    | 30.12.2020                                     | (54) METHOD FOR OMNI-CHANNEL                 |
| (33) Korea (Republic)              | (22) 25.06.2020                                | NOTIFICATION AND SELECTION                   |
| (51) H04M 1/02                     | (54) IDENTIFYING, SCREENING,                   | (73) Genesys Cloud Services Holdings II, LLC |
| H04M 1/03                          | AND BLOCKING OF CALLS                          | (72) SIVAKUMAR, Venkatesh                    |
| H04M 1/18                          | FROM PROBLEMATIC                               | ANANDADOSS, Praveen Kumar                    |
| G06F 1/16                          | TELECOMMUNICATIONS CARRIERS                    | SUBRAMANIAN, Rajeshkumar                     |
| H05K 5/02                          | AND NUMBER BLOCKS                              | (31) 201816028972                            |
| (11) EP4113959                     | (73) Youmail, Inc                              | (32) 06.07.2018                              |
| (21) EP22735757.1                  | (72) QUILICI, Alexander, E.                    | (33) United States of America                |
| (47) 18.12.2024                    | RUDOLPH, Michael, J.                           | (51) H04M 15/00                              |
| (87) CN2022072604                  | (31) 201916451318                              | H04L 9/40                                    |
| 24.11.2022                         | (32) 25.06.2019                                | (11) EP4360253                               |
| (22) 18.01.2022                    | (33) United States of America                  | (21) EP21737382.8                            |
| (54) SHELL AND TERMINAL DEVICE     | (51) H04M 3/42                                 | (47) 18.12.2024                              |
| COMPRISING SAME                    | H04M 3/436                                     | (87) EP2021067429                            |
| (73) Honor Device Co., Ltd.        | (11) EP4099670                                 | 24.11.2022                                   |
| (72) XUE, Kangle                   | (21) EP22186278.2                              | (22) 24.06.2021                              |
| WANG, Yan                          | (47) 18.12.2024                                | (54) BLOCKCHAIN-BASED INTEGRITY              |
| GAO, Jiuliang                      | (22) 25.08.2020                                | PROTECTION FOR CDR                           |
| WANG, Chuanguo                     | (54) DETECTION OF SPOOFED CALLS                | (73) Telefonaktiebolaget LM Ericsson (publ)  |
| (31) 202121085023 U                | USING CALL HEADER                              | (72) MEIROSU, Catalin                        |
| (32) 20.05.2021                    | (73) Google LLC                                | REVEMAN, Jon                                 |
| (33) China                         | (72) LU, Shi                                   | WELIN, Annikki                               |
| (51) H04M 1/60                     | YANG, Ji                                       | (51) H04N 1/40                               |
| H04M 1/72403                       | YIN, Jun                                       | H04N 5/33                                    |
| (11) EP4131907                     | (31) 201962948183 P                            | H04N 1/48                                    |
| (21) EP22790187.3                  | (32) 13.12.2019                                | (11) EP3926939                               |
| (47) 18.12.2024                    | (33) United States of America                  | (21) EP21179214.8                            |
| (87) CN2022088074                  | (51) H04M 3/436                                | (47) 18.12.2024                              |
| 22.12.2022                         | H04M 3/22                                      | (22) 14.06.2021                              |
| (22) 21.04.2022                    | (11) EP3977715                                 | (54) IMAGE PROCESSING APPARATUS              |
| (54) SOUND RECORDING METHOD AND    | (21) EP20721264.8                              | AND IMAGE READING METHOD                     |
| APPARATUS                          | (47) 18.12.2024                                | (73) Ricoh Company, Ltd.                     |
| (73) Honor Device Co., Ltd.        | (87) EP2020062124                              | (72) NAKAZAWA, Masamoto                      |
| (72) ZHANG, Shengwei               | 03.12.2020                                     | SHUKUYA, Yuichiro                            |
| CHU, Jianfei                       | (22) 30.04.2020                                | Oyama, Tadaaki                               |
| YANG, Xiao                         | (54) ROUTING OF AUTOMATED CALLS IN A           | (31) 2020104460                              |
| YEH, Chienfeng                     | COMMUNICATIONS NETWORK                         | (32) 17.06.2020                              |
| LIU, Zhenyi                        | (73) British Telecommunications public limited | (33) Japan                                   |
| XUAN, Jianyong                     | company                                        | (51) H04N 1/62                               |
| WU, Yuanyou                        | (72) WALKER, Joanne                            | (11) EP4093008                               |
| (31) 202110663657                  | CLAXTON, Robert                                | (21) EP22173182.1                            |
| (32) 15.06.2021                    | (31) 19176597                                  | (47) 18.12.2024                              |
| (33) China                         | (32) 24.05.2019                                | (22) 13.05.2022                              |
| (51) H04M 1/725                    | (33) European Patent Office (EPO)              | (54) INFORMATION PROCESSING                  |
| H04M 1/02                          | (51) H04M 3/51                                 | APPARATUS, INFORMATION                       |
| H04M 1/72403                       | H04M 3/523                                     | PROCESSING METHOD, AND                       |
| G06F 1/16                          | H04M 1/725                                     | PROGRAM                                      |
| (11) EP4131909                     | (11) EP4246948                                 | (73) CANON KABUSHIKI KAISHA                  |
| (21) EP20929224.2                  | (21) EP23182505.0                              | (72) ODERA, Satoru                           |

|                                  |                                               |                                          |
|----------------------------------|-----------------------------------------------|------------------------------------------|
| (31) 2021083082                  | 05.08.2021                                    | (21) EP19199749.3                        |
| (32) 17.05.2021                  | (22) 28.01.2021                               | (47) 18.12.2024                          |
| (33) Japan                       | (54) PROJECTION SYSTEM AND METHOD             | (22) 20.09.2013                          |
| (51) H04N 7/12                   | FOR UNIFORMITY CORRECTION                     | (54) MOTION-CONSTRAINED TILE SET         |
| H04N 19/12                       | (73) Dolby Laboratories Licensing Corporation | FOR REGION OF INTEREST CODING            |
| H04N 19/157                      | (72) SHIELDS, Jerome, D.                      | (73) Microsoft Technology Licensing, LLC |
| H04N 19/187                      | (31) 202063125202 P                           | (72) WU, Yongjun                         |
| H04N 19/61                       | 202062967655 P                                | ZHANG, Yifu                              |
| H04N 19/70                       | (32) 14.12.2020                               | SULLIVAN, Gary J.                        |
| H04N 19/91                       | 30.01.2020                                    | (31) 201314021883                        |
| (11) EP3881530                   | (33) United States of America                 | 201361809427 P                           |
| (21) EP20859431.7                | United States of America                      | (32) 09.09.2013                          |
| (47) 18.12.2024                  | (51) H04N 9/31                                | 08.04.2013                               |
| (87) US2020047223                | G02B 27/46                                    | (33) United States of America            |
| 04.03.2021                       | G03H 1/22                                     | United States of America                 |
| (22) 20.08.2020                  | (11) EP4285588                                | (51) H04N 19/105                         |
| (54) METHOD AND APPARATUS FOR    | (21) EP22703821.3                             | H04N 19/50                               |
| VIDEO CODING                     | (47) 18.12.2024                               | H04N 19/176                              |
| (73) Tencent America LLC         | (87) US2022014153                             | H04N 19/119                              |
| (72) ZHAO, Xin                   | 04.08.2022                                    | H04N 19/172                              |
| LIU, Shan                        | (22) 27.01.2022                               | H04N 19/136                              |
| ZHAO, Liang                      | (54) PROJECTION SYSTEM AND METHOD             | (11) EP3403405                           |
| LI, Xiang                        | WITH PIXEL SHIFTING                           | (21) EP17703841.1                        |
| (31) 201962891045 P              | (73) Dolby Laboratories Licensing Corporation | (47) 18.12.2024                          |
| (32) 23.08.2019                  | (72) RICHARDS, Martin J.                      | (87) US2017013485                        |
| (33) United States of America    | PERTIERRA, Juan Pablo                         | 20.07.2017                               |
| (51) H04N 7/18                   | (31) 202163143149 P                           | (22) 13.01.2017                          |
| B66C 13/00                       | 21154272                                      | (54) MULTI-TYPE-TREE FRAMEWORK FOR       |
| G06T 7/00                        | (32) 29.01.2021                               | VIDEO CODING                             |
| G08B 25/00                       | 29.01.2021                                    | (73) Qualcomm Incorporated               |
| G08B 29/20                       | (33) United States of America                 | (72) ZHAO, Xin                           |
| B66C 13/46                       | European Patent Office (EPO)                  | KARCZEWICZ, Marta                        |
| (11) EP3595298                   | (51) H04N 13/282                              | LI, Xiang                                |
| (21) EP18763563.6                | H04N 13/349                                   | ZHANG, Li                                |
| (47) 18.12.2024                  | H04N 13/351                                   | CHEN, Jianle                             |
| (87) JP2018009293                | H04B 10/116                                   | CHIEN, Wei-Jung                          |
| 13.09.2018                       | (11) EP4088450                                | (31) 201715404634                        |
| (22) 09.03.2018                  | (21) EP21757432.6                             | 201662279233 P                           |
| (54) HUMAN DETECTION SYSTEM FOR  | (47) 18.12.2024                               | (32) 12.01.2017                          |
| WORK VEHICLE, AND WORK VEHICLE   | (87) IB2021051135                             | 15.01.2016                               |
| EQUIPPED WITH SAME               | 26.08.2021                                    | (33) United States of America            |
| (73) Tadano Ltd.                 | (22) 11.02.2021                               | United States of America                 |
| (72) TOYOSAKI Tomohiro           | (54) MULTIVIEW SYSTEM, METHOD                 | (51) H04N 19/119                         |
| TAKAHASHI Masafumi               | AND DISPLAY FOR RENDERING                     | H04N 19/139                              |
| ISHIKAWA Iwao                    | MULTIVIEW CONTENT, AND VIEWER                 | H04N 19/105                              |
| (31) 2017046830                  | LOCALISATION SYSTEM, METHOD                   | H04N 19/513                              |
| (32) 10.03.2017                  | AND DEVICE THEREFOR                           | H04N 19/176                              |
| (33) Japan                       | (73) Evolution Optiks Limited                 | H04N 19/44                               |
| (51) H04N 9/31                   | (72) ETIGSON, Joseph Ivar                     | H04N 19/577                              |
| (11) EP4210326                   | MIHALI, Raul                                  | (11) EP4243419                           |
| (21) EP23150946.4                | CARTER, Jean-Michel Delisle                   | (21) EP23184716.1                        |
| (47) 18.12.2024                  | (31) 202062978160 P                           | (47) 18.12.2024                          |
| (22) 10.01.2023                  | 202062978129 P                                | (22) 12.03.2020                          |
| (54) PROJECTION POSITION GUIDING | (32) 18.02.2020                               | (54) VIDEO CODING FOR GEOMETRIC          |
| METHOD                           | 18.02.2020                                    | INTER PARTITION PREDICTION               |
| (73) Coretronic Corporation      | (33) United States of America                 | (73) Beijing Dajia Internet Information  |
| (72) TU, HSUN-CHENG              | United States of America                      | Technology Co., Ltd.                     |
| YANG, CHUNG-LUNG                 | (51) H04N 19/105                              | (72) XIU, Xiaoyu                         |
| PENG, CHIEN-CHUN                 | H04N 19/167                                   | CHEN, Yi-Wen                             |
| HSU, KANG-SHUN                   | H04N 19/174                                   | MA, Tsung-Chuan                          |
| (31) 202210022225                | H04N 19/436                                   | WANG, Xianglin                           |
| (32) 10.01.2022                  | H04N 19/577                                   | (31) 201962817852 P                      |
| (33) China                       | H04N 19/70                                    | 201962817537 P                           |
| (51) H04N 9/31                   | H04N 19/55                                    | (32) 13.03.2019                          |
| (11) EP4097969                   | H04N 19/107                                   | 12.03.2019                               |
| (21) EP21706810.5                | H04N 19/40                                    | (33) United States of America            |
| (47) 18.12.2024                  | H04N 19/65                                    | United States of America                 |
| (87) US2021015554                | (11) EP3606068                                | (51) H04N 19/186                         |

|                                                |                                                |                                   |
|------------------------------------------------|------------------------------------------------|-----------------------------------|
| H04N 19/176                                    | (72) GAO, Min                                  | (72) Mao, Weidong                 |
| H04N 19/593                                    | LIU, Chen                                      | Ramaswamy, Srinath V.             |
| H04N 19/103                                    | FU, Deliang                                    | Press, Jason                      |
| H04N 19/61                                     | MA, Juncheng                                   | (31) 201916244783                 |
| (11) EP3903493                                 | ZHANG, Wenhao                                  | (32) 10.01.2019                   |
| (21) EP20759225.4                              | (31) 201862650864 P                            | (33) United States of America     |
| (47) 18.12.2024                                | (32) 30.03.2018                                | (51) H04N 21/234                  |
| (87) CN2020076362                              | (33) United States of America                  | H04N 19/132                       |
| 27.08.2020                                     | (51) H04N 19/57                                | H04N 19/645                       |
| (22) 24.02.2020                                | H04N 19/56                                     | H04N 19/124                       |
| (54) PARAMETER DERIVATION FOR INTRA            | H04N 19/513                                    | H04N 19/146                       |
| PREDICTION                                     | H04N 19/533                                    | H04N 19/174                       |
| (73) ByteDance Inc.                            | H04N 19/573                                    | (11) EP3632122                    |
| Beijing Bytedance Network Technology           | H04N 19/52                                     | (21) EP18828512.6                 |
| Co., Ltd.                                      | (11) EP3688991                                 | (47) 18.12.2024                   |
| (72) WANG, Yue                                 | (21) EP18726497.3                              | (87) AU2018000112                 |
| ZHANG, Kai                                     | (47) 18.12.2024                                | 10.01.2019                        |
| LIU, Hongbin                                   | (87) EP2018064247                              | (22) 03.07.2018                   |
| XU, Jizheng                                    | 18.04.2019                                     | (54) METHOD, APPARATUS AND SYSTEM |
| ZHANG, Li                                      | (22) 30.05.2018                                | FOR ENCODING AND DECODING         |
| (31) PCT/CN2019/079769                         | (54) LIMITED MEMORY ACCESS WINDOW              | VIDEO DATA                        |
| PCT/CN2019/079431                              | FOR MOTION VECTOR REFINEMENT                   | (73) Canon Kabushiki Kaisha       |
| PCT/CN2019/079396                              | (73) Huawei Technologies Co., Ltd.             | (72) DORRELL, Andrew James        |
| PCT/CN2019/076195                              | (72) KOTRA, Anand, Meher                       | ROSEWARNE, Christopher James      |
| PCT/CN2019/075993                              | ESENLIK, Semih                                 | (31) 2017204643                   |
| (32) 26.03.2019                                | GAO, Han                                       | (32) 07.07.2017                   |
| 25.03.2019                                     | ZHAO, Zhijie                                   | (33) Australia                    |
| 24.03.2019                                     | (31) PCT/EP2017/075710                         | (51) H04N 21/2343                 |
| 26.02.2019                                     | (32) 09.10.2017                                | (11) EP3603081                    |
| 24.02.2019                                     | (33) World Intellectual Property Office (WIPO) | (21) EP18713840.9                 |
| (33) World Intellectual Property Office (WIPO) | (51) H04N 21/2187                              | (47) 18.12.2024                   |
| World Intellectual Property Office (WIPO)      | H04N 21/258                                    | (87) EP2018057052                 |
| World Intellectual Property Office (WIPO)      | H04N 21/2665                                   | 04.10.2018                        |
| World Intellectual Property Office (WIPO)      | H04N 21/2743                                   | (22) 20.03.2018                   |
| World Intellectual Property Office (WIPO)      | H04N 21/418                                    | (54) METHOD FOR GENERATING MEDIA  |
| (51) H04N 19/503                               | H04N 21/45                                     | DATA                              |
| H04N 19/593                                    | H04N 21/658                                    | (73) Canon Kabushiki Kaisha       |
| H04N 19/134                                    | H04N 21/81                                     | (72) DENOVAL, Franck              |
| H04N 19/102                                    | H04N 21/242                                    | MAZE, Frédéric                    |
| H04N 19/48                                     | H04N 21/262                                    | (31) 201708337                    |
| G06T 9/00                                      | H04N 21/27                                     | 201704882                         |
| (11) EP3994888                                 | H04N 21/4402                                   | (32) 24.05.2017                   |
| (21) EP19735557.1                              | H04N 21/442                                    | 27.03.2017                        |
| (47) 18.12.2024                                | H04N 21/472                                    | (33) United Kingdom               |
| (87) EP2019067775                              | (11) EP3624457                                 | United Kingdom                    |
| 07.01.2021                                     | (21) EP18895114.9                              | (51) H04N 21/2343                 |
| (22) 02.07.2019                                | (47) 18.12.2024                                | H04N 21/2662                      |
| (54) INFERENCE PROCESSING OF DATA              | (87) CN2018117506                              | H04N 21/845                       |
| (73) Telefonaktiebolaget LM Ericsson (publ)    | 04.07.2019                                     | H04N 21/4402                      |
| (72) BASTANI, Saeed                            | (22) 26.11.2018                                | (11) EP3797518                    |
| LI, Yun                                        | (54) METHOD AND APPARATUS FOR LIVE             | (21) EP18765250.8                 |
| HUNT, Alexander                                | BROADCASTING                                   | (47) 18.12.2024                   |
| (51) H04N 19/52                                | (73) Guangzhou Kugou Computer Technology       | (87) US2018047224                 |
| H04N 19/105                                    | Co., Ltd.                                      | 27.02.2020                        |
| H04N 19/577                                    | (72) LV, Xianguang                             | (22) 21.08.2018                   |
| H04N 19/176                                    | (31) 201711482284                              | (54) SYSTEMS AND METHODS FOR      |
| H04N 19/103                                    | (32) 29.12.2017                                | REAL-TIME ADAPTIVE BITRATE        |
| H04N 19/137                                    | (33) China                                     | TRANSCODING AND TRANSMISSION      |
| (11) EP3777174                                 | (51) H04N 21/23                                | OF TRANSCODED MEDIA               |
| (21) EP19775251.2                              | H04N 21/262                                    | (73) Adeia Guides Inc.            |
| (47) 18.12.2024                                | H04N 21/658                                    | (72) DOBRZYNSKI, Maciej           |
| (87) US2019025043                              | (11) EP3681162                                 | OLIVER, Jonathan                  |
| 03.10.2019                                     | (21) EP20150991.6                              | MAYHEW, Steven                    |
| (22) 29.03.2019                                | (47) 18.12.2024                                | (51) H04N 21/442                  |
| (54) TEMPLATE BASED ADAPTIVE                   | (22) 09.01.2020                                | H04N 21/422                       |
| WEIGHTED BI-PREDICTION FOR                     | (54) SEAMLESS CONTENT ENCODING                 | H04N 21/41                        |
| VIDEO CODING                                   | AND TRANSMISSION                               | H04N 21/8547                      |
| (73) Hulu, LLC                                 | (73) Comcast Cable Communications, LLC         | H04N 21/4223                      |

|                                      |                                     |                                               |
|--------------------------------------|-------------------------------------|-----------------------------------------------|
| G06F 16/683                          | (22) 18.03.2019                     | (21) EP21188825.0                             |
| (11) EP3539296                       | (54) CAMERA MODULE AND OPTICAL      | (47) 18.12.2024                               |
| (21) EP17869772.8                    | DEVICE COMPRISING SAME              | (22) 30.07.2021                               |
| (47) 18.12.2024                      | (73) LG Innotek Co., Ltd.           | (54) IMAGE ACQUISITION MODULE AND             |
| (87) US2017050624                    | (72) CHUNG, Jong Ho                 | TERMINAL                                      |
| 17.05.2018                           | KIM, Min Soo                        | (73) Beijing Xiaomi Mobile Software Co., Ltd. |
| (22) 08.09.2017                      | OH, Hyun Ah                         | (72) CHEN, Chaoxi                             |
| (54) INTERACTION RECOGNITION OF A    | LEE, Sung Il                        | SUN, Changyu                                  |
| TELEVISION CONTENT INTERACTION       | KIM, In Hoe                         | (31) 202110124197                             |
| DEVICE                               | (31) 20180031895                    | (32) 29.01.2021                               |
| (73) Roku, Inc.                      | (32) 20.03.2018                     | (33) China                                    |
| (72) LOUBOUTIN, Sylvain René Yves    | (33) Korea (Republic)               | (51) H04N 23/56                               |
| (31) 201615348592                    | (51) H04N 23/54                     | H04M 1/22                                     |
| (32) 10.11.2016                      | H01L 27/146                         | H04M 1/02                                     |
| (33) United States of America        | H04N 23/55                          | H04N 23/55                                    |
| (51) H04N 21/643                     | (11) EP3481046                      | H04N 23/57                                    |
| H04N 21/8547                         | (21) EP17788772.6                   | G02B 7/00                                     |
| (11) EP3758388                       | (47) 18.12.2024                     | G02B 7/02                                     |
| (21) EP20175768.9                    | (87) CN2017082000                   | G02B 19/00                                    |
| (47) 18.12.2024                      | 02.11.2017                          | G03B 15/05                                    |
| (22) 08.09.2014                      | (22) 26.04.2017                     | G03B 30/00                                    |
| (54) TRANSMISSION METHOD,            | (54) IMAGE CAPTURING MODULE         | G02B 3/00                                     |
| RECEPTION METHOD, TRANSMITTER        | AND MOLDED PHOTSENSITIVE            | G02B 5/02                                     |
| APPARATUS, AND RECEIVER              | ASSEMBLY THEREFOR, MOLDED           | (11) EP3852347                                |
| APPARATUS                            | PHOTSENSITIVE ASSEMBLY              | (21) EP19859745.2                             |
| (73) Panasonic Intellectual Property | SEMI-FINISHED PRODUCT AND           | (47) 18.12.2024                               |
| Corporation of America               | MANUFACTURING METHOD, AND           | (87) KR2019011826                             |
| (72) IGUCHI, Noritaka                | ELECTRONIC DEVICE                   | 19.03.2020                                    |
| TOMA, Tadamasu                       | (73) Ningbo Sunny Opotech Co., Ltd. | (22) 11.09.2019                               |
| KATOU, Hisaya                        | (72) WANG, Mingzhu                  | (54) LIGHT-EMITTING MODULE AND                |
| (31) 2014173071                      | CHEN, Zhenyu                        | CAMERA MODULE                                 |
| 201361880304 P                       | LUAN, Zhongyu                       | (73) LG Innotek Co., Ltd.                     |
| (32) 27.08.2014                      | GUO, Nan                            | (72) PARK, Kang Yeol                          |
| 20.09.2013                           | HUANG, Zhen                         | LEE, Hee Se                                   |
| (33) Japan                           | TANAKA, Takehiko                    | KIM, Sung Phil                                |
| United States of America             | MEI, Zhewen                         | (31) 20180109796                              |
| (51) H04N 21/81                      | ZHAO, Bojie                         | (32) 13.09.2018                               |
| G06F 3/0481                          | (31) 201620875781 U                 | (33) Korea (Republic)                         |
| H04N 21/431                          | 201620876056 U                      | (51) H04N 23/66                               |
| H04N 21/422                          | 201610669214                        | (11) EP4037305                                |
| H04N 21/414                          | 201620875381 U                      | (21) EP20870217.5                             |
| G06T 19/00                           | 201620875383 U                      | (47) 18.12.2024                               |
| G06F 3/0488                          | 201610668807                        | (87) JP2020035124                             |
| G06F 3/0485                          | 201620373323 U                      | 01.04.2021                                    |
| G06F 3/0484                          | 201610278035                        | (22) 16.09.2020                               |
| (11) EP3605295                       | (32) 12.08.2016                     | (54) PHOTOGRAPHY SYSTEM, CONTROL              |
| (21) EP18857883.5                    | 12.08.2016                          | METHOD, PROGRAM, AND STORAGE                  |
| (47) 18.12.2024                      | 12.08.2016                          | MEDIUM                                        |
| (87) JP2018033398                    | 12.08.2016                          | (73) HONDA MOTOR CO., LTD.                    |
| 28.03.2019                           | 12.08.2016                          | (72) OKUBO, Katsuyuki                         |
| (22) 10.09.2018                      | 12.08.2016                          | FUJIWARA, Takao                               |
| (54) CONTROL DEVICE, CONTROL         | 28.04.2016                          | MITSUKAWA, Makoto                             |
| METHOD AND PROGRAM                   | 28.04.2016                          | YOSHIDA, Hiroaki                              |
| (73) Canon Kabushiki Kaisha          | (33) China                          | FUJITSU, Shun                                 |
| (72) KATO Yuji                       | China                               | NAKAUCHI, Kota                                |
| (31) 2017179581                      | China                               | WATANABE, Naruaki                             |
| (32) 19.09.2017                      | China                               | (31) 2019177692                               |
| (33) Japan                           | China                               | (32) 27.09.2019                               |
| (51) H04N 23/54                      | China                               | (33) Japan                                    |
| G03B 17/02                           | China                               | (51) H04N 23/68                               |
| G03B 30/00                           | (51) H04N 23/54                     | G06T 3/00                                     |
| H04N 23/57                           | H04N 23/55                          | (11) EP3854071                                |
| H04N 23/68                           | H04N 23/68                          | (21) EP19863228.3                             |
| (11) EP3771195                       | G02B 13/00                          | (47) 18.12.2024                               |
| (21) EP19771520.4                    | G02B 27/64                          | (87) US2019048368                             |
| (47) 18.12.2024                      | G02B 7/04                           | 26.03.2020                                    |
| (87) KR2019003108                    | (11) EP4036631                      | (22) 27.08.2019                               |
| 26.09.2019                           |                                     |                                               |

|                                                 |                                       |                                       |
|-------------------------------------------------|---------------------------------------|---------------------------------------|
| (54) SYSTEMS AND METHODS FOR STABILIZING VIDEOS | RODRIGUES DOS SANTOS                  | VERBEKE, Joseph                       |
| (73) GoPro, Inc.                                | GUERRINHA, João Tiago                 | MARTI, Stefan                         |
| (72) DOUADY, Cesar                              | NUNES DE SOUSA PIRES                  | BOULANGER, Adam                       |
| DERBANNE, Thomas                                | CARVALHIDO, Pedro Antero              | (31) 201815873852                     |
| KARPUSHIN, Maxim                                | (31) 2020116955                       | (32) 17.01.2018                       |
| (31) 201916391705                               | (32) 17.12.2020                       | (33) United States of America         |
| 201862733237 P                                  | (33) Portugal                         | (51) H04R 7/04                        |
| (32) 23.04.2019                                 | (51) H04R 1/10                        | H04R 9/06                             |
| 19.09.2018                                      | (11) EP4295584                        | (11) EP3606087                        |
| (33) United States of America                   | (21) EP22708843.2                     | (21) EP18915783.7                     |
| United States of America                        | (47) 18.12.2024                       | (47) 18.12.2024                       |
| (51) H04Q 9/00                                  | (87) EP2022053339                     | (87) JP2018017715                     |
| G01C 21/26                                      | 25.08.2022                            | 14.11.2019                            |
| G06Q 10/00                                      | (22) 11.02.2022                       | (22) 08.05.2018                       |
| G06Q 10/06                                      | (54) SOUND CHANNEL, PORTABLE          | (54) SPEAKER APPARATUS                |
| G06Q 40/08                                      | AUDIO DEVICE COMPRISING SUCH          | (73) Cityforest Workers Net Co., Ltd. |
| G07C 5/08                                       | A SOUND CHANNEL AND METHOD            | (72) YOKOHAMA, Kinpei                 |
| G06Q 10/20                                      | OF OPERATING SUCH A SOUND             | (51) H04R 9/06                        |
| G06Q 10/0635                                    | CHANNEL                               | H04R 9/04                             |
| G06Q 50/40                                      | (73) Sonion Nederland B.V.            | (11) EP3945730                        |
| (11) EP3914879                                  | (72) BOLSMAN, Caspar, Titus           | (21) EP21153188.4                     |
| (21) EP20745068.5                               | (31) 2027562                          | (47) 18.12.2024                       |
| (47) 18.12.2024                                 | (32) 16.02.2021                       | (22) 25.01.2021                       |
| (87) US2020014828                               | (33) Netherlands                      | (54) SPEAKER ASSEMBLY AND DISPLAY     |
| 30.07.2020                                      | (51) H04R 1/10                        | DEVICE COMPRISING IT                  |
| (22) 23.01.2020                                 | (11) EP3745735                        | (73) LG Electronics Inc.              |
| (54) METHODS, APPARATUSES, AND                  | (21) EP20174549.4                     | (72) JE, Yongjun                      |
| SYSTEMS FOR MONITORING AND                      | (47) 18.12.2024                       | LEE, Sangkeun                         |
| MAINTAINING VEHICLE CONDITION                   | (22) 14.05.2020                       | YOUN, Hyunseung                       |
| (73) Assurant, Inc.                             | (54) EARPHONE DEFINING A SEALED       | SONG, Genmoo                          |
| (72) PERKNA, Ronnie Blake                       | VENT CHANNEL WITH A FIRST             | (31) 20200093827                      |
| GRONSBELL, Dan                                  | EARTIP AND AN OPEN VENT               | (32) 28.07.2020                       |
| GARCIA, Angel                                   | CHANNEL WITH A SECOND EARTIP          | (33) Korea (Republic)                 |
| (31) 201962795832 P                             | (73) GUANGDONG OPPO MOBILE            | (51) H04R 25/00                       |
| (32) 23.01.2019                                 | TELECOMMUNICATIONS CORP., LTD.        | (11) EP3651477                        |
| (33) United States of America                   | (72) LIU, Bo                          | (21) EP19210098.0                     |
| (51) H04Q 9/00                                  | (31) 201910449252                     | (47) 18.12.2024                       |
| H01M 10/42                                      | 201920788583 U                        | (22) 08.05.2018                       |
| G01R 31/36                                      | (32) 28.05.2019                       | (54) A HEARING AID FOR PLACEMENT AT   |
| (11) EP4091334                                  | 28.05.2019                            | AN EAR OF A USER                      |
| (21) EP21710809.1                               | (33) China                            | (73) Oticon Medical A/S               |
| (47) 18.12.2024                                 | China                                 | (72) HAAGERUP, Emilie Munk            |
| (87) US2021018180                               | (51) H04R 1/28                        | ROSENGREN, Johan                      |
| 02.09.2021                                      | B81B 7/00                             | PEDERSEN, Peder Hesselbjerg           |
| (22) 16.02.2021                                 | (11) EP4024890                        | MORTENSEN, Mads Buur                  |
| (54) ACCELERATED ERROR TESTING FOR              | (21) EP20218015.4                     | (31) 17171091                         |
| WIRELESS BATTERY MANAGEMENT                     | (47) 18.12.2024                       | (32) 15.05.2017                       |
| SYSTEMS                                         | (22) 31.12.2020                       | (33) European Patent Office (EPO)     |
| (73) Sensata Technologies, Inc.                 | (54) MICROPHONE ASSEMBLY WITH         | (51) H04R 25/00                       |
| (72) RIGELSFORD, Jonathan M.                    | ACOUSTIC FILTER                       | G10L 25/60                            |
| HENRIET, Nicolas R.                             | (73) GN Hearing 2 A/S                 | G10L 25/15                            |
| (31) 202062983355 P                             | (72) Knudsen, Emil Holm               | (11) EP3962115                        |
| (32) 28.02.2020                                 | Obradovic, Gojko                      | (21) EP21190918.9                     |
| (33) United States of America                   | Christensen, René                     | (47) 18.12.2024                       |
| (51) H04Q 11/00                                 | Christiansen, Nikolaj                 | (22) 12.08.2021                       |
| (11) EP4264952                                  | (51) H04R 5/02                        | (54) METHOD FOR EVALUATING THE        |
| (21) EP21848188.5                               | H04S 7/00                             | SPEECH QUALITY OF A SPEECH            |
| (47) 18.12.2024                                 | G06F 3/01                             | SIGNAL BY MEANS OF A HEARING          |
| (87) IB2021060802                               | G06T 13/20                            | DEVICE                                |
| 23.06.2022                                      | (11) EP3515093                        | (73) Sivantos Pte. Ltd.               |
| (22) 22.11.2021                                 | (21) EP19152100.4                     | (72) LUGGER, Marko                    |
| (54) METHOD FOR CONFIGURING A FTTH              | (47) 18.12.2024                       | THIEMT, Jana                          |
| DISTRIBUTION NETWORK CELL                       | (22) 16.01.2019                       | (31) 102020210919                     |
| (73) Altice Labs, S.A.                          | (54) MOBILE SPEAKER SYSTEM FOR        | (32) 28.08.2020                       |
| (72) OLIVEIRA ROMEIRO, Manuel Agostinho         | VIRTUAL REALITY ENVIRONMENTS          | (33) Germany                          |
| VICENTE CADIME, Ricardo Nuno                    | (73) Harman International Industries, | (51) H04S 3/00                        |
|                                                 | Incorporated                          | H04S 7/00                             |
|                                                 | (72) KRATZ, Sven                      |                                       |



|                                  |                                            |                                    |
|----------------------------------|--------------------------------------------|------------------------------------|
| G10K 15/12                       | (32) 26.10.2018                            | (54) METHOD AND APPARATUS FOR      |
| G10L 19/00                       | (33) India                                 | REPORTING UE CAPABILITY FOR MR-    |
| G10L 19/008                      | (51) H04W 4/70                             | DC IN NR SYSTEM                    |
| (11) EP3699905                   | H04W 4/80                                  | (73) Samsung Electronics Co., Ltd. |
| (21) EP18868539.0                | H04W 12/02                                 | (72) JIN, Seungri                  |
| (47) 18.12.2024                  | H04W 8/00                                  | VAN DER VELDE, Himke               |
| (87) JP2018037330                | H04L 9/40                                  | (31) 20190035901                   |
| 25.04.2019                       | H04L 12/28                                 | (32) 28.03.2019                    |
| (22) 05.10.2018                  | H04W 76/14                                 | (33) Korea (Republic)              |
| (54) SIGNAL PROCESSING DEVICE,   | H04W 12/50                                 | (51) H04W 12/04                    |
| METHOD, AND PROGRAM              | (11) EP3679734                             | H04W 36/14                         |
| (73) Sony Group Corporation      | (21) EP18789545.3                          | H04L 9/14                          |
| (72) TSUJI, Minoru               | (47) 18.12.2024                            | H04L 9/32                          |
| HONMA, Hiroyuki                  | (87) US2018053371                          | H04W 12/106                        |
| CHINEN, Toru                     | 25.04.2019                                 | H04W 36/00                         |
| (31) 2017203877                  | (22) 28.09.2018                            | H04L 9/08                          |
| (32) 20.10.2017                  | (54) SECURE DEVICE TO DEVICE               | H04W 12/041                        |
| (33) Japan                       | COMMUNICATION CHANNEL                      | H04W 12/0433                       |
| (51) H04S 7/00                   | (73) Apple Inc.                            | (11) EP4109947                     |
| (11) EP4030786                   | (72) KROCHMAL, Marc                        | (21) EP22172893.4                  |
| (21) EP22155834.9                | BRADLEY, Bob                               | (47) 18.12.2024                    |
| (47) 18.12.2024                  | (31) 201762575373 P                        | (22) 22.10.2018                    |
| (22) 06.07.2016                  | (32) 21.10.2017                            | (54) KEY GENERATION METHOD,        |
| (54) CALIBRATION STATE VARIABLE  | (33) United States of America              | APPARATUS, AND SYSTEM              |
| (73) Sonos, Inc.                 | (51) H04W 4/70                             | (73) Huawei Technologies Co., Ltd. |
| (72) GRIFFITHS, Neil             | H04W 40/00                                 | (72) PAN, Kai                      |
| SHEEN, Timothy                   | H04W 36/08                                 | CHEN, Jing                         |
| WILBERDING, Dayn                 | (11) EP4229885                             | (31) 201710996047                  |
| (31) 201514793205                | (21) EP21790492.9                          | (32) 23.10.2017                    |
| 201514793190                     | (47) 18.12.2024                            | (33) China                         |
| (32) 07.07.2015                  | (87) EP2021078247                          | (51) H04W 12/041                   |
| 07.07.2015                       | 21.04.2022                                 | H04W 36/14                         |
| (33) United States of America    | (22) 13.10.2021                            | H04W 36/00                         |
| United States of America         | (54) LIMITING CELLULAR NETWORK             | (11) EP3767981                     |
| (51) H04S 7/00                   | INFLUENCE ON LATENCY IN AN                 | (21) EP19780668.0                  |
| H04R 3/04                        | INDUSTRIAL AUTOMATION SYSTEM               | (47) 18.12.2024                    |
| G10K 15/08                       | (73) ABB SCHWEIZ AG                        | (87) CN2019080964                  |
| (11) EP3944638                   | (72) LANDERNÄS, Krister                    | 10.10.2019                         |
| (21) EP20774002.8                | BAG, Gargi                                 | (22) 02.04.2019                    |
| (47) 18.12.2024                  | HOVILA, Petri                              | (54) COMMUNICATION METHOD AND      |
| (87) JP2020008997                | (31) 20201641                              | APPARATUS                          |
| 24.09.2020                       | (32) 13.10.2020                            | (73) Huawei Technologies Co., Ltd. |
| (22) 03.03.2020                  | (33) European Patent Office (EPO)          | (72) ZENG, Qinghai                 |
| (54) ACOUSTIC PROCESSING DEVICE, | (51) H04W 4/80                             | LIU, Xing                          |
| ACOUSTIC PROCESSING METHOD,      | G06Q 20/40                                 | CHEN, Jing                         |
| AND ACOUSTIC PROCESSING          | H04L 9/40                                  | XU, Xiaoying                       |
| PROGRAM                          | G06Q 20/32                                 | ZHAO, Yang                         |
| (73) Sony Group Corporation      | G06Q 20/34                                 | (31) 201810301411                  |
| (72) NAKAGAWA, Toru              | (11) EP3531358                             | (32) 04.04.2018                    |
| OKIMOTO, Koyuru                  | (21) EP18159017.5                          | (33) China                         |
| (31) 2019051931                  | (47) 18.12.2024                            | (51) H04W 12/06                    |
| (32) 19.03.2019                  | (22) 27.02.2018                            | H04W 12/08                         |
| (33) Japan                       | (54) REDUCING FRAUDULENT DATA              | H04W 12/041                        |
| (51) H04W 4/024                  | TRANSFERS                                  | H04W 4/90                          |
| H04W 4/33                        | (73) Mastercard International Incorporated | H04L 9/40                          |
| F24F 11/00                       | (72) ALI, Muhammad Yaseen                  | H04W 36/00                         |
| (11) EP3871428                   | (51) H04W 8/24                             | (11) EP3166351                     |
| (21) EP19797410.8                | H04W 76/16                                 | (21) EP15306757.4                  |
| (47) 18.12.2024                  | H04W 8/22                                  | (47) 18.12.2024                    |
| (87) US2019054719                | H04W 76/15                                 | (22) 05.11.2015                    |
| 30.04.2020                       | H04W 88/06                                 | (54) SUPPORT OF EMERGENCY          |
| (22) 04.10.2019                  | (11) EP3925250                             | SERVICES OVER WLAN ACCESS TO       |
| (54) SYSTEM FOR MONITORING SMART | (21) EP20779078.3                          | 3GPP EVOLVED PACKET CORE FOR       |
| UTILITIES                        | (47) 18.12.2024                            | UNAUTHENTICATED USERS              |
| (73) Carrier Corporation         | (87) KR2020004267                          | (73) Alcatel Lucent                |
| (72) SWAMI, Aditya               | 01.10.2020                                 | (72) DREVON, Nicolas               |
| KOTTUR, Guru Charan              | (22) 27.03.2020                            | THIEBAUT, Laurent                  |
| (31) 201811040476                |                                            | LANDAIS, Bruno                     |

|                                                                                                                      |                                                                                                         |                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| (51) H04W 12/122<br>H04W 36/00<br>H04W 36/08                                                                         | (54) BEAM FAILURE RECOVERY REQUEST<br>SENDING AND RECEIVING METHOD,<br>APPARATUS AND SYSTEM             | H04W 74/0833<br>H04W 74/08<br>H04W 74/00                                                                             |
| (11) EP3874785                                                                                                       | (73) Vivo Mobile Communication Co., Ltd.                                                                | (11) EP4118918                                                                                                       |
| (21) EP19877981.1                                                                                                    | (72) MA, Jingzhi                                                                                        | (21) EP20896692.9                                                                                                    |
| (47) 18.12.2024                                                                                                      | SUN, Peng                                                                                               | (47) 18.12.2024                                                                                                      |
| (87) FI2019050752<br>07.05.2020                                                                                      | YANG, Yu                                                                                                | (87) CN2020083899<br>10.06.2021                                                                                      |
| (22) 23.10.2019                                                                                                      | (31) 201711148199                                                                                       | (22) 09.04.2020                                                                                                      |
| (54) ISOLATING FALSE BASE STATIONS IN<br>COMMUNICATION SYSTEMS                                                       | (32) 17.11.2017                                                                                         | (54) SYSTEMS AND METHODS FOR<br>REPORTING RANDOM ACCESS<br>INFORMATION IN WIRELESS<br>COMMUNICATION NETWORKS         |
| (73) Nokia Technologies Oy                                                                                           | (33) China                                                                                              | (73) ZTE Corporation                                                                                                 |
| (72) NAIR, Suresh                                                                                                    | (51) H04W 24/02<br>H04W 36/00                                                                           | (72) QIU, Zhihong<br>HUANG, He                                                                                       |
| (31) 201816178211                                                                                                    | (11) EP3691324                                                                                          | (51) H04W 28/02<br>H04B 17/318                                                                                       |
| (32) 01.11.2018                                                                                                      | (21) EP18860675.0                                                                                       | (11) EP4238246                                                                                                       |
| (33) United States of America                                                                                        | (47) 18.12.2024                                                                                         | (21) EP21814985.4                                                                                                    |
| (51) H04W 16/14<br>H04W 16/10<br>H04W 24/02<br>H04W 24/10<br>H04W 4/021                                              | (87) CN2018105871<br>04.04.2019                                                                         | (47) 18.12.2024                                                                                                      |
| (11) EP3723397                                                                                                       | (22) 15.09.2018                                                                                         | (87) US2021056887<br>05.05.2022                                                                                      |
| (21) EP20166810.0                                                                                                    | (54) COMMUNICATION METHOD AND<br>APPARATUS TO EXCHANGE CELL<br>MEASUREMENT CONFIGURATION<br>INFORMATION | (22) 27.10.2021                                                                                                      |
| (47) 18.12.2024                                                                                                      | (73) Huawei Technologies Co., Ltd.                                                                      | (54) SELECTIVE SPATIAL REUSE<br>TRANSMISSIONS                                                                        |
| (22) 30.03.2020                                                                                                      | (72) LIU, Jin                                                                                           | (73) QUALCOMM INCORPORATED                                                                                           |
| (54) ADAPTIVE CHANNEL<br>ORCHESTRATION                                                                               | LUO, Jun                                                                                                | (72) BHATTACHARYA, Abhijit<br>PALANIVELU, Arul Durai Murugan<br>BELUR RAMACHANDRA, Vinod<br>KRISHNA KUMAR, Raj Kumar |
| (73) Airspan IP Holdco LLC                                                                                           | ZARIFI, Keyvan                                                                                          | (31) 202041047773                                                                                                    |
| (72) Logothetis, Andrew                                                                                              | YUAN, Pu                                                                                                | (32) 02.11.2020                                                                                                      |
| Goel, Ashvtosh                                                                                                       | AU, Kelvin Kar Kin                                                                                      | (33) India                                                                                                           |
| Katepalli, Venkateswarlu                                                                                             | (31) 201710945974                                                                                       | (51) H04W 28/02<br>H04L 47/2416                                                                                      |
| Persaud, Marlon Peter                                                                                                | (32) 30.09.2017                                                                                         | (11) EP3794866                                                                                                       |
| Dudzinski, Krzysztof                                                                                                 | (33) China                                                                                              | (21) EP18919273.5                                                                                                    |
| (31) 202003168<br>201905222                                                                                          | (51) H04W 24/10<br>H04W 24/08                                                                           | (47) 18.12.2024                                                                                                      |
| (32) 05.03.2020<br>12.04.2019                                                                                        | (11) EP4142337                                                                                          | (87) CN2018087559<br>21.11.2019                                                                                      |
| (33) United Kingdom<br>United Kingdom                                                                                | (21) EP20937560.9                                                                                       | (22) 18.05.2018                                                                                                      |
| (51) H04W 16/14<br>H04W 24/10<br>H04W 84/12<br>H04W 88/04<br>H04W 92/20                                              | (47) 18.12.2024                                                                                         | (54) METHOD AND APPARATUS<br>FOR PERFORMING WIRELESS<br>COMMUNICATIONS                                               |
| (11) EP3518571                                                                                                       | (87) CN2020092702<br>02.12.2021                                                                         | (73) Nokia Technologies Oy                                                                                           |
| (21) EP17852682.8                                                                                                    | (22) 27.05.2020                                                                                         | (72) FAN, Dongsheng<br>CAI, Yigang                                                                                   |
| (47) 18.12.2024                                                                                                      | (54) MEASUREMENTS AT A NETWORK                                                                          | (51) H04W 28/02<br>H04W 88/06                                                                                        |
| (87) JP2017027072<br>29.03.2018                                                                                      | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                            | (11) EP3997907                                                                                                       |
| (22) 26.07.2017                                                                                                      | (72) WANG, Shukun                                                                                       | (21) EP20877726.8                                                                                                    |
| (54) ACCESS POINT DEVICE, STATION<br>DEVICE, WIRELESS CONTROL<br>METHOD, COMMUNICATION<br>CONTROL METHOD AND PROGRAM | (51) H04W 24/10<br>H04W 72/1268<br>H04W 76/36<br>H04L 1/00<br>H04L 5/00<br>H04B 7/06<br>H04W 72/56      | (47) 18.12.2024                                                                                                      |
| (73) Sony Group Corporation                                                                                          | (11) EP4104500                                                                                          | (87) KR2020014188<br>22.04.2021                                                                                      |
| (72) MORIOKA, Yuichi                                                                                                 | (21) EP21706151.4                                                                                       | (22) 16.10.2020                                                                                                      |
| SUGAYA, Shigeru                                                                                                      | (47) 18.12.2024                                                                                         | (54) METHODS AND SYSTEMS FOR<br>RECOVERING DANGLING DATA IN A<br>NR LEG OF A SPLIT BEARER                            |
| YAMAURA, Tomoya                                                                                                      | (87) US2021070081<br>19.08.2021                                                                         | (73) Samsung Electronics Co., Ltd.                                                                                   |
| (31) 2016186401                                                                                                      | (22) 27.01.2021                                                                                         | (72) SEN, Arijit<br>GUHA, Shouvik<br>ROY, Koustav<br>AGARWAL, Rishav                                                 |
| (32) 26.09.2016                                                                                                      | (54) CHANNEL STATE INFORMATION (CSI)<br>PROCESSING UNIT PROCEDURES<br>FOR CSI REPORT PRE-EMPTION        | (31) 201941042176<br>201941042176                                                                                    |
| (33) Japan                                                                                                           | (73) QUALCOMM INCORPORATED                                                                              | (32) 05.10.2020                                                                                                      |
| (51) H04W 16/28                                                                                                      | (72) HOSSEINI, Seyedkianoush                                                                            | 17.10.2019                                                                                                           |
| (11) EP3713278                                                                                                       | (31) 202117248469<br>202062972466 P                                                                     |                                                                                                                      |
| (21) EP18879207.1                                                                                                    | (32) 26.01.2021                                                                                         |                                                                                                                      |
| (47) 18.12.2024                                                                                                      | 10.02.2020                                                                                              |                                                                                                                      |
| (87) CN2018109703<br>23.05.2019                                                                                      | (33) United States of America<br>United States of America                                               |                                                                                                                      |
| (22) 10.10.2018                                                                                                      | (51) H04W 24/10                                                                                         |                                                                                                                      |

|                                                |                                                |                                    |
|------------------------------------------------|------------------------------------------------|------------------------------------|
| (33) India                                     | H04W 36/08                                     | (47) 18.12.2024                    |
| India                                          | (11) EP4133696                                 | (87) CN2020090023                  |
| (51) H04W 28/16                                | (21) EP20935492.7                              | 03.12.2020                         |
| H04W 16/12                                     | (47) 18.12.2024                                | (22) 13.05.2020                    |
| H04W 92/20                                     | (87) CN2020090264                              | (54) CELL HANDOVER METHOD AND      |
| H04W 92/12                                     | 18.11.2021                                     | APPARATUS                          |
| H04W 88/08                                     | (22) 14.05.2020                                | (73) Huawei Technologies Co., Ltd. |
| (11) EP3520471                                 | (54) LOW-LAYER BASED MOBILITY                  | (72) LI, Rong                      |
| (21) EP17777543.4                              | MANAGEMENT                                     | MENG, Xian                         |
| (47) 18.12.2024                                | (73) Apple Inc.                                | WANG, Yu                           |
| (87) EP2017074132                              | (72) XU, Fangli                                | QIAO, Yunfei                       |
| 05.04.2018                                     | ZHANG, Yushu                                   | (31) 201910462911                  |
| (22) 22.09.2017                                | SUN, Haitong                                   | (32) 30.05.2019                    |
| (54) RESOURCE MANAGEMENT METHOD                | HU, Haijing                                    | (33) China                         |
| (73) British Telecommunications public limited | ZHANG, Dawei                                   | (51) H04W 36/00                    |
| company                                        | YAO, Chunhai                                   | H04W 36/30                         |
| (72) HAO, Mo                                   | ZENG, Wei                                      | H04W 36/32                         |
| MACKENZIE, Richard                             | (51) H04W 36/00                                | H04W 76/19                         |
| YANG, Yang                                     | H04W 36/08                                     | H04W 76/18                         |
| (31) 201610875596                              | H04W 36/24                                     | H04W 36/36                         |
| (32) 30.09.2016                                | H04W 36/30                                     | (11) EP4055886                     |
| (33) China                                     | H04W 92/20                                     | (21) EP21760611.0                  |
| (51) H04W 36/00                                | (11) EP4229905                                 | (47) 18.12.2024                    |
| (11) EP3738342                                 | (21) EP20797055.9                              | (87) KR2021002531                  |
| (21) EP19700787.5                              | (47) 18.12.2024                                | 02.09.2021                         |
| (47) 18.12.2024                                | (87) EP2020079218                              | (22) 02.03.2021                    |
| (87) EP2019050787                              | 21.04.2022                                     | (54) METHOD AND APPARATUS FOR      |
| 18.07.2019                                     | (22) 16.10.2020                                | FAILURE RECOVERY IN WIRELESS       |
| (22) 14.01.2019                                | (54) HANDOVER CONTROL MECHANISM                | COMMUNICATION SYSTEM               |
| (54) RELOCATION OF MULTI-USER EDGE             | IN NON-HOMOGENEOUS NETWORK                     | (73) LG ELECTRONICS INC.           |
| APPLICATIONS                                   | ARCHITECTURE                                   | (72) KIM, Hongsuk                  |
| (73) Sony Group Corporation                    | (73) Nokia Technologies Oy                     | JUNG, Sunghoon                     |
| (72) TRANG, Linh                               | (72) AWADA, Ahmad                              | HONG, Jongwoo                      |
| ALNÄS, Svante                                  | BULAKCI, Ömer                                  | (31) 202062982613 P                |
| (31) 1830009                                   | GODIN, Philippe                                | (32) 27.02.2020                    |
| (32) 12.01.2018                                | NASEER-UL-ISLAM, Muhammad                      | (33) United States of America      |
| (33) Sweden                                    | (51) H04W 36/00                                | (51) H04W 36/00                    |
| (51) H04W 36/00                                | H04W 36/12                                     | H04W 48/18                         |
| H04W 8/06                                      | H04W 48/18                                     | H04W 76/27                         |
| H04W 8/12                                      | H04W 88/16                                     | H04W 76/30                         |
| H04W 36/12                                     | H04W 4/02                                      | (11) EP3902333                     |
| H04W 76/18                                     | H04W 8/02                                      | (21) EP21176481.6                  |
| H04W 8/20                                      | (11) EP3785455                                 | (47) 18.12.2024                    |
| H04W 76/16                                     | (21) EP19793037.3                              | (22) 16.03.2018                    |
| H04W 84/04                                     | (47) 18.12.2024                                | (54) TERMINAL REGISTRATION FOR     |
| H04W 88/06                                     | (87) CN2019082894                              | CONNECTION TO ROAMING              |
| H04W 76/30                                     | 31.10.2019                                     | NETWORK                            |
| (11) EP3883297                                 | (22) 16.04.2019                                | (73) Samsung Electronics Co., Ltd. |
| (21) EP21162306.1                              | (54) SERVING GATEWAY CONTROL                   | (72) Kim, Sunghoon                 |
| (47) 18.12.2024                                | PLANE FUNCTION TO MANAGE A                     | Son, Jungje                        |
| (22) 12.03.2021                                | PLURALITY OF SERVING GATEWAY                   | Baek, Youngkyo                     |
| (54) METHOD AND APPARATUS FOR                  | USER PLANE FUNCTIONS, AND                      | Lee, Jinsung                       |
| PROVIDING ACCESS TRAFFIC                       | MOBILITY MANAGEMENT ENTITY TO                  | Lee, Hoyeon                        |
| STEERING FUNCTION IN WIRELESS                  | COMMUNICATE WITH THE SAME                      | (31) 20170055349                   |
| COMMUNICATION SYSTEM                           | (73) TELEFONAKTIEBOLAGET LM                    | 20170033379                        |
| (73) Samsung Electronics Co., Ltd.             | ERICSSON (PUBL)                                | (32) 28.04.2017                    |
| (72) Suh, Dongeun                              | (72) LU, Yunjie                                | 16.03.2017                         |
| Jeong, Sangsoo                                 | ZHU, Jinyin                                    | (33) Korea (Republic)              |
| (31) 20200041215                               | XU, Wenliang                                   | Korea (Republic)                   |
| 20200039394                                    | GAN, Juying                                    | (51) H04W 36/00                    |
| 202062988806 P                                 | (31) PCT/CN2018/084751                         | H04W 72/04                         |
| (32) 03.04.2020                                | (32) 27.04.2018                                | H04W 24/10                         |
| 31.03.2020                                     | (33) World Intellectual Property Office (WIPO) | H04W 76/15                         |
| 12.03.2020                                     | (51) H04W 36/00                                | (11) EP4017170                     |
| (33) Korea (Republic)                          | H04W 36/14                                     | (21) EP20851649.2                  |
| Korea (Republic)                               | H04W 36/08                                     | (47) 18.12.2024                    |
| United States of America                       | (11) EP3972340                                 | (87) CN2020107397                  |
| (51) H04W 36/00                                | (21) EP20812523.7                              | 18.02.2021                         |

|                                                                                                               |                                                                                                                                                                                                                                                                                        |                                                                |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| (22) 06.08.2020                                                                                               | (22) 07.05.2018                                                                                                                                                                                                                                                                        | H04W 8/24                                                      |
| (54) AUXILIARY INFORMATION REPORT<br>METHOD AND CONFIGURATION<br>METHOD, TERMINAL, AND NETWORK<br>SIDE DEVICE | (54) METHOD AND TERMINAL DEVICE<br>FOR DATA TRANSMISSION                                                                                                                                                                                                                               | H04W 84/12                                                     |
| (73) Vivo Mobile Communication Co., Ltd.                                                                      | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                                                                                                                                                                                                           | (11) EP3782407                                                 |
| (72) WU, Yumin                                                                                                | (72) LIU, Jianhua                                                                                                                                                                                                                                                                      | (21) EP19787956.2                                              |
| (31) 201910755723                                                                                             | (31) PCT/CN2018/081182                                                                                                                                                                                                                                                                 | (47) 18.12.2024                                                |
| (32) 15.08.2019                                                                                               | (32) 29.03.2018                                                                                                                                                                                                                                                                        | (87) JP2019014144                                              |
| (33) China                                                                                                    | (33) World Intellectual Property Office (WIPO)                                                                                                                                                                                                                                         | 24.10.2019                                                     |
| (51) H04W 36/08                                                                                               | (51) H04W 40/12                                                                                                                                                                                                                                                                        | (22) 29.03.2019                                                |
| H04J 3/06                                                                                                     | H04W 40/22                                                                                                                                                                                                                                                                             | (54) COMMUNICATION APPARATUS AND<br>COMMUNICATION METHOD       |
| H04W 56/00                                                                                                    | (11) EP4021082                                                                                                                                                                                                                                                                         | (73) Panasonic Intellectual Property<br>Corporation of America |
| (11) EP3886497                                                                                                | (21) EP21176754.6                                                                                                                                                                                                                                                                      | (72) URABE, Yoshio                                             |
| (21) EP19892306.2                                                                                             | (47) 18.12.2024                                                                                                                                                                                                                                                                        | CHITRAKAR, Rojan                                               |
| (47) 18.12.2024                                                                                               | (22) 28.05.2021                                                                                                                                                                                                                                                                        | HUANG, Lei                                                     |
| (87) CN2019122703                                                                                             | (54) METHOD AND DEVICE FOR<br>NETWORKING, AND STORAGE<br>MEDIUM                                                                                                                                                                                                                        | (31) 2018078232                                                |
| 11.06.2020                                                                                                    | (73) Beijing Xiaomi Mobile Software Co., Ltd.                                                                                                                                                                                                                                          | (32) 16.04.2018                                                |
| (22) 03.12.2019                                                                                               | (72) Sun, Hanbiao                                                                                                                                                                                                                                                                      | (33) Japan                                                     |
| (54) SYNCHRONIZATION OF A TSN<br>NETWORK COMPRISING A CU-DU<br>ARCHITECTURE                                   | Liu, Liming                                                                                                                                                                                                                                                                            | (51) H04W 52/02                                                |
| (73) Huawei Technologies Co., Ltd.                                                                            | (31) 202011581339                                                                                                                                                                                                                                                                      | H04W 52/24                                                     |
| (72) ZENG, Qinghai                                                                                            | (32) 28.12.2020                                                                                                                                                                                                                                                                        | H04W 52/36                                                     |
| HU, Xingxing                                                                                                  | (33) China                                                                                                                                                                                                                                                                             | H04W 52/38                                                     |
| ZHANG, Hongping                                                                                               | (51) H04W 48/08                                                                                                                                                                                                                                                                        | (11) EP4192126                                                 |
| (31) 201811496817                                                                                             | H04W 60/00                                                                                                                                                                                                                                                                             | (21) EP23154030.3                                              |
| (32) 07.12.2018                                                                                               | H04W 4/50                                                                                                                                                                                                                                                                              | (47) 18.12.2024                                                |
| (33) China                                                                                                    | H04W 72/04                                                                                                                                                                                                                                                                             | (22) 25.09.2018                                                |
| (51) H04W 40/02                                                                                               | H04W 88/18                                                                                                                                                                                                                                                                             | (54) WIRELESS COMMUNICATION<br>METHOD AND TERMINAL DEVICE      |
| H04L 45/121                                                                                                   | H04W 88/02                                                                                                                                                                                                                                                                             | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.   |
| H04L 47/2416                                                                                                  | H04W 40/22                                                                                                                                                                                                                                                                             | (72) TANG, Hai                                                 |
| (11) EP4007223                                                                                                | (11) EP4223012                                                                                                                                                                                                                                                                         | (51) H04W 52/02                                                |
| (21) EP20854158.1                                                                                             | (21) EP21891292.1                                                                                                                                                                                                                                                                      | H04W 72/04                                                     |
| (47) 18.12.2024                                                                                               | (47) 18.12.2024                                                                                                                                                                                                                                                                        | H04L 5/00                                                      |
| (87) CN2020101952                                                                                             | (87) FI2021050693                                                                                                                                                                                                                                                                      | (11) EP3815434                                                 |
| 25.02.2021                                                                                                    | 19.05.2022                                                                                                                                                                                                                                                                             | (21) EP19854755.6                                              |
| (22) 14.07.2020                                                                                               | (22) 18.10.2021                                                                                                                                                                                                                                                                        | (47) 18.12.2024                                                |
| (54) LINK PATH CALCULATION METHOD,<br>APPARATUS, TERMINAL AND<br>COMPUTER-READABLE STORAGE<br>MEDIUM          | (54) CONFIGURATION INDICATION                                                                                                                                                                                                                                                          | (87) US2019047843                                              |
| (73) ZTE Corporation                                                                                          | (73) Nokia Technologies Oy                                                                                                                                                                                                                                                             | 05.03.2020                                                     |
| (72) GAO, Chenqiang                                                                                           | (72) BULAKCI, Ömer                                                                                                                                                                                                                                                                     | (22) 23.08.2019                                                |
| YU, Jinghai                                                                                                   | NASEER-UL-ISLAM, Muhammad                                                                                                                                                                                                                                                              | (54) TRANSMIT DIVERSITY MECHANISMS<br>FOR POWER SAVING SIGNAL  |
| (31) 201910770799                                                                                             | YILMAZ, Osman Nuri Can                                                                                                                                                                                                                                                                 | (73) Apple Inc.                                                |
| (32) 20.08.2019                                                                                               | (31) 202063112362 P                                                                                                                                                                                                                                                                    | (72) MIAO, Honglei                                             |
| (33) China                                                                                                    | (32) 11.11.2020                                                                                                                                                                                                                                                                        | (31) 201862724430 P                                            |
| (51) H04W 40/02                                                                                               | (33) United States of America                                                                                                                                                                                                                                                          | (32) 29.08.2018                                                |
| H04W 72/02                                                                                                    | (51) H04W 48/18                                                                                                                                                                                                                                                                        | (33) United States of America                                  |
| H04W 4/40                                                                                                     | H04W 60/00                                                                                                                                                                                                                                                                             | (51) H04W 52/08                                                |
| H04L 1/00                                                                                                     | H04W 12/069                                                                                                                                                                                                                                                                            | H04W 52/24                                                     |
| H04L 1/08                                                                                                     | H04W 48/08                                                                                                                                                                                                                                                                             | H04W 52/38                                                     |
| H04L 1/18                                                                                                     | H04W 76/15                                                                                                                                                                                                                                                                             | (11) EP4011129                                                 |
| H04L 5/00                                                                                                     | H04W 12/40                                                                                                                                                                                                                                                                             | (21) EP20758421.0                                              |
| H04L 27/00                                                                                                    | (11) EP4415430                                                                                                                                                                                                                                                                         | (47) 18.12.2024                                                |
| H04L 27/20                                                                                                    | (21) EP23156288.5                                                                                                                                                                                                                                                                      | (87) US2020070381                                              |
| H04L 27/36                                                                                                    | (47) 18.12.2024                                                                                                                                                                                                                                                                        | 11.02.2021                                                     |
| H04L 67/12                                                                                                    | (22) 13.02.2023                                                                                                                                                                                                                                                                        | (22) 07.08.2020                                                |
| H04L 69/322                                                                                                   | (54) METHOD FOR OPERATING A<br>MOBILE STATION BEING IN A RADIO<br>ENVIRONMENT COMPRISING<br>A PLURALITY OF RADIO CELLS<br>OF A PLURALITY OF MOBILE<br>COMMUNICATION NETWORKS,<br>MOBILE STATION, SYSTEM OR<br>MOBILE COMMUNICATION NETWORK,<br>PROGRAM AND COMPUTER<br>PROGRAM PRODUCT | (54) SIDELINK TRANSMIT POWER<br>CONTROL COMMAND GENERATION     |
| H04W 40/24                                                                                                    | (73) Deutsche Telekom AG                                                                                                                                                                                                                                                               | (73) QUALCOMM INCORPORATED                                     |
| H04W 80/02                                                                                                    | (72) BISCHINGER, Kurt                                                                                                                                                                                                                                                                  | (72) GULATI, Kapil                                             |
| H04W 92/18                                                                                                    | (51) H04W 52/02                                                                                                                                                                                                                                                                        | CHENG, Hong                                                    |
| H04L 1/1867                                                                                                   |                                                                                                                                                                                                                                                                                        | MONTOJO, Juan                                                  |
| H04W 88/06                                                                                                    |                                                                                                                                                                                                                                                                                        | LI, Junyi                                                      |
| (11) EP4255102                                                                                                |                                                                                                                                                                                                                                                                                        | AKKARAKARAN, Sony                                              |
| (21) EP23192749.2                                                                                             |                                                                                                                                                                                                                                                                                        | RYU, Jung Ho                                                   |
| (47) 18.12.2024                                                                                               |                                                                                                                                                                                                                                                                                        | LUO, Tao                                                       |
|                                                                                                               |                                                                                                                                                                                                                                                                                        | (31) 202016947574                                              |
|                                                                                                               |                                                                                                                                                                                                                                                                                        | 201962884626 P                                                 |

|                                    |                                         |                                          |
|------------------------------------|-----------------------------------------|------------------------------------------|
| (32) 06.08.2020                    | (31) 20180088744                        | United States of America                 |
| 08.08.2019                         | (32) 30.07.2018                         | (51) H04W 72/04                          |
| (33) United States of America      | (33) Korea (Republic)                   | H04W 52/02                               |
| United States of America           | (51) H04W 72/04                         | H04W 76/28                               |
| (51) H04W 64/00                    | H04L 5/00                               | H04L 5/00                                |
| (11) EP3804424                     | (11) EP3665994                          | (11) EP3975641                           |
| (21) EP19728234.6                  | (21) EP17920856.6                       | (21) EP19947457.8                        |
| (47) 18.12.2024                    | (47) 18.12.2024                         | (47) 18.12.2024                          |
| (87) US2019032509                  | (87) CN2017097231                       | (87) CN2019109685                        |
| 12.12.2019                         | 14.02.2019                              | 08.04.2021                               |
| (22) 15.05.2019                    | (22) 11.08.2017                         | (22) 30.09.2019                          |
| (54) EXCHANGING LOCATION           | (54) RESOURCE DEFINITION                | (54) SIGNAL RECEPTION METHOD AND         |
| INFORMATION OF A BASE STATION      | (73) ZTE Corporation                    | TERMINAL DEVICE                          |
| THAT IS ASSOCIATED WITH            | (72) LIU, Wenhao                        | (73) GUANGDONG OPPO MOBILE               |
| A PLURALITY OF DIFFERENT           | HAO, Peng                               | TELECOMMUNICATIONS CORP., LTD.           |
| TRANSMISSION POINT LOCATIONS       | ZHANG, Chenchen                         | (72) XU, Weijie                          |
| (73) QUALCOMM INCORPORATED         | ZUO, Zhisong                            | (51) H04W 72/04                          |
| (72) VITTHALADEVUNI, Pavan Kumar   | GONG, Yuhong                            | H04W 72/23                               |
| LI, Junyi                          | (51) H04W 72/04                         | H04W 72/0453                             |
| SORIAGA, Joseph Binamira           | H04L 5/00                               | (11) EP4068890                           |
| MANOLAKOS, Alexandros              | (11) EP4085708                          | (21) EP22174658.9                        |
| SADIQ, Bilal                       | (21) EP20887357.0                       | (47) 18.12.2024                          |
| (31) 20180100242                   | (47) 18.12.2024                         | (22) 10.08.2017                          |
| 201916412110                       | (87) CN2020070239                       | (54) METHOD AND DEVICE FOR GRANT-        |
| (32) 05.06.2018                    | 20.05.2021                              | LESS UPLINK MULTIPLE ACCESS              |
| 14.05.2019                         | (22) 03.01.2020                         | (73) InterDigital Patent Holdings, Inc.  |
| (33) Greece                        | (54) INCREASING TRANSMISSIONS OF        | (72) BELURI, Mihaela C.                  |
| United States of America           | SOUNDING REFERENCE SIGNALS              | STERN-BERKOWITZ, Janet A.                |
| (51) H04W 72/04                    | IN WIRELESS COMMUNICATION               | BALA, Erdem                              |
| (11) EP4142401                     | SYSTEMS                                 | KINI, Ananth                             |
| (21) EP21804952.6                  | (73) ZTE Corporation                    | LEE, Moon-il                             |
| (47) 18.12.2024                    | (72) LU, Zhaohua                        | HAGHIGHAT, Afshin                        |
| (87) CN2021089246                  | JIANG, Chuangxin                        | (31) 201762474838 P                      |
| 18.11.2021                         | WU, Hao                                 | 201662400934 P                           |
| (22) 23.04.2021                    | ZHANG, Shujuan                          | 201662373040 P                           |
| (54) COMMUNICATION METHOD AND      | (51) H04W 72/04                         | (32) 22.03.2017                          |
| COMMUNICATION APPARATUS            | H04L 5/00                               | 28.09.2016                               |
| (73) Huawei Technologies Co., Ltd. | H04L 27/00                              | 10.08.2016                               |
| (72) YU, Zheng                     | (11) EP4037404                          | (33) United States of America            |
| WEN, Ronghui                       | (21) EP22162335.8                       | United States of America                 |
| (31) 202010418043                  | (47) 18.12.2024                         | United States of America                 |
| (32) 15.05.2020                    | (22) 02.02.2018                         | (51) H04W 72/12                          |
| (33) China                         | (54) INFORMATION TRANSMISSION           | (11) EP4007423                           |
| (51) H04W 72/04                    | METHOD AND DEVICE                       | (21) EP21213978.6                        |
| H04L 1/1607                        | (73) GUANGDONG OPPO MOBILE              | (47) 18.12.2024                          |
| H04W 24/10                         | TELECOMMUNICATIONS CORP., LTD.          | (22) 10.03.2017                          |
| H04L 27/26                         | (72) TANG, Hai                          | (54) METHODS FOR LATENCY REDUCTION       |
| H04L 1/18                          | (51) H04W 72/04                         | (73) Cable Television Laboratories, Inc. |
| H04L 1/16                          | H04L 27/26                              | (72) MCKIBBEN, Bernard                   |
| H04L 1/00                          | H04L 5/12                               | ANDREOLI-FANG, Jennifer                  |
| H04L 5/00                          | G01S 1/20                               | (31) 201715454668                        |
| H04W 74/08                         | G01S 5/10                               | 201715453146                             |
| H04W 72/12                         | (11) EP3516913                          | 201715447419                             |
| H04L 1/1812                        | (21) EP17852492.2                       | 201615236147                             |
| H04L 1/1829                        | (47) 18.12.2024                         | 201662357770 P                           |
| (11) EP3818761                     | (87) IB2017055514                       | 201662353755 P                           |
| (21) EP19844245.1                  | 29.03.2018                              | 201662345634 P                           |
| (47) 18.12.2024                    | (22) 13.09.2017                         | 201662339463 P                           |
| (87) KR2019009399                  | (54) IDENTIFYING ANGLE OF DEPARTURE     | 201662306360 P                           |
| 06.02.2020                         | OF MULTI-ANTENNA TRANSMITTERS           | (32) 09.03.2017                          |
| (22) 29.07.2019                    | (73) Deeyook Location Technologies Ltd. | 08.03.2017                               |
| (54) DATA COMMUNICATION METHOD     | (72) SHPAK, Eran                        | 02.03.2017                               |
| AND APPARATUS IN WIRELESS          | (31) 201615385965                       | 12.08.2016                               |
| COMMUNICATION SYSTEM               | 201615270010                            | 01.07.2016                               |
| (73) Samsung Electronics Co., Ltd. | (32) 21.12.2016                         | 23.06.2016                               |
| (72) JANG, Jaehyuk                 | 20.09.2016                              | 03.06.2016                               |
| AGIWAL, Anil                       | (33) United States of America           | 20.05.2016                               |
| KIM, Soenghun                      |                                         | 10.03.2016                               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (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) QUALCOMM Incorporated<br>(72) LUO, Tao<br>WANG, Xiao Feng<br>WANG, Renqiu<br>CHEN, Wanshi<br>AKKARAKARAN, Sony<br>HUANG, Yi<br>GAAL, Peter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (54) PACKET DELAY BUDGET (PDB) AND<br>TIME SENSITIVE COMMUNICATION<br>(TSC) TRAFFIC IN INTEGRATED<br>ACCESS AND BACKHAUL (IAB)<br>NETWORKS<br>(73) QUALCOMM INCORPORATED<br>(72) ABEDINI, Navid<br>LI, Junyi<br>HAMPEL, Karl Georg<br>LUO, Tao<br>AKL, Naeem<br>BLESSENT, Luca<br>LUO, Jianghong                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (51) H04W 72/12<br>H04L 5/00<br>(11) EP3874875<br>(21) EP19809314.8<br>(47) 18.12.2024<br>(87) US2019059474<br>07.05.2020<br>(22) 01.11.2019<br>(54) AGGREGATION FACTOR<br>ASSOCIATIONS IN UPLINK AND<br>DOWNLINK TRANSMISSIONS<br>(73) QUALCOMM Incorporated<br>(72) JIANG, Jing<br>HOSSEINI, Seyedkianoush<br>CHEN, Wanshi<br>(31) 201916670666<br>201862755411 P<br>(32) 31.10.2019<br>02.11.2018<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                  | (31) 201816188912<br>201762587464 P<br>(32) 13.11.2018<br>16.11.2017<br>(33) United States of America<br>United States of America<br>(51) H04W 72/1268<br>H04W 76/27<br>H04W 76/36<br>H04W 56/00<br>H04W 72/23<br>H04W 76/11<br>(11) EP4091388<br>(21) EP21779444.5<br>(47) 18.12.2024<br>(87) CN2021083970<br>07.10.2021<br>(22) 30.03.2021<br>(54) METHOD AND USER EQUIPMENT FOR<br>SMALL DATA TRANSMISSION<br>(73) Sharp Kabushiki Kaisha<br>(72) WEI, Chiahung<br>TSAI, Hsinhsi<br>WANG, Haihan<br>CHIN, Hengli<br>(31) 202063002269 P<br>(32) 30.03.2020<br>(33) United States of America<br>(51) H04W 72/541<br>H04L 5/00<br>H04W 72/0453<br>H04W 84/12<br>(11) EP4207910<br>(21) EP22827189.6<br>(47) 18.12.2024<br>(87) CN2022089927<br>29.12.2022<br>(22) 28.04.2022<br>(54) OFDMA FREQUENCY DOMAIN<br>RESOURCE SCHEDULING METHOD,<br>STA, AP AND COMMUNICATION<br>SYSTEM<br>(73) Honor Device Co., Ltd.<br>(72) GUO, Qiulun<br>LI, Zheng<br>(31) 202110713028<br>(32) 25.06.2021<br>(33) China<br>(51) H04W 72/543<br>H04L 1/18<br>H04B 7/155<br>H04W 72/542<br>H04W 80/02<br>(11) EP4211822<br>(21) EP21786689.6<br>(47) 18.12.2024<br>(87) US2021049476<br>17.03.2022<br>(22) 08.09.2021 | (31) 202117468471<br>202063075798 P<br>202063075788 P<br>202063075764 P<br>(32) 07.09.2021<br>08.09.2020<br>08.09.2020<br>08.09.2020<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>(51) H04W 74/08<br>(11) EP4406336<br>(21) EP23749201.2<br>(47) 18.12.2024<br>(87) US2023026734<br>04.01.2024<br>(22) 30.06.2023<br>(54) SIDELINK COMMUNICATIONS IN<br>SHARED SPECTRUM<br>(73) Ofinno, LLC<br>(72) DINAN, Esmael Hejazi<br>LIN, Huifa<br>HUI, Bing<br>XU, Kai<br>ZHOU, Hua<br>JEON, Hyoungsuk<br>(31) 202263357691 P<br>(32) 01.07.2022<br>(33) United States of America<br>(51) H04W 74/0808<br>H04W 74/08<br>H04W 74/00<br>H04W 72/12<br>(11) EP3456136<br>(21) EP16727017.2<br>(47) 18.12.2024<br>(87) US2016032026<br>16.11.2017<br>(22) 12.05.2016<br>(54) LISTEN BEFORE TALK (LBT)<br>CONFIGURATION METHOD FOR<br>WIRELESS COMMUNICATION IN<br>UNLICENSED FREQUENCY BANDS<br>AND APPARATUS THEREFOR<br>(73) Sony Group Corporation<br>(72) LJUNG, Rickard<br>(51) H04W 74/0816<br>(11) EP4245093<br>(21) EP21819640.0<br>(47) 18.12.2024<br>(87) US2021057922<br>19.05.2022<br>(22) 03.11.2021 |
| (51) H04W 72/1263<br>H04W 76/11<br>(11) EP3975649<br>(21) EP20846975.9<br>(47) 18.12.2024<br>(87) CN2020105575<br>04.02.2021<br>(22) 29.07.2020<br>(54) COMMUNICATION METHOD AND<br>APPARATUS<br>(73) Huawei Technologies Co. Ltd.<br>(72) LI, Meng<br>GUAN, Lei<br>LI, Bingzhao<br>YANG, Yanmei<br>ZHANG, Wanqiang<br>GE, Cuili<br>(31) 201910866760<br>201910704742<br>(32) 12.09.2019<br>31.07.2019<br>(33) China<br>China<br>(51) H04W 72/1268<br>H04L 5/00<br>H04B 7/0413<br>H04B 7/06<br>H04L 1/18<br>H04W 72/20<br>(11) EP3711421<br>(21) EP18812539.7<br>(47) 18.12.2024<br>(87) US2018061051<br>23.05.2019<br>(22) 14.11.2018<br>(54) UPLINK CONTROL CHANNEL<br>RESOURCE ALLOCATION FOR NEW<br>RADIO (NR) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                                                   |                                     |                                |
|-------------------------------------------------------------------|-------------------------------------|--------------------------------|
| (54) LBT PROCEDURE FOR SIDELINK<br>OPERATIONS IN UNLICENSED BANDS | (47) 18.12.2024                     | (72) SHI, Shufeng              |
| (73) QUALCOMM INCORPORATED                                        | (87) US2019067472                   | YAO, Qi                        |
| (72) STEFANATOS, Stelios                                          | 02.07.2020                          | (31) 201810481106              |
| WU, Shuanshuan                                                    | (22) 19.12.2019                     | 201810432656                   |
| CHERAGHI, Parisa                                                  | (54) RESTRICTED SERVICES AND POLICY | (32) 18.05.2018                |
| GUBESKYS, Arthur                                                  | CONTROL FOR ALWAYS-ON PDU           | 08.05.2018                     |
| (31) 20200100676                                                  | SESSIONS                            | (33) China                     |
| (32) 10.11.2020                                                   | (73) Ofinno, LLC                    | China                          |
| (33) Greece                                                       | (72) BHARATIA, Jayshree             |                                |
| (51) H04W 74/0833                                                 | DINAN, Esmael                       | (51) H04W 76/15                |
| H04W 36/00                                                        | QIAO, Weihua                        | (11) EP3942897                 |
| (11) EP3922077                                                    | PARK, Kyungmin                      | (21) EP20701523.1              |
| (21) EP20713773.8                                                 | TALEBI FARD, Peyman                 | (47) 18.12.2024                |
| (47) 18.12.2024                                                   | RYU, Jinsook                        | (87) SE2020050004              |
| (87) US2020017138                                                 | (31) 201962791490 P                 | 24.09.2020                     |
| 13.08.2020                                                        | 201862786897 P                      | (22) 08.01.2020                |
| (22) 07.02.2020                                                   | 201862785946 P                      | (54) HANDLING A SECONDARY CELL |
| (54) BANDWIDTH PART FLEXIBILITY FOR                               | (32) 11.01.2019                     | GROUP CONFIGURATION            |
| UNLICENSED NR ACCESS                                              | 31.12.2018                          | (73) TELEFONAKTIEBOLAGET LM    |
| (73) Sony Group Corporation                                       | 28.12.2018                          | ERICSSON (PUBL)                |
| (72) BERGGREN, Anders                                             | (33) United States of America       | (72) TEYEB, Oumer              |
| LJUNG, Rickard                                                    | United States of America            | RUGELAND, Patrik               |
| (31) 1930048                                                      | United States of America            | DA SILVA, Icaro L. J.          |
| (32) 08.02.2019                                                   |                                     | YILMAZ, Osman Nuri Can         |
| (33) Sweden                                                       | (51) H04W 76/10                     | ARAUJO, Lian                   |
| (51) H04W 76/00                                                   | H04W 60/00                          | (31) 201962820872 P            |
| H04W 8/24                                                         | (11) EP4106478                      | (32) 20.03.2019                |
| H04L 5/00                                                         | (21) EP21753587.1                   | (33) United States of America  |
| H04L 1/1829                                                       | (47) 18.12.2024                     | (51) H04W 76/15                |
| H04W 88/02                                                        | (87) CN2021073839                   | H04W 48/12                     |
| (11) EP4101249                                                    | 19.08.2021                          | H04L 1/1867                    |
| (21) EP21700610.5                                                 | (22) 26.01.2021                     | H04W 74/0816                   |
| (47) 18.12.2024                                                   | (54) TERMINAL CAPABILITY MATCH      | H04W 76/38                     |
| (87) EP2021051372                                                 | CHECKING METHOD, AMF, AND BASE      | H04W 84/12                     |
| 12.08.2021                                                        | STATION                             | H04L 1/1829                    |
| (22) 21.01.2021                                                   | (73) Datang Mobile Communications   | H04L 1/00                      |
| (54) DYNAMIC PROCESSING TIME                                      | Equipment Co., Ltd.                 | (11) EP3935770                 |
| AND DYNAMIC BLIND DECODING                                        | (72) WANG, Hucheng                  | (21) EP20768963.9              |
| CAPABILITY FOR NR USER DEVICES                                    | ZHOU, Ye                            | (47) 18.12.2024                |
| (73) Fraunhofer-Gesellschaft zur Förderung                        | (31) 202010093612                   | (87) CN2020077387              |
| der angewandten Forschung e.V.                                    | (32) 14.02.2020                     | 17.09.2020                     |
| (72) MCMENAMY, Jasmina                                            | (33) China                          | (22) 02.03.2020                |
| WIRTH, Thomas                                                     | (51) H04W 76/12                     | (54) MULTIPLE ACCESS POINT     |
| SCHIERL, Thomas                                                   | H04W 40/00                          | OPERATION OF WIRELESS NETWORK  |
| GÖKTEPE, Baris                                                    | H04L 45/00                          | (73) ZTE Corporation           |
| HELLGE, Cornelius                                                 | (11) EP4412384                      | (72) FANG, Yonggang            |
| SRINIVASAN, Nithin                                                | (21) EP23154432.1                   | (31) 201916297564              |
| FEHRENBACH, Thomas                                                | (47) 18.12.2024                     | (32) 08.03.2019                |
| (31) 20156219                                                     | (22) 01.02.2023                     | (33) United States of America  |
| (32) 07.02.2020                                                   | (54) METHOD FOR USING A USER        | (51) H04W 76/20                |
| (33) European Patent Office (EPO)                                 | EQUIPMENT WITH AT LEAST ONE         | H04W 76/10                     |
| (51) H04W 76/10                                                   | TELECOMMUNICATIONS NETWORK,         | H04W 4/80                      |
| H04L 12/14                                                        | USER EQUIPMENT, SYSTEM OR           | H04W 84/20                     |
| H04M 15/00                                                        | TELECOMMUNICATIONS NETWORK,         | (11) EP3500056                 |
| H04W 48/18                                                        | PROGRAM AND COMPUTER-               | (21) EP17839052.2              |
| H04L 47/765                                                       | READABLE MEDIUM                     | (47) 18.12.2024                |
| H04L 47/78                                                        | (73) Deutsche Telekom AG            | (87) JP2017021956              |
| H04L 47/80                                                        | (72) COLOM IKUNO, Josep             | 15.02.2018                     |
| H04L 47/70                                                        | (51) H04W 76/12                     | (22) 14.06.2017                |
| H04L 67/14                                                        | H04W 88/14                          | (54) COMMUNICATION APPARATUS,  |
| H04W 4/90                                                         | H04W 92/02                          | CONTROL METHOD AND PROGRAM     |
| H04W 28/12                                                        | (11) EP3979698                      | THEREFOR, AND COMMUNICATION    |
| H04W 76/50                                                        | (21) EP21193229.8                   | SYSTEM                         |
| H04W 4/40                                                         | (47) 18.12.2024                     | (73) Canon Kabushiki Kaisha    |
| H04W 4/70                                                         | (22) 17.04.2019                     | (72) KAECHI, Shuya             |
| (11) EP3903539                                                    | (54) NETWORK ELEMENT SELECTION      | (31) 2016158125                |
| (21) EP19839580.8                                                 | METHOD, SYSTEM, CHIP AND            | (32) 10.08.2016                |
|                                                                   | COMPUTER PROGRAM PRODUCT            | (33) Japan                     |
|                                                                   | (73) Huawei Technologies Co., Ltd.  | (51) H04W 76/23                |

|                                                |                                    |                                              |
|------------------------------------------------|------------------------------------|----------------------------------------------|
| H04W 76/30                                     | 12.12.2019                         | KLAFENBRÖCK, Thomas                          |
| H04W 88/02                                     | (22) 29.05.2019                    | (31) 102020100746                            |
| (11) EP4154670                                 | (54) INTEGRATION METHOD AMONG DATA | (32) 14.01.2020                              |
| (21) EP21735443.0                              | COMMUNICATION NETWORKS WITH        | (33) Germany                                 |
| (47) 18.12.2024                                | WIRELESS MESH AND CAN BUS          | (51) H05B 6/06                               |
| (87) US2021033603                              | TECHNOLOGY                         | (11) EP4236622                               |
| 25.11.2021                                     | (73) Norel S.r.l.                  | (21) EP23175924.2                            |
| (22) 21.05.2021                                | (72) LOMBARDO, Mauro               | (47) 18.12.2024                              |
| (54) METHODS AND APPARATUS FOR                 | MORO, Andrea                       | (22) 05.08.2020                              |
| HANDLING CONGESTION OF A                       | LAMAESTRA, Salvatore               | (54) INDUCTION HEATING DEVICE HAVING         |
| SIDELINK COMMUNICATION                         | MORI, Alberto                      | IMPROVED OUTPUT CONTROL                      |
| (73) InterDigital Patent Holdings, Inc.        | (31) 201800006001                  | FUNCTION                                     |
| (72) FERDI, Samir                              | (32) 04.06.2018                    | (73) LG Electronics Inc.                     |
| PERRAS, Michelle                               | (33) Italy                         | (72) PARK, Byeong Wook                       |
| AGHILI, Behrouz                                | (51) H05B 1/02                     | JUNG, Kyung Hoon                             |
| AHMAD, Saad                                    | G01F 23/26                         | OH, Dooyong                                  |
| SHI, Xiaoyan                                   | (11) EP3804459                     | (31) 20190113977                             |
| (31) 202063028554 P                            | (21) EP19726678.6                  | (32) 17.09.2019                              |
| (32) 21.05.2020                                | (47) 18.12.2024                    | (33) Korea (Republic)                        |
| (33) United States of America                  | (87) EP2019063472                  | (51) H05B 45/30                              |
| (51) H04W 76/27                                | 28.11.2019                         | H01L 27/092                                  |
| H04W 48/02                                     | (22) 24.05.2019                    | (11) EP4211989                               |
| H04W 48/06                                     | (54) FLUID HEATER                  | (21) EP21777701.0                            |
| H04W 48/12                                     | (73) DBK David + Baader GmbH       | (47) 18.12.2024                              |
| H04W 60/00                                     | (72) RIEHLING, Achim               | (87) EP2021075229                            |
| (11) EP3791686                                 | KRÄMER, Alexander                  | 17.03.2022                                   |
| (21) EP19722624.4                              | STRATMANN, Andreas                 | (22) 14.09.2021                              |
| (47) 18.12.2024                                | (31) 102018112471                  | (54) COMPACT CONTROL FOR LAMPS IN A          |
| (87) EP2019062051                              | (32) 24.05.2018                    | MOTOR VEHICLE                                |
| 14.11.2019                                     | (33) Germany                       | (73) Elmos Semiconductor SE                  |
| (22) 10.05.2019                                | (51) H05B 1/02                     | (72) SCHMITZ, Christian                      |
| (54) UPLINK ACCESS MANAGEMENT                  | G05D 23/19                         | BURCHARD, Bernd                              |
| CONCEPT                                        | F24H 1/20                          | (31) 102020123818                            |
| (73) Fraunhofer-Gesellschaft zur Förderung     | F24H 9/20                          | (32) 14.09.2020                              |
| der angewandten Forschung e.V.                 | (11) EP4285058                     | (33) Germany                                 |
| (72) WIRTH, Thomas                             | (21) EP22709186.5                  | (51) H05B 47/10                              |
| HELLGE, Cornelius                              | (47) 18.12.2024                    | F21V 21/40                                   |
| SCHIERL, Thomas                                | (87) EP2022051541                  | F21V 23/04                                   |
| EBRAHIM REZAGAH, Roya                          | 04.08.2022                         | F21W 131/205                                 |
| SEIDEL, Eiko                                   | (22) 25.01.2022                    | F21V 14/00                                   |
| (31) 18171867                                  | (54) METHOD FOR CONTROLLING A      | A61B 90/30                                   |
| (32) 11.05.2018                                | TEMPERATURE OF A LIQUID IN A       | G06F 3/01                                    |
| (33) European Patent Office (EPO)              | LIQUID CONTAINER                   | (11) EP3795897                               |
| (51) H04W 76/28                                | (73) BRITA SE                      | (21) EP18918884.0                            |
| H04W 28/02                                     | (72) MACHUI, Oliver                | (47) 18.12.2024                              |
| H04W 76/14                                     | DUCHARDT, Thomas                   | (87) CN2018086877                            |
| (11) EP4278852                                 | (31) 21154506                      | 21.11.2019                                   |
| (21) EP22700898.4                              | (32) 01.02.2021                    | (22) 15.05.2018                              |
| (47) 18.12.2024                                | (33) European Patent Office (EPO)  | (54) CONTROL METHOD FOR SURGICAL             |
| (87) EP2022050302                              | (51) H05B 3/12                     | LIGHT, AND SURGICAL LIGHT                    |
| 21.07.2022                                     | H05B 3/16                          | (73) Nanjing Mindray Bio-Medical Electronics |
| (22) 10.01.2022                                | H05B 3/26                          | Co., Ltd.                                    |
| (54) METHOD, DEVICES AND PRODUCT               | H05B 3/34                          | (72) WANG, Lei                               |
| FOR SIDELINK CONFIGURATION AND                 | (11) EP4091405                     | (51) H05K 1/02                               |
| OPERATION                                      | (21) EP21701397.8                  | H04M 1/02                                    |
| (73) Telefonaktiebolaget LM Ericsson (publ)    | (47) 18.12.2024                    | (11) EP4131905                               |
| (72) ZHANG, Zhang                              | (87) EP2021050439                  | (21) EP22741140.2                            |
| WANG, Min                                      | 22.07.2021                         | (47) 18.12.2024                              |
| (31) PCT/CN2021/071586                         | (22) 12.01.2021                    | (87) CN2022072538                            |
| (32) 13.01.2021                                | (54) BUILDING BOARD WITH HEATING   | 29.12.2022                                   |
| (33) World Intellectual Property Office (WIPO) | FOIL                               | (22) 18.01.2022                              |
| (51) H04W 84/22                                | (73) Infinite Flex GmbH            | (54) FLEXIBLE CIRCUIT BOARD ASSEMBLY         |
| H04L 12/40                                     | WMT Thermosysteme GmbH             | AND ELECTRONIC DEVICE                        |
| H04L 12/46                                     | Printenergy GmbH                   | (73) Honor Device Co., Ltd.                  |
| (11) EP3804456                                 | (72) HÜTTENBRENNER, Severin        | (72) LI, Mingchuan                           |
| (21) EP19735649.6                              | KORNHERR, Andreas                  | YANG, Xiujuan                                |
| (47) 18.12.2024                                | ASTLEITHNER, Manfred               | WANG, Wenhao                                 |
| (87) IT2019000040                              | BISGES, Michael                    | (31) 202110700216                            |



|                                      |                                      |                                  |
|--------------------------------------|--------------------------------------|----------------------------------|
| (32) 23.06.2021                      | H01R 25/00                           | (11) EP4190137                   |
| (33) China                           | (11) EP3747246                       | (21) EP21742810.1                |
| (51) H05K 1/18                       | (21) EP19709369.3                    | (47) 18.12.2024                  |
| H01L 25/00                           | (47) 18.12.2024                      | (87) EP2021068865                |
| H01L 23/22                           | (87) EP2019025031                    | 03.02.2022                       |
| H01L 23/24                           | 08.08.2019                           | (22) 07.07.2021                  |
| H01L 23/48                           | (22) 31.01.2019                      | (54) COOLING DEVICE FOR COOLING  |
| H01L 23/00                           | (54) POWER DISTRIBUTION UNIT WITH    | COMPONENTS OF A CIRCUIT BOARD    |
| H05K 3/46                            | INTERIOR BUSBARS                     | (73) Nexalus Limited             |
| H01L 23/055                          | (73) Eaton Intelligent Power Limited | (72) O'MAHONY, Kenneth           |
| H01L 23/498                          | (72) LE, Long Larry                  | WILSON, Cathal                   |
| H05K 1/02                            | CHEN, George                         | ROBINSON, Anthony                |
| H05K 1/14                            | CARROLL, John Douglas                | (31) 202011601                   |
| H05K 3/32                            | SMITH, Josiah Daniel                 | (32) 27.07.2020                  |
| H05K 3/36                            | (31) 201815884832                    | (33) United Kingdom              |
| (11) EP3349551                       | (32) 31.01.2018                      | (51) H05K 7/20                   |
| (21) EP17151014.2                    | (33) United States of America        | H05K 5/00                        |
| (47) 18.12.2024                      | (51) H05K 7/14                       | H05K 9/00                        |
| (22) 11.01.2017                      | H05K 5/02                            | H02M 7/00                        |
| (54) A PRINTED CIRCUIT BOARD         | (11) EP3824699                       | (11) EP4201161                   |
| EMBEDDING A POWER DIE AND A          | (21) EP19768890.6                    | (21) EP21762488.1                |
| METHOD FOR MANUFACTURING SAID        | (47) 18.12.2024                      | (47) 18.12.2024                  |
| PRINTED CIRCUIT BOARD                | (87) IB2019055884                    | (87) EP2021072874                |
| (73) Mitsubishi Electric Corporation | 23.01.2020                           | 24.02.2022                       |
| (72) Degrenne, Nicolas               | (22) 10.07.2019                      | (22) 18.08.2021                  |
| Mollov, Stefan                       | (54) BATTERY CHARGER FOR ELECTRIC    | (54) INVERTER SYSTEM FOR A DRIVE |
| (51) H05K 5/06                       | OR HYBRID MOTOR VEHICLES             | TRAIN OF A MOTOR VEHICLE         |
| H05K 5/00                            | (73) Meta System S.p.A.              | (73) Voith Patent GmbH           |
| H04M 1/02                            | (72) SIMONAZZI, Giuseppe             | (72) HELWICH, Gerald             |
| H05K 5/03                            | (31) 201800007394                    | GRUBER, Christoph                |
| H04M 1/18                            | (32) 20.07.2018                      | (31) 102020121917                |
| (11) EP4207962                       | (33) Italy                           | (32) 21.08.2020                  |
| (21) EP21876022.1                    | (51) H05K 7/14                       | (33) Germany                     |
| (47) 18.12.2024                      | H05K 7/20                            | (51) H05K 13/04                  |
| (87) KR2021013330                    | H02M 7/00                            | H05K 13/08                       |
| 07.04.2022                           | (11) EP3793337                       | (11) EP4114163                   |
| (22) 29.09.2021                      | (21) EP19734445.0                    | (21) EP20921730.6                |
| (54) ELECTRONIC DEVICE INCLUDING     | (47) 18.12.2024                      | (47) 18.12.2024                  |
| WATERPROOF STRUCTURE                 | (87) ES2019070308                    | (87) JP2020007709                |
| (73) Samsung Electronics Co., Ltd.   | 14.11.2019                           | 02.09.2021                       |
| (72) LEE, Yongseok                   | (22) 09.05.2019                      | (22) 26.02.2020                  |
| SHIM, Minchang                       | (54) MODULAR SOLAR PHOTOVOLTAIC      | (54) MALFUNCTION DETERMINING     |
| YOO, Minwoo                          | INVERTER                             | DEVICE AND MALFUNCTION           |
| SEOK, Sangyoun                       | (73) Power Electronics España, S.L.  | DETERMINING METHOD FOR           |
| KIM, Sangmin                         | (72) POVEDA LERMA, Antonio           | COMPONENT MOUNTING MACHINE       |
| MOON, Heecheul                       | SALVO LILLO, Abelardo                | (73) Fuji Corporation            |
| SON, Kwonho                          | SALVO LILLO, David                   | (72) NAKAI, Kenji                |
| NOH, Daeyoung                        | (31) 201830455                       | KAMIYA, Yuki                     |
| (31) 20200127332                     | (32) 09.05.2018                      | NAITO, Shinji                    |
| (32) 29.09.2020                      | (33) Spain                           | YAMANAKA, Daisuke                |
| (33) Korea (Republic)                | (51) H05K 7/20                       | (51) H05K 13/08                  |
| (51) H05K 7/14                       | (11) EP4049519                       | (11) EP4132249                   |
| (11) EP3824701                       | (21) EP20780156.4                    | (21) EP20927271.5                |
| (21) EP19769878.0                    | (47) 18.12.2024                      | (47) 18.12.2024                  |
| (47) 18.12.2024                      | (87) EP2020076534                    | (87) JP2020012719                |
| (87) IB2019056115                    | 23.04.2021                           | 30.09.2021                       |
| 23.01.2020                           | (22) 23.09.2020                      | (22) 23.03.2020                  |
| (22) 17.07.2019                      | (54) METHOD FOR DETERMINING A        | (54) MANAGEMENT APPARATUS,       |
| (54) BATTERY CHARGER FOR VEHICLES    | TARGET VOLUMETRIC FLOW RATE          | MOUNTING SYSTEM, AND             |
| AND RELATIVE REALIZATION             | FOR A COOLANT                        | MANAGEMENT METHOD                |
| PROCESS                              | (73) Robert Bosch GmbH               | (73) Fuji Corporation            |
| (73) Meta System S.p.A.              | (72) MAUER, Jakob                    | (72) MINOSHIMA, Nobuaki          |
| (72) SIMONAZZI, Giuseppe             | (31) 102019216218                    | (51) H10B 61/00                  |
| (31) 201800007376                    | (32) 22.10.2019                      | H10N 50/01                       |
| (32) 20.07.2018                      | (33) Germany                         | H10N 50/10                       |
| (33) Italy                           | (51) H05K 7/20                       | G11C 11/16                       |
| (51) H05K 7/14                       | G06F 1/20                            | G11C 13/00                       |
| H01R 13/514                          | H01L 23/473                          | H10B 63/00                       |

|                                                                                                         |                                                                                    |                       |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------|
| H10B 63/10                                                                                              | G09G 3/3233                                                                        | (31) 20210165651      |
| (11) EP4055636                                                                                          | (11) EP4012773                                                                     | (32) 26.11.2021       |
| (21) EP20942421.7                                                                                       | (21) EP20850140.3                                                                  | (33) Korea (Republic) |
| (47) 18.12.2024                                                                                         | (47) 18.12.2024                                                                    |                       |
| (87) US2020067742                                                                                       | (87) CN2020106204                                                                  |                       |
| 30.12.2021                                                                                              | 11.02.2021                                                                         |                       |
| (22) 31.12.2020                                                                                         | (22) 31.07.2020                                                                    |                       |
| (54) MEMORY DEVICE CONTAINING DUAL ETCH STOP LAYERS FOR SELECTOR ELEMENTS AND METHOD OF MAKING THE SAME | (54) DISPLAY SUBSTRATE AND MANUFACTURING METHOD THEREFOR, AND DISPLAY APPARATUS    |                       |
| (73) SanDisk Technologies LLC                                                                           | (73) Beijing BOE Technology Development Co., Ltd.                                  |                       |
| (72) PATEL, Kanaiyalal LILLE, Jeffrey                                                                   | BOE Technology Group Co., Ltd.                                                     |                       |
| (31) 202016910799                                                                                       | (72) QIAO, Yong                                                                    |                       |
| (32) 24.06.2020                                                                                         | WU, Xinyin                                                                         |                       |
| (33) United States of America                                                                           | MA, Yongda                                                                         |                       |
| (51) H10K 50/12                                                                                         | HAO, Xueguang                                                                      |                       |
| H10K 85/60                                                                                              | (31) 201921258054 U                                                                |                       |
| H10K 101/00                                                                                             | (32) 05.08.2019                                                                    |                       |
| (11) EP3800683                                                                                          | (33) China                                                                         |                       |
| (21) EP20197892.1                                                                                       | (51) H10K 59/131                                                                   |                       |
| (47) 18.12.2024                                                                                         | (11) EP3945591                                                                     |                       |
| (22) 23.09.2020                                                                                         | (21) EP21174584.9                                                                  |                       |
| (54) ORGANIC ELECTROLUMINESCENCE DEVICE                                                                 | (47) 18.12.2024                                                                    |                       |
| (73) Samsung Display Co., Ltd.                                                                          | (22) 19.05.2021                                                                    |                       |
| (72) KIM, Hyunyoung                                                                                     | (54) DISPLAY APPARATUS                                                             |                       |
| SHIN, Hyosup                                                                                            | (73) Samsung Display Co., Ltd.                                                     |                       |
| JUNG, Hyejin                                                                                            | (72) Cho, Youngmin                                                                 |                       |
| CHO, Kunwook                                                                                            | Kim, Hongam                                                                        |                       |
| YOON, Seokgyu                                                                                           | (31) 20200096112                                                                   |                       |
| LYU, Jaejin                                                                                             | (32) 31.07.2020                                                                    |                       |
| CHOI, Minsoo                                                                                            | (33) Korea (Republic)                                                              |                       |
| KIM, Minje                                                                                              | (51) H10K 85/50                                                                    |                       |
| LEE, Jiyoung                                                                                            | H01G 9/20                                                                          |                       |
| LEE, Youngki                                                                                            | (11) EP3295491                                                                     |                       |
| KIM, Eung Do                                                                                            | (21) EP16793494.2                                                                  |                       |
| CHOI, Youngeun                                                                                          | (47) 18.12.2024                                                                    |                       |
| KIM, Hyojeong                                                                                           | (87) US2016031986                                                                  |                       |
| CHO, Hyeon Gu                                                                                           | 17.11.2016                                                                         |                       |
| LEE, Jungsub                                                                                            | (22) 12.05.2016                                                                    |                       |
| (31) 20190121391                                                                                        | (54) TITANATE INTERFACIAL LAYERS IN PEROVSKITE MATERIAL DEVICES                    |                       |
| (32) 01.10.2019                                                                                         | (73) CubicPV Inc.                                                                  |                       |
| (33) Korea (Republic)                                                                                   | (72) IRWIN, Michael D.                                                             |                       |
| (51) H10K 50/15                                                                                         | CHUTE, Jerred A.                                                                   |                       |
| H10K 50/16                                                                                              | DHAS, Vivek V.                                                                     |                       |
| H10K 59/65                                                                                              | (31) 201514711430                                                                  |                       |
| H04M 1/02                                                                                               | (32) 13.05.2015                                                                    |                       |
| H10K 59/80                                                                                              | (33) United States of America                                                      |                       |
| H10K 71/00                                                                                              | (51) H10K 85/60                                                                    |                       |
| H10K 71/16                                                                                              | H10K 85/30                                                                         |                       |
| (11) EP4060745                                                                                          | H10K 50/11                                                                         |                       |
| (21) EP22158206.7                                                                                       | C09K 11/06                                                                         |                       |
| (47) 18.12.2024                                                                                         | H10K 50/19                                                                         |                       |
| (22) 23.02.2022                                                                                         | H10K 59/38                                                                         |                       |
| (54) DISPLAY APPARATUS AND METHOD OF MANUFACTURING THE SAME                                             | C07F 15/00                                                                         |                       |
| (73) Samsung Display Co., Ltd.                                                                          | (11) EP4188059                                                                     |                       |
| (72) CHOI, Jungmin                                                                                      | (21) EP22194468.9                                                                  |                       |
| JEON, Woosik                                                                                            | (47) 18.12.2024                                                                    |                       |
| KIM, Sangyeol                                                                                           | (22) 07.09.2022                                                                    |                       |
| SONG, Jehyun                                                                                            | (54) ORGANIC LIGHT EMITTING DIODE AND ORGANIC LIGHT EMITTING DEVICE HAVING THEREOF |                       |
| OH, Eonseok                                                                                             | (73) LG Display Co., Ltd.                                                          |                       |
| (31) 20210024227                                                                                        | (72) JEONG, Yoo-Jeong                                                              |                       |
| (32) 23.02.2021                                                                                         | PARK, Han-Sol                                                                      |                       |
| (33) Korea (Republic)                                                                                   | CHOUNG, Ku-Sun                                                                     |                       |
| (51) H10K 59/121                                                                                        |                                                                                    |                       |



|                                          |                                                |                                      |
|------------------------------------------|------------------------------------------------|--------------------------------------|
| (54) SOLAR PARASOL                       | New Zealand                                    | (54) A DEVICE FOR MEASURING VOLATILE |
| (73) Tempo Manufacturing LLC.            | (47) 18.09.2024                                | MARKERS IN BREATH                    |
| (72) LUO, Xiong                          | (51) A47C 7/54                                 | (73) Nanose Medical Ltd              |
| (74) dr. W.A.H.M. Van Borm               | (11) EP4074221                                 | (72) SELLA TAVOR, Osnat              |
| (31) 201910957597                        | (21) EP22167846.9                              | HAICK, Hossam                        |
| (32) 10.10.2019                          | (22) 12.04.2022                                | MAROM ALBECK, Orit                   |
| (33) China                               | (54) ARMREST FOR CHAIR                         | (74) ir. W.J.J.M. Kempes             |
| (47) 06.11.2024                          | (73) Secretlab SG Pte. Ltd.                    | (31) 202163161117 P                  |
| (51) A45D 24/04                          | (72) Chan, Jon Hao                             | 202063037822 P                       |
| A45D 24/10                               | Sin, Vincent                                   | (32) 15.03.2021                      |
| G01L 1/22                                | Lee, Cheng Feng Elroy                          | 11.06.2020                           |
| A45D 1/04                                | (74) dr. ir. F.M. van Bouwelen                 | (33) United States of America        |
| A45D 1/18                                | (31) 202220804963 U                            | United States of America             |
| A45D 2/00                                | 202120730172 U                                 | (47) 16.10.2024                      |
| G01L 5/00                                | (32) 08.04.2022                                | (51) A61B 5/145                      |
| A61B 5/00                                | 12.04.2021                                     | A61B 5/1495                          |
| (11) EP3685134                           | (33) China                                     | (11) EP4026496                       |
| (21) EP18765139.3                        | China                                          | (21) EP21206620.3                    |
| (22) 12.09.2018                          | (47) 18.09.2024                                | (22) 14.05.2015                      |
| (54) DEVICE FOR MEASURING HAIR           | (51) A61B 1/005                                | (54) ANALYTE LEVEL CALIBRATION USING |
| PROPERTIES                               | A61B 1/307                                     | BASELINE ANALYTE LEVEL               |
| (73) Koninklijke Philips N.V.            | A61B 1/31                                      | (73) Abbott Diabetes Care Inc.       |
| (72) ZJIOECHA, Nikolaj, Vasiljevitsj     | A61B 1/273                                     | (72) BUDIMAN, Erwin S                |
| PANG, Chuen, Yu, Cyrus                   | A61B 1/267                                     | HOSS, Udo                            |
| SCHOUTEN, Marcel                         | (11) EP3962343                                 | (74) ir. F.A. Geurts c.s.            |
| BRADA, Ype, Bernardus                    | (21) EP20727881.3                              | (31) 201461993908 P                  |
| LELIEVELD, Mark, Johannes                | (22) 30.04.2020                                | (32) 15.05.2014                      |
| KOENEN, Maurits                          | (54) SYSTEMS AND DEVICES FOR                   | (33) United States of America        |
| VAN ES, Michel                           | ARTICULATION WIRE GUIDANCE                     | (47) 16.10.2024                      |
| (74) dr. R.C. van Duijvenbode c.s.       | (73) Boston Scientific Scimed, Inc.            | (51) A61B 6/00                       |
| (31) 17192029                            | (72) MAILLET, Maria, Therese                   | A61N 5/00                            |
| (32) 20.09.2017                          | WHITNEY, Andrew, James                         | G21G 1/00                            |
| (33) European Patent Office (EPO)        | MILLER, Thomas, Jeffrey                        | G21G 4/00                            |
| (47) 20.11.2024                          | (74) ir. A.R. Aalbers                          | G21G 4/04                            |
| (51) A47B 57/40                          | (31) 201962841290 P                            | G21G 4/08                            |
| (11) EP3813591                           | (32) 01.05.2019                                | F04B 49/00                           |
| (21) EP19737919.1                        | (33) United States of America                  | (11) EP3840651                       |
| (22) 18.06.2019                          | (47) 23.10.2024                                | (21) EP19852440.7                    |
| (54) RACK SYSTEM                         | (51) A61B 5/00                                 | (22) 22.08.2019                      |
| (73) Keter Home and Garden Products Ltd. | G06V 20/20                                     | (54) 82RB ELUTION SYSTEM CONTROL     |
| (72) BRUNNER, Yaron                      | G06V 40/10                                     | AND CONFIGURATIONS                   |
| PARIZER, Uri                             | (11) EP4125551                                 | (73) Jubilant Draximage, Inc.        |
| SHANI, Izhar                             | (21) EP21713058.2                              | (72) DONNELLY, Paul                  |
| (74) ir. F.A. Geurts c.s.                | (22) 25.03.2021                                | LEFORT, Etienne                      |
| (31) 26035018                            | (54) A SYSTEM FOR PROVIDING                    | MOORE, Thomas, Allen                 |
| (32) 01.07.2018                          | GUIDANCE                                       | RIDDOCH, Robert, William             |
| (33) Israel                              | (73) Koninklijke Philips N.V.                  | SANTOPIETRO, Riccardo                |
| (47) 02.10.2024                          | (72) Zhang, Qiushi                             | (74) ir. W.J.J.M. Kempes             |
| (51) A47B 67/02                          | Shi, Jun                                       | (31) 201862721033 P                  |
| G06Q 10/08                               | Bulut, Murtaza                                 | (32) 22.08.2018                      |
| G07F 11/62                               | Hilbig Rainer                                  | (33) United States of America        |
| G07F 17/00                               | Palero, Jonathan Alambra                       | (47) 13.11.2024                      |
| A47F 1/08                                | (74) dr. R.C. van Duijvenbode c.s.             | (51) A61B 6/00                       |
| (11) EP3687340                           | (31) PCT/CN2020/083343                         | G01T 1/161                           |
| (21) EP18863387.9                        | 20172496                                       | G01T 1/164                           |
| (22) 28.09.2018                          | (32) 03.04.2020                                | A61B 6/42                            |
| (54) MEDICAL SUPPLIES CABINET            | 30.04.2020                                     | A61B 6/50                            |
| (73) Xoria Limited                       | (33) World Intellectual Property Office (WIPO) | G01T 7/00                            |
| (72) WELLACOTT, James                    | European Patent Office (EPO)                   | A61B 6/03                            |
| MANN, Stephen Ian                        | (47) 27.11.2024                                | (11) EP3946063                       |
| MONTGOMERY, Peter James                  | (51) A61B 5/08                                 | (21) EP20784501.7                    |
| CLARIDGE, Matthew                        | G01N 33/00                                     | (22) 02.04.2020                      |
| (74) ir. A. Blokland c.s.                | G01N 33/497                                    | (54) METHOD OF USING TEMPORAL        |
| (31) 18743404                            | A61B 5/097                                     | MEASUREMENTS OF LOCALIZED            |
| 17735981                                 | (11) EP4164481                                 | RADIATION TO ESTIMATE THE            |
| (32) 12.06.2018                          | (21) EP21734529.7                              | MAGNITUDE, LOCATION, AND             |
| 29.09.2017                               | (22) 10.06.2021                                | VOLUME OF RADIOACTIVE MATERIAL       |
| (33) New Zealand                         |                                                | IN THE BODY                          |

|                                           |                                     |                                      |
|-------------------------------------------|-------------------------------------|--------------------------------------|
| (73) Lucerno Dynamics, LLC                | United States of America            | (32) 23.05.2018                      |
| (72) PERRIN, Steven                       | United States of America            | (33) United States of America        |
| KNOWLAND, Joshua, G.                      | (47) 18.09.2024                     | (47) 09.10.2024                      |
| (74) ir. F.A. Geurts c.s.                 | (51) A61B 17/02                     | (51) A61B 17/122                     |
| (31) 202016837187                         | A61C 5/82                           | A61B 17/128                          |
| 201962828033 P                            | A61C 5/90                           | A61B 17/00                           |
| (32) 01.04.2020                           | A61B 13/00                          | A61B 17/02                           |
| 02.04.2019                                | (11) EP3747371                      | (11) EP3873355                       |
| (33) United States of America             | (21) EP20177661.4                   | (21) EP19808935.1                    |
| United States of America                  | (22) 01.06.2020                     | (22) 30.10.2019                      |
| (47) 16.10.2024                           | (54) DENTAL RETRACTION DEVICE       | (54) CLIP DEVICE FOR ENGAGING TISSUE |
| (51) A61B 8/06                            | (73) Ultradent Products, Inc.       | (73) Boston Scientific Scimed Inc.   |
| A61B 8/08                                 | (72) JESSOP, Neil                   | (72) PFIZENMAIER, Todd M.            |
| G06N 3/045                                | (74) dr. R.C. van Duijvenbode c.s.  | SCUTTI, James J.                     |
| G06N 3/08                                 | (31) 201916430168                   | OLMEDA, Katie                        |
| G06T 7/11                                 | (32) 03.06.2019                     | WEITZNER, Barry                      |
| G06T 7/155                                | (33) United States of America       | CARRILLO, Oscar R. Jr.               |
| G06T 7/187                                | (47) 27.11.2024                     | (74) ir. A.R. Aalbers                |
| A61B 8/00                                 | (51) A61B 17/12                     | (31) 201962837041 P                  |
| G06T 7/00                                 | (11) EP3576644                      | 201862753540 P                       |
| (11) EP4192358                            | (21) EP18713545.4                   | (32) 22.04.2019                      |
| (21) EP20754821.5                         | (22) 12.03.2018                     | 31.10.2018                           |
| (22) 07.08.2020                           | (54) OCCLUSIVE MEDICAL DEVICE       | (33) United States of America        |
| (54) ULTRASOUND METHOD                    | SYSTEM                              | United States of America             |
| (73) Oxford University Innovation Limited | (73) Boston Scientific Scimed, Inc. | (47) 02.10.2024                      |
| (72) LOONEY, Pdraig                       | (72) KROEGER, John D.               | (51) A61B 17/22                      |
| YIN, Yi                                   | MORRIS, David B.                    | A61B 8/00                            |
| CLARK, Alys                               | CHOW, Hoi Ki Ricky                  | A61B 8/12                            |
| COLLINS, Sally                            | (74) ir. A.R. Aalbers               | A61B 17/00                           |
| (74) dr. R.C. van Duijvenbode c.s.        | (31) 201762470584 P                 | A61B 17/34                           |
| (47) 18.09.2024                           | (32) 13.03.2017                     | A61B 34/20                           |
| (51) A61B 8/08                            | (33) United States of America       | A61B 8/08                            |
| A61B 8/00                                 | (47) 09.10.2024                     | (11) EP4072444                       |
| (11) EP3790469                            | (51) A61B 17/12                     | (21) EP21708821.0                    |
| (21) EP19800213.1                         | A61B 1/00                           | (22) 02.02.2021                      |
| (22) 03.05.2019                           | A61B 17/00                          | (54) STEERABLE CROSSING CATHETER     |
| (54) ULTRASOUND SYSTEM WITH               | A61B 17/064                         | (73) Boston Scientific Scimed, Inc.  |
| AUTOMATED WALL TRACING                    | (11) EP3941365                      | (72) HAVERKOST, Patrick A.           |
| (73) Fujifilm Sonosite, Inc.              | (21) EP20753640.0                   | ANDERSON, Jason T.                   |
| (72) WHITE, Christopher, A.               | (22) 23.07.2020                     | RIZQ, Raed N.                        |
| (74) J.M.H. Duyver lic.                   | (54) DEVICE FOR CLOSING A WOUND     | MUNDAHL, John Harris                 |
| (31) 201815974255                         | (73) Boston Scientific Scimed, Inc. | WASDYKE, Joel M.                     |
| (32) 08.05.2018                           | (72) FAVREAU, John T.               | HETTEL, Rowan Olund                  |
| (33) United States of America             | LYDECKER, Lauren S.                 | LAROY, John James Ling               |
| (47) 20.11.2024                           | PIC, Andrew                         | (74) ir. A.R. Aalbers                |
| (51) A61B 17/02                           | (74) ir. A.R. Aalbers               | (31) 202062969252 P                  |
| A61B 17/15                                | (31) 201962879218 P                 | (32) 03.02.2020                      |
| A61B 17/17                                | (32) 26.07.2019                     | (33) United States of America        |
| A61B 17/56                                | (33) United States of America       | (47) 16.10.2024                      |
| (11) EP3322361                            | (47) 09.10.2024                     | (51) A61B 17/221                     |
| (21) EP16825176.7                         | (51) A61B 17/12                     | A61F 2/01                            |
| (22) 14.07.2016                           | A61B 17/00                          | A61M 1/02                            |
| (54) BONE POSITIONING GUIDE               | (11) EP3796850                      | (11) EP3836855                       |
| (73) Treace Medical Concepts, Inc.        | (21) EP19730063.5                   | (21) EP19849303.3                    |
| (72) TREACE, John T.                      | (22) 23.05.2019                     | (22) 08.08.2019                      |
| GIL, Carlos Eduardo                       | (54) OCCLUSIVE DEVICE WITH          | (54) SYSTEM FOR TREATING EMBOLISM    |
| DAYTON, Paul                              | EXPANDABLE MEMBER                   | AND ASSOCIATED DEVICES AND           |
| SMITH, W. Bret                            | (73) Boston Scientific Scimed, Inc. | METHODS                              |
| SCANLAN, Sean F.                          | (72) EDGELL, John M.                | (73) Inari Medical, Inc.             |
| BAYS, F. Barry                            | ANDERSON, James M.                  | (72) TU, Thomas                      |
| (74) ir. W.J.J.M. Kempes                  | ONUSHKO, David John                 | STRAUSS, Brian Michael               |
| (31) 201514981335                         | INOUE, Joshua Mark                  | MACIAS, Jaqueline                    |
| 201562205338 P                            | LARSEN, Steven R.                   | MERRITT, Ben                         |
| 201562192319 P                            | TASSONI, Nicholas Lee               | (74) ir. F.A. Geurts c.s.            |
| (32) 28.12.2015                           | RAAB, David                         | (31) 201862718269 P                  |
| 14.08.2015                                | MEREGOTTE, Jose A.                  | 201862718248 P                       |
| 14.07.2015                                | (74) ir. A.R. Aalbers               | (32) 13.08.2018                      |
| (33) United States of America             | (31) 201862675593 P                 | 13.08.2018                           |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>United States of America<br>(47) 25.09.2024                                                                                                                                                                                                                                                                                                                                                                              | (51) A61B 17/28<br>(11) EP4319662<br>(21) EP22721024.2<br>(22) 06.04.2022<br>(54) ASSEMBLY METHOD AND A<br>SCREWDRIVING TOOL AND SCREW<br>KIT<br>(73) Aesculap AG<br>(72) BARTHELMES, Sven<br>MORALES, Pedro<br>(74) ir. W.J.J.M. Kempes<br>(31) 102021108715<br>(32) 08.04.2021<br>(33) Germany<br>(47) 30.10.2024                                                                                                                                       | (51) A61B 18/14<br>(11) EP3917423<br>(21) EP20710293.0<br>(22) 26.02.2020<br>(54) DELIVERING TUMOR TREATING<br>FIELDS (TTFIELDS) USING<br>IMPLANTABLE TRANSDUCER ARRAYS<br>(73) Novocure GmbH<br>(72) GILADI, Moshe<br>BAR-TAL, Golan<br>WASSERMAN, Yoram<br>NAVEH, Ariel<br>HERSHKOVICH, Hadas Sara<br>KIRSON, Eilon<br>VOLOSHIN-SELA, Tali<br>BOMZON, Zeev<br>(74) dr. R.C. van Duijvenbode c.s.<br>(31) 201962811311 P<br>(32) 27.02.2019<br>(33) United States of America<br>(47) 13.11.2024 | (73) Boston Scientific Scimed Inc.<br>(72) COYNE, Martin<br>DOLAN, Jonathan<br>BYRNE, James<br>FEENEY, Niall<br>HOLEHONNUR, Harshad<br>(74) ir. A.R. Aalbers<br>(31) 201762579990 P<br>(32) 01.11.2017<br>(33) United States of America<br>(47) 16.10.2024                                                                                                                                                                                                                                                                                                            |
| (51) A61B 17/32<br>(11) EP4161411<br>(21) EP21733692.4<br>(22) 04.06.2021<br>(54) ULTRASONIC SURGICAL ASPIRATOR<br>FOR PROBING AND ABLATING TISSUE<br>(73) Stryker Corporation<br>(72) DOWNEY, Adam, D.<br>(74) J.M.H. Duyver lic.<br>(31) 202063034713 P<br>(32) 04.06.2020<br>(33) United States of America<br>(47) 27.11.2024                                                                                                                          | (51) A61B 18/02<br>A61B 18/12<br>A61B 17/00<br>A61B 18/00<br>A61B 90/00<br>A61B 90/11<br>(11) EP3697330<br>(21) EP18796126.3<br>(22) 17.10.2018<br>(54) CRYOSURGERY SYSTEM<br>(73) Boston Scientific Scimed Inc.<br>(72) SPRAIN, Jason<br>DAVIS, Tim<br>(74) ir. A.R. Aalbers<br>(31) 201715787253<br>PCT/US2017/057167<br>(32) 18.10.2017<br>18.10.2017<br>(33) United States of America<br>World Intellectual Property Office (WIPO)<br>(47) 09.10.2024 | (51) A61B 18/14<br>A61B 18/00<br>A61B 17/00<br>(11) EP3331466<br>(21) EP16751759.8<br>(22) 03.08.2016<br>(54) EXPANDABLE BALLOON MAPPING<br>AND ABLATION DEVICE<br>(73) Boston Scientific Scimed, Inc.<br>(72) NAGALE, Sandra<br>CHIAVETTA, Amedeo<br>CLARK, Bryan<br>SHOME, Shibaji<br>BODEN, Mark<br>(74) ir. H.J.G. Lips c.s.<br>(31) 201562201519 P<br>(32) 05.08.2015<br>(33) United States of America<br>(47) 25.09.2024                                                                   | (31) 386337 P<br>949609<br>(32) 24.09.2010<br>18.11.2010<br>(33) United States of America<br>United States of America<br>(47) 30.10.2024                                                                                                                                                                                                                                                                                                                                                                                                                              |
| (51) A61B 18/02<br>A61B 18/12<br>A61B 17/00<br>A61B 18/00<br>A61B 90/00<br>A61B 90/11<br>(11) EP3697330<br>(21) EP18796126.3<br>(22) 17.10.2018<br>(54) CRYOSURGERY SYSTEM<br>(73) Boston Scientific Scimed Inc.<br>(72) SPRAIN, Jason<br>DAVIS, Tim<br>(74) ir. A.R. Aalbers<br>(31) 201715787253<br>PCT/US2017/057167<br>(32) 18.10.2017<br>18.10.2017<br>(33) United States of America<br>World Intellectual Property Office (WIPO)<br>(47) 09.10.2024 | (51) A61B 18/14<br>(11) EP3840677<br>(21) EP18766443.8<br>(22) 24.08.2018<br>(54) MEDICAL DEVICES<br>(73) Boston Scientific Scimed Inc.<br>(72) JORDAN, Gary<br>ANDERSON, Niklas<br>ESTEVEZ, Ramon<br>XU, Mingxiang<br>JENSRUD, Allyn<br>SMITH, Paul<br>MCGLINCHEY, Aidan<br>(74) ir. A.R. Aalbers<br>(47) 09.10.2024                                                                                                                                     | (51) A61F 2/04<br>A61F 2/07<br>A61F 2/966<br>A61F 2/95<br>(11) EP3638150<br>(21) EP18737771.8<br>(22) 14.06.2018<br>(54) STENT AND SLEEVE DEPLOYMENT<br>(73) Boston Scientific Scimed, Inc.<br>(72) FORDE, Bryan<br>KEATING, Thomas Martin<br>HYNES, Martin<br>NOLAN, Damien Vincent<br>CORCORAN, Kathleen<br>FOLAN, Martyn G.<br>REAVIS, Kevin M.<br>(74) ir. A.R. Aalbers<br>(31) 201762521129 P<br>(32) 16.06.2017<br>(33) United States of America<br>(47) 09.10.2024                        | (51) A61F 2/06<br>(11) EP2618778<br>(21) EP11827664.1<br>(22) 23.09.2011<br>(54) STENT WITH SUPPORT BRACES<br>(73) Boston Scientific Scimed, Inc.<br>(72) KAO, Stephen<br>(74) ir. A.R. Aalbers<br>(31) 386337 P<br>949609<br>(32) 24.09.2010<br>18.11.2010<br>(33) United States of America<br>United States of America<br>(47) 30.10.2024                                                                                                                                                                                                                           |
| (51) A61B 18/02<br>A61B 18/12<br>A61B 17/00<br>A61B 18/00<br>A61B 90/00<br>A61B 90/11<br>(11) EP3697330<br>(21) EP18796126.3<br>(22) 17.10.2018<br>(54) CRYOSURGERY SYSTEM<br>(73) Boston Scientific Scimed Inc.<br>(72) SPRAIN, Jason<br>DAVIS, Tim<br>(74) ir. A.R. Aalbers<br>(31) 201715787253<br>PCT/US2017/057167<br>(32) 18.10.2017<br>18.10.2017<br>(33) United States of America<br>World Intellectual Property Office (WIPO)<br>(47) 09.10.2024 | (51) A61B 18/14<br>(11) EP3840677<br>(21) EP18766443.8<br>(22) 24.08.2018<br>(54) MEDICAL DEVICES<br>(73) Boston Scientific Scimed Inc.<br>(72) JORDAN, Gary<br>ANDERSON, Niklas<br>ESTEVEZ, Ramon<br>XU, Mingxiang<br>JENSRUD, Allyn<br>SMITH, Paul<br>MCGLINCHEY, Aidan<br>(74) ir. A.R. Aalbers<br>(47) 09.10.2024                                                                                                                                     | (51) A61F 2/04<br>A61F 2/07<br>A61F 2/966<br>A61F 2/95<br>(11) EP3638150<br>(21) EP18737771.8<br>(22) 14.06.2018<br>(54) STENT AND SLEEVE DEPLOYMENT<br>(73) Boston Scientific Scimed, Inc.<br>(72) FORDE, Bryan<br>KEATING, Thomas Martin<br>HYNES, Martin<br>NOLAN, Damien Vincent<br>CORCORAN, Kathleen<br>FOLAN, Martyn G.<br>REAVIS, Kevin M.<br>(74) ir. A.R. Aalbers<br>(31) 201762521129 P<br>(32) 16.06.2017<br>(33) United States of America<br>(47) 09.10.2024                        | (51) A61F 2/24<br>A61L 27/36<br>(11) EP3373860<br>(21) EP16804954.2<br>(22) 04.11.2016<br>(54) KIDNEY CAPSULE LEAFLET<br>MATERIAL<br>(73) Boston Scientific Scimed Inc.<br>(72) CROMPTON, Philip D.<br>FAZACKERLEY, Katherine Cora<br>SWANSON, Lynne E.<br>ANDERSON-CUNANAN, Crystal Marie<br>(74) dr. R.C. van Duijvenbode c.s.<br>(31) 201615340242<br>201562253225 P<br>(32) 01.11.2016<br>10.11.2015<br>(33) United States of America<br>United States of America<br>(47) 02.10.2024                                                                              |
| (51) A61B 18/14<br>(11) EP3840677<br>(21) EP18766443.8<br>(22) 24.08.2018<br>(54) MEDICAL DEVICES<br>(73) Boston Scientific Scimed Inc.<br>(72) JORDAN, Gary<br>ANDERSON, Niklas<br>ESTEVEZ, Ramon<br>XU, Mingxiang<br>JENSRUD, Allyn<br>SMITH, Paul<br>MCGLINCHEY, Aidan<br>(74) ir. A.R. Aalbers<br>(47) 09.10.2024                                                                                                                                     | (51) A61B 18/14<br>(11) EP3840677<br>(21) EP18766443.8<br>(22) 24.08.2018<br>(54) MEDICAL DEVICES<br>(73) Boston Scientific Scimed Inc.<br>(72) JORDAN, Gary<br>ANDERSON, Niklas<br>ESTEVEZ, Ramon<br>XU, Mingxiang<br>JENSRUD, Allyn<br>SMITH, Paul<br>MCGLINCHEY, Aidan<br>(74) ir. A.R. Aalbers<br>(47) 09.10.2024                                                                                                                                     | (51) A61F 2/04<br>A61F 2/24<br>(11) EP3681436<br>(21) EP18815058.5<br>(22) 31.10.2018<br>(54) ESOPHAGEAL STENT INCLUDING A<br>VALVE MEMBER                                                                                                                                                                                                                                                                                                                                                       | (51) A61F 13/15<br>A61F 13/511<br>A61F 13/512<br>(11) EP3641713<br>(21) EP17914384.7<br>(22) 20.12.2017<br>(54) LAMINATE WEBS AND ABSORBENT<br>ARTICLES HAVING THE SAME<br>(73) The Procter & Gamble Company<br>(72) LI, Shihuang<br>SAUER, Linda Ann<br>CECCHETTO, Pietro<br>(74) ir. W.J.J.M. Kempes<br>(31) PCT/CN2017/089550<br>PCT/CN2017/089553<br>PCT/CN2017/089554<br>(32) 22.06.2017<br>22.06.2017<br>22.06.2017<br>(33) World Intellectual Property Office (WIPO)<br>World Intellectual Property Office (WIPO)<br>World Intellectual Property Office (WIPO) |

|                                                                                                                                  |                                                                    |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| (47) 27.11.2024                                                                                                                  | 31.01.2020                                                         | (22) 20.07.2016                                                                       |
| (51) A61F 13/62                                                                                                                  | 30.12.2019                                                         | (54) CHIRAL DIARYL MACROCYCLE AND USE THEREOF IN THE TREATMENT OF CANCER              |
| A61F 13/551                                                                                                                      | 30.12.2019                                                         | (73) Turning Point Therapeutics, Inc.                                                 |
| A61F 13/56                                                                                                                       | (33) United States of America                                      | (72) LI, Yishan                                                                       |
| (11) EP3761935                                                                                                                   | United States of America                                           | ROGERS, Evan W.                                                                       |
| (21) EP19712089.2                                                                                                                | United States of America                                           | HUANG, Zhongdong                                                                      |
| (22) 05.03.2019                                                                                                                  | United States of America                                           | CUI, Jingrong Jean                                                                    |
| (54) ADHESIVE TAPE ASSEMBLIES                                                                                                    | (47) 09.10.2024                                                    | ZHAI, Dayong                                                                          |
| (73) Avery Dennison Corporation                                                                                                  | (51) A61K 31/397                                                   | DENG, Wei                                                                             |
| (72) BOGAERTS, Bert                                                                                                              | A61K 9/00                                                          | (74) ir. H.A. Witmans c.s.                                                            |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                               | A61K 31/431                                                        | (31) 201662302231 P                                                                   |
| (31) 201862638383 P                                                                                                              | A61K 31/546                                                        | 201562195081 P                                                                        |
| (32) 05.03.2018                                                                                                                  | A61P 31/04                                                         | (2) 02.03.2016                                                                        |
| (33) United States of America                                                                                                    | (11) EP3616695                                                     | 21.07.2015                                                                            |
| (47) 27.11.2024                                                                                                                  | (21) EP19203616.8                                                  | (33) United States of America                                                         |
| (51) A61K 9/00                                                                                                                   | (22) 07.09.2012                                                    | United States of America                                                              |
| A61K 9/12                                                                                                                        | (54) CEFTOZOZANE/TAZOBACTAM FOR TREATING INTRAPULMONARY INFECTIONS | (47) 16.10.2024                                                                       |
| A61K 9/51                                                                                                                        | (73) Merck Sharp & Dohme LLC                                       | (51) A61K 31/7028                                                                     |
| A61K 47/64                                                                                                                       | (72) HUNTINGTON, Jennifer, A.                                      | A61P 7/00                                                                             |
| A61K 47/69                                                                                                                       | UMEH, Obiamiwe, C.                                                 | A61P 31/00                                                                            |
| A61K 31/713                                                                                                                      | PARSONS, Tara                                                      | A61P 39/00                                                                            |
| A61K 8/14                                                                                                                        | CHANDORKAR, Gurudatt, A.                                           | A61P 43/00                                                                            |
| A61K 9/127                                                                                                                       | (74) ir. H.A. Witmans c.s.                                         | A61K 45/06                                                                            |
| B82Y 5/00                                                                                                                        | (31) 201261657386 P                                                | A61P 7/02                                                                             |
| B82Y 30/00                                                                                                                       | 201161532914 P                                                     | A61P 9/10                                                                             |
| A61P 27/02                                                                                                                       | (32) 08.06.2012                                                    | A61P 29/00                                                                            |
| A61P 31/04                                                                                                                       | 09.09.2011                                                         | A61P 37/00                                                                            |
| A61P 35/00                                                                                                                       | (33) United States of America                                      | (11) EP3723768                                                                        |
| (11) EP3316850                                                                                                                   | United States of America                                           | (21) EP18888652.7                                                                     |
| (21) EP16822074.7                                                                                                                | (47) 23.10.2024                                                    | (22) 14.12.2018                                                                       |
| (22) 08.07.2016                                                                                                                  | (51) A61K 31/404                                                   | (54) COMPOUNDS FOR TREATING AND PREVENTING EXTRACELLULAR HISTONE MEDIATED PATHOLOGIES |
| (54) FUSOGENIC LIPOSOME-COATED POROUS SILICON NANOPARTICLES                                                                      | A61K 9/127                                                         | (73) Griffith University                                                              |
| (73) The Regents of the University of California                                                                                 | A61K 9/50                                                          | The Australian National University                                                    |
| (72) SAILOR, Michael, J.                                                                                                         | A61K 31/44                                                         | (72) BEZOS, Anna                                                                      |
| KIM, Byungji                                                                                                                     | A61K 31/47                                                         | CHANG, Chih-Wei                                                                       |
| KANG, Jinyoung                                                                                                                   | A61K 31/53                                                         | DAVIS, David Anak Simon                                                               |
| (74) ir. A. Blokland c.s.                                                                                                        | A61K 31/704                                                        | O'MEARA, Connor                                                                       |
| (31) 201562190705 P                                                                                                              | (11) EP3630078                                                     | PARISH, Christopher                                                                   |
| (32) 09.07.2015                                                                                                                  | (21) EP18805890.3                                                  | PHILIP, Lee Andrew                                                                    |
| (33) United States of America                                                                                                    | (22) 25.05.2018                                                    | VON ITZSTEIN, Laurence Mark                                                           |
| (47) 11.09.2024                                                                                                                  | (54) CHEMOEMBOLIZATION AGENTS                                      | QUAH, Benjamin Ju Chye                                                                |
| (51) A61K 9/14                                                                                                                   | (73) Bruin Biosciences, Inc.                                       | TREDWELL, Gregory David                                                               |
| A61K 9/16                                                                                                                        | The Regents of the University of California                        | BRÜSTLE, Anne                                                                         |
| A61K 9/20                                                                                                                        | (72) TUCCI, Fabio                                                  | COUPLAND, Lucy                                                                        |
| A61K 47/38                                                                                                                       | BEATON, Graham                                                     | KORDBACHEH, Farzaneh                                                                  |
| A61P 35/00                                                                                                                       | IMAGAWA, David                                                     | BROWNE, Anna                                                                          |
| A61K 31/4375                                                                                                                     | RAVULA, Satheesh                                                   | STEPHENS, Ross                                                                        |
| C07D 471/04                                                                                                                      | NA, James                                                          | KNOX, Karen                                                                           |
| (11) EP4084779                                                                                                                   | (74) dr. R.C. van Duijvenbode c.s.                                 | (74) ir. J.D. de Zeeuw                                                                |
| (21) EP20848921.1                                                                                                                | (31) 201762511898 P                                                | (31) 2017905024                                                                       |
| (22) 30.12.2020                                                                                                                  | 201762511895 P                                                     | (32) 15.12.2017                                                                       |
| (54) COMPOSITIONS OF 1-(4-BROMO-5-(1-ETHYL-7-(METHYLAMINO)-2-OXO-1,2-DIHYDRO-1,6-NAPHTHYRIDIN-3-YL)-2-FLUOROPHENYL)-3-PHENYLUREA | (32) 26.05.2017                                                    | (33) Australia                                                                        |
| (73) Deciphera Pharmaceuticals, LLC                                                                                              | (33) United States of America                                      | (47) 09.10.2024                                                                       |
| (72) BLOOM, Corey                                                                                                                | United States of America                                           | (51) A61K 31/7068                                                                     |
| BONE, Scott                                                                                                                      | (47) 11.09.2024                                                    | C07H 19/067                                                                           |
| JORDAN, Fred                                                                                                                     | (51) A61K 31/519                                                   | C07H 19/10                                                                            |
| KAUFMAN, Michael, D.                                                                                                             | A61K 31/52                                                         | A61P 31/14                                                                            |
| (74) ir. H.A. Witmans c.s.                                                                                                       | C07D 491/16                                                        | A61P 31/12                                                                            |
| (31) 202062968724 P                                                                                                              | C07D 491/12                                                        | (11) EP3706762                                                                        |
| 202062968695 P                                                                                                                   | C07D 491/18                                                        | (21) EP18886104.1                                                                     |
| 201962955073 P                                                                                                                   | C07D 498/18                                                        | (22) 07.12.2018                                                                       |
| 201962955062 P                                                                                                                   | A61P 35/00                                                         | (54) N4-HYDROXYCYTIDINE DERIVATIVE AND ANTI-VIRAL USES RELATED THERETO                |
| (32) 31.01.2020                                                                                                                  | (11) EP3733187                                                     |                                                                                       |
|                                                                                                                                  | (21) EP20181616.2                                                  |                                                                                       |

|                                    |                                   |                                                 |
|------------------------------------|-----------------------------------|-------------------------------------------------|
| (73) Emory University              | (32) 19.12.2017                   | A61K 47/42                                      |
| (72) GUTHRIE, David                | (33) European Patent Office (EPO) | A61P 35/00                                      |
| PAINTER, George, R.                | (47) 09.10.2024                   | A61K 31/704                                     |
| BLUEMLING, Gregory, R.             | (51) A61K 39/395                  | (11) EP3632413                                  |
| NATCHUS, Michael, G.               | A61K 45/06                        | (21) EP18806024.8                               |
| (74) dr. W.A.H.M. Van Borm         | A61P 35/00                        | (22) 24.05.2018                                 |
| (31) 201862760434 P                | A61K 31/555                       | (54) LONG-CIRCULATING LIPOSOME                  |
| 201862626998 P                     | A61K 33/243                       | MODIFIED WITH C(RGD-ACP-K)                      |
| 201762595907 P                     | A61K 31/519                       | (73) Beijing Greatsun Bio-pharm. Tech. Co., Ltd |
| (32) 13.11.2018                    | A61K 31/5377                      | (72) LEE, Changjin                              |
| 06.02.2018                         | A61K 31/497                       | WU, Cuishuan                                    |
| 07.12.2017                         | (11) EP3856251                    | ZHANG, Qiang                                    |
| (33) United States of America      | (21) EP19783237.1                 | CUI, Guanghua                                   |
| United States of America           | (22) 26.09.2019                   | SU, Yue                                         |
| United States of America           | (54) COMBINATION OF A PD-1        | (74) dr. R.C. van Duijvenbode c.s.              |
| (47) 16.10.2024                    | ANTAGONIST, AN ATR INHIBITOR      | (31) 201710379667                               |
| (51) A61K 31/7088                  | AND A PLATINATING AGENT FOR THE   | (32) 25.05.2017                                 |
| A61K 45/00                         | TREATMENT OF CANCER               | (33) China                                      |
| A61K 31/575                        | (73) Merck Patent GmbH            | (47) 11.09.2024                                 |
| A61K 31/519                        | Pfizer Inc.                       | (51) A61K 49/22                                 |
| A61K 31/472                        | (72) FALK, Martin                 | (11) EP3817777                                  |
| A61K 31/4706                       | TADJALLI MEHR, Keyvan             | (21) EP19736705.5                               |
| A61K 31/365                        | DAHMEN, Heike                     | (22) 05.07.2019                                 |
| A61K 31/192                        | ZIMMERMANN, Astrid                | (54) FREEZE-DRIED FORMULATION FOR               |
| A61K 31/155                        | ALIMZHANOV, Marat                 | GAS-FILLED MICROVESICLES                        |
| G01N 33/50                         | ZENKE, Frank                      | (73) Bracco Suisse SA                           |
| G01N 33/15                         | SOULARD, Patricia                 | (72) GORGERAT, Stéphane                         |
| C12Q 1/04                          | SCHROEDER, Andreas                | BROCHOT, Jean                                   |
| A61P 43/00                         | (74) ir. H.A. Witmans c.s.        | GUILLLOT, Christian                             |
| A61P 27/10                         | (31) 201862736699 P               | LASSUS, Anne                                    |
| A61K 31/235                        | (32) 26.09.2018                   | YAN, Feng                                       |
| (11) EP3593817                     | (33) United States of America     | (74) ir. W.J.J.M. Kempes                        |
| (21) EP18764652.6                  | (47) 09.10.2024                   | (31) 201916260894                               |
| (22) 06.03.2018                    | (51) A61K 39/395                  | 201816028536                                    |
| (54) COMPOSITION FOR USE IN THE    | C07K 16/28                        | (32) 29.01.2019                                 |
| PREVENTION OR SUPPRESSION OF       | A61P 3/10                         | 06.07.2018                                      |
| MYOPIA                             | (11) EP3570885                    | (33) United States of America                   |
| (73) Tsubota Laboratory, Inc.      | (21) EP18714635.2                 | United States of America                        |
| (72) Tsubota Kazuo                 | (22) 16.01.2018                   | (47) 20.11.2024                                 |
| KURIHARA Toshihide                 | (54) METHOD OF TREATING OR        | (51) A61K 51/04                                 |
| IKEDA Shinichi                     | AMELIORATING METABOLIC            | A61P 35/04                                      |
| JIANG Xiaoyan                      | DISORDERS USING GLP-1 RECEPTOR    | A61P 35/00                                      |
| (74) dr. R.C. van Duijvenbode c.s. | AGONISTS CONJUGATED TO            | A61K 103/40                                     |
| (31) 2017041349                    | ANTAGONISTS FOR GASTRIC           | A61K 103/00                                     |
| (32) 06.03.2017                    | INHIBITORY PEPTIDE RECEPTOR       | (11) EP3498308                                  |
| (33) Japan                         | (GIPR)                            | (21) EP18212268.9                               |
| (47) 13.11.2024                    | (73) Amgen Inc.                   | (22) 13.12.2018                                 |
| (51) A61K 33/00                    | (72) STANISLAUS, Shanaka          | (54) COMPLEX COMPRISING A PSMA-                 |
| A61K 33/24                         | HOLDER, Jerry Ryan                | TARGETING COMPOUND LINKED TO                    |
| A61K 33/242                        | CHENG, Yuan                       | A LEAD OR THORIUM RADIONUCLIDE                  |
| A61K 33/243                        | LU, Shu-Chen                      | (73) Sciencons AS                               |
| A61K 9/00                          | NETIROJJANAKUL, Chawita           | (72) LARSEN, Roy Hartvig                        |
| A61K 9/51                          | WU, Bin                           | (74) dr. R.C. van Duijvenbode c.s.              |
| A61K 47/00                         | FALSEY, James R.                  | (31) 17206887                                   |
| A61P 25/00                         | SHAM, Kelvin                      | (32) 13.12.2017                                 |
| A61P 25/28                         | VENIANT-ELLISON, Murielle M.      | (33) European Patent Office (EPO)               |
| (11) EP3727402                     | HERBERICH, Bradley J.             | (47) 27.11.2024                                 |
| (21) EP18822059.4                  | MIRANDA, Leslie P.                | (51) A61L 2/20                                  |
| (22) 18.12.2018                    | XU, Jing                          | (11) EP3541434                                  |
| (54) NANOPARTICLES FOR USE IN      | YIE, Junming                      | (21) EP17870809.5                               |
| ENHANCING BRAIN PERFORMANCES       | (74) ir. W.J.J.M. Kempes          | (22) 15.11.2017                                 |
| OR IN TREATING STRESS              | (31) 201762447332 P               | (54) APPARATUS AND METHOD FOR                   |
| (73) Nanobiotix                    | (32) 17.01.2017                   | STERILIZATION OF AN ARTICLE                     |
| (72) MEYRE, Marie-Edith            | (33) United States of America     | (73) Ideate Medical                             |
| POTTIER, Agnès                     | (47) 18.09.2024                   | (72) CONSEIL, Philippe                          |
| LEVY, Laurent                      | (51) A61K 47/69                   | CHICATUN, Florencia                             |
| (74) ir. W.J.J.M. Kempes           | A61K 47/62                        | (74) J.M.H. Duyver lic.                         |
| (31) 17306831                      | A61K 9/127                        |                                                 |



|                                             |                                     |                                                    |
|---------------------------------------------|-------------------------------------|----------------------------------------------------|
| (31) 201662422493 P                         | European Patent Office (EPO)        | (73) Boston Scientific Neuromodulation Corporation |
| (32) 15.11.2016                             | (47) 27.11.2024                     | (72) MOORE, Lisa                                   |
| (33) United States of America               | (51) A61M 5/20                      | MUSTAKOS, Richard                                  |
| (47) 13.11.2024                             | A61M 5/315                          | JUAREZ PAZ, Leon                                   |
| (51) A61L 2/20                              | A61M 5/32                           | (74) ir. A.R. Aalbers                              |
| A61M 5/00                                   | (11) EP3397317                      | (31) 202163149167 P                                |
| A61M 5/31                                   | (21) EP16819956.0                   | (32) 12.02.2021                                    |
| A61M 5/315                                  | (22) 29.12.2016                     | (33) United States of America                      |
| B65B 3/00                                   | (54) FRONT LOADED AUTO INJECTOR     | (47) 30.10.2024                                    |
| B65B 55/02                                  | FOR ADMINISTERING A MEDICAMENT      | (51) A61N 1/36                                     |
| B65B 55/10                                  | (73) Ascendis Pharma A/S            | A61N 1/372                                         |
| (11) EP3463490                              | (72) FABRICIUS, Paul Erik           | A61N 1/378                                         |
| (21) EP17807234.4                           | JENSEN, Steen                       | A61B 5/00                                          |
| (22) 22.05.2017                             | EGESBORG, Henrik                    | (11) EP4182008                                     |
| (54) METHODS FOR MANUFACTURING              | OLESEN, Jan                         | (21) EP21752754.8                                  |
| NON-GLASS PREFILLED CONTAINERS              | PEDERSEN, Per Mølgaard              | (22) 16.07.2021                                    |
| (73) Centurion Medical Products Corporation | (74) dr. R.C. van Duijvenbode c.s.  | (54) METHOD FOR ADAPTIVE DEEP BRAIN                |
| (72) CARPENTER, Curt                        | (31) 16190461                       | STIMULATION                                        |
| KUEHNE, Kelley                              | 15203168                            | (73) Newronika S.p.A.                              |
| LEGINSKI, Jessica                           | (32) 23.09.2016                     | (72) ROSSI, Lorenzo                                |
| (74) J.M.H. Duyver lic.                     | 30.12.2015                          | ARLOTTI, Mattia                                    |
| (31) 201615169962                           | (33) European Patent Office (EPO)   | (74) J.M.H. Duyver lic.                            |
| (32) 01.06.2016                             | European Patent Office (EPO)        | (31) 202063053263 P                                |
| (33) United States of America               | (47) 09.10.2024                     | (32) 17.07.2020                                    |
| (47) 23.10.2024                             | (51) A61M 15/00                     | (33) United States of America                      |
| (51) A61L 27/16                             | (11) EP3986514                      | (47) 09.10.2024                                    |
| A61L 27/36                                  | (21) EP20832571.2                   | (51) A61N 1/378                                    |
| A61F 2/02                                   | (22) 23.06.2020                     | A61N 1/02                                          |
| A61M 5/00                                   | (54) A DEVICE FOR DELIVERY OF A     | A61N 1/36                                          |
| A61M 31/00                                  | COMPOSITION TO AN AIRWAY OF A       | A61N 1/362                                         |
| A61M 37/00                                  | SUBJECT                             | (11) EP4101500                                     |
| C12N 5/00                                   | (73) De Motu Cordis Pty Ltd         | (21) EP22182944.3                                  |
| A61F 2/00                                   | (72) FREDATOVICH, John              | (22) 14.09.2018                                    |
| (11) EP4218842                              | LIPMAN, Johann                      | (54) CURRENT GENERATION                            |
| (21) EP23169082.7                           | LYNCH, Patrick, Joseph              | ARCHITECTURE FOR AN                                |
| (22) 08.11.2017                             | O'FLAHERTY, Brendan                 | IMPLANTABLE STIMULATOR DEVICE                      |
| (54) CELL ENCAPSULATION DEVICES             | (74) ir. W.J.J.M. Kempes            | INCLUDING DISTRIBUTOR CIRCUITRY                    |
| CONTAINING STRUCTURAL SPACERS               | (31) 201916450077                   | FOR SENDING AN AMPLITUDE-                          |
| (73) W.L. Gore & Associates, Inc.           | (32) 24.06.2019                     | SCALED CURRENT TO DIGITAL-                         |
| W.L. Gore & Associates GmbH                 | (33) United States of America       | TO-ANALOG CONVERTERS AT THE                        |
| (72) ZAMBOTTI, Lauren                       | (47) 18.09.2024                     | ELECTRODES                                         |
| PARSONS, Bernadette                         | (51) A61M 16/00                     | (73) Boston Scientific Neuromodulation Corporation |
| CULLY, Edward, H.                           | A61M 16/10                          | (72) MARNFELDT, Goran N.                           |
| DRUMHELLER, Paul, D.                        | A61M 16/12                          | WEISS, Philip L.                                   |
| (74) ir. W.J.J.M. Kempes                    | A61M 16/20                          | WEERAKOON, Pujitha                                 |
| (31) 201715806099                           | (11) EP4241812                      | WAGENBACH, David M.                                |
| 201662419148 P                              | (21) EP23159400.3                   | GURURAJ, Kiran K.                                  |
| (32) 07.11.2017                             | (22) 01.03.2023                     | (74) ir. A.R. Aalbers                              |
| 08.11.2016                                  | (54) NO DELIVERY APPARATUS WITH TWO | (31) 201762559249 P                                |
| (33) United States of America               | GAS OUTLETS                         | (32) 15.09.2017                                    |
| United States of America                    | (73) Inosystems                     | (33) United States of America                      |
| (47) 09.10.2024                             | (72) MARCHAL, Frédéric              | (47) 30.10.2024                                    |
| (51) A61M 5/20                              | (74) ir. W.J.J.M. Kempes            | (51) A61P 29/00                                    |
| A61M 5/24                                   | (31) 2202053                        | C07D 471/04                                        |
| (11) EP3397319                              | (32) 09.03.2022                     | A61K 31/53                                         |
| (21) EP16822213.1                           | (33) France                         | (11) EP4135842                                     |
| (22) 29.12.2016                             | (47) 16.10.2024                     | (21) EP21717912.6                                  |
| (54) AUTO INJECTOR WITH CARTRIDGE           | (51) A61N 1/05                      | (22) 15.04.2021                                    |
| LOCKING SYSTEM                              | A61N 1/372                          | (54) PYRROLO[1,2-D][1,2,4]TRIAZINE-2-YL-           |
| (73) Ascendis Pharma A/S                    | A61N 1/36                           | ACETAMIDES AS INHIBITORS OF THE                    |
| (72) OLESEN, Jan                            | (11) EP4267235                      | NLRP3 INFLAMMASOME PATHWAY                         |
| JACOBSEN, Thorben Kvisgaard                 | (21) EP22705705.6                   | (73) JANSSEN Pharmaceutica NV                      |
| (74) dr. R.C. van Duijvenbode c.s.          | (22) 31.01.2022                     | (72) MURATORE, Michael, Eric                       |
| (31) 15203132                               | (54) AUTOMATED SELECTION OF         | LEENAERTS, Joseph, Elisabeth                       |
| 15203137                                    | ELECTRODES AND STIMULATION          | MARTINEZ VITURRO, Carlos, Manuel                   |
| (32) 30.12.2015                             | PARAMETERS IN A DEEP BRAIN          | OEHLRICH, Daniel                                   |
| 30.12.2015                                  | STIMULATION SYSTEM EMPLOYING        |                                                    |
| (33) European Patent Office (EPO)           | DIRECTIONAL LEADS                   |                                                    |

|                                         |                                        |                                     |
|-----------------------------------------|----------------------------------------|-------------------------------------|
| VAN OPDENBOSCH, Nina                    | (22) 28.09.2016                        | (54) BIOLOGICAL DETECTION DEVICE    |
| VAN GOOL, Michiel Luc Maria             | (54) A CATALYST REGENERATOR AND A      | (73) SKYLA Corporation              |
| LAMKANFI, Mohamed                       | RISER TERMINATOR USED THEREIN          | (72) He, Sz-Shian                   |
| (74) ir. W.J.J.M. Kempes                | (73) Dow Global Technologies LLC       | (74) dr. R.C. van Duijvenbode c.s.  |
| (31) 20382298                           | (72) KODAM, Madhusudhan                | (31) 202063054806 P                 |
| (32) 15.04.2020                         | SHAW, Don, F.                          | 110100572                           |
| (33) European Patent Office (EPO)       | WALTER, Richard, E.                    | (32) 22.07.2020                     |
| (47) 23.10.2024                         | PRETZ, Matthew, T.                     | 07.01.2021                          |
| (51) B01D 29/52                         | (74) ir. W.J.J.M. Kempes               | (33) United States of America       |
| B01D 29/94                              | (31) 201514870368                      | Taiwan, Chinese Taipei              |
| C11B 3/10                               | (32) 30.09.2015                        | (47) 27.11.2024                     |
| (11) EP3806975                          | (33) United States of America          | (51) B02C 18/14                     |
| (21) EP19732527.7                       | (47) 27.11.2024                        | (11) EP4154982                      |
| (22) 11.06.2019                         | (51) B01J 8/24                         | (21) EP21199036.1                   |
| (54) A FILTRATION PROCESS               | B01J 8/18                              | (22) 27.09.2021                     |
| (73) Cargill, Incorporated              | B01J 8/26                              | (54) SHAFT COUPLING AND A           |
| (72) TARNOW, Armin Willem-Friedrich     | C10G 11/18                             | DISINTEGRATION DEVICE WITH SUCH     |
| Hermann                                 | (11) EP3661639                         | A SHAFT COUPLING                    |
| MAIWORM, Michael                        | (21) EP18755612.1                      | (73) Lindner, Manuel                |
| (74) ir. W.J.J.M. Kempes                | (22) 30.07.2018                        | (72) WEINGARTNER, Peter             |
| (31) 18177486                           | (54) METHODS AND APPARATUSES FOR       | LINDNER, Manuel                     |
| (32) 13.06.2018                         | PROCESSING GAS STREAMS                 | (74) dr. R.C. van Duijvenbode c.s.  |
| (33) European Patent Office (EPO)       | (73) DOW GLOBAL TECHNOLOGIES LLC       | (47) 20.11.2024                     |
| (47) 04.12.2024                         | (72) PRETZ, Matthew T.                 | (51) B03D 1/01                      |
| (51) B01D 61/02                         | KODAM, Madhusudhan                     | B03D 1/016                          |
| B01D 61/08                              | (74) ir. W.J.J.M. Kempes               | C08G 63/685                         |
| B01D 61/12                              | (31) 201762538987 P                    | (11) EP4288215                      |
| C02F 1/44                               | (32) 31.07.2017                        | (21) EP22708189.0                   |
| C02F 1/00                               | (33) United States of America          | (22) 03.02.2022                     |
| (11) EP3397375                          | (47) 27.11.2024                        | (54) POLYESTERAMINES AND            |
| (21) EP16739582.1                       | (51) B01J 31/22                        | POLYESTERQUATS                      |
| (22) 13.07.2016                         | C07C 31/20                             | (73) ARKEMA FRANCE                  |
| (54) IMPROVED REVERSE OSMOSIS OR        | C07C 29/10                             | (72) DELROISSE, Henry               |
| NANOFILTRATION SYSTEM AND               | B01J 29/03                             | BALOCHE, Alain                      |
| PROCESS FOR CLEANING WATER              | B01J 31/16                             | JORDA, Eric                         |
| (73) IDE WATER TECHNOLOGIES LTD.        | (11) EP3831478                         | BARRETO, Gilles                     |
| (72) EFRAT, Tomer                       | (21) EP19844935.7                      | (74) dr. R.C. van Duijvenbode c.s.  |
| DRAK, Alex                              | (22) 30.07.2019                        | (31) 2101067                        |
| ZAKEN, Roi                              | (54) NANOCAGED CATALYST,               | (32) 04.02.2021                     |
| (74) dr. A. Krebs                       | PREPARATION METHOD, AND                | (33) France                         |
| (31) 201512979                          | APPLICATION                            | (47) 06.11.2024                     |
| (32) 23.07.2015                         | (73) Shanghai Research Institute of    | (51) B04B 5/12                      |
| (33) United Kingdom                     | Petrochemical Technology, SINOPEC      | B04B 9/12                           |
| (47) 25.09.2024                         | China Petroleum & Chemical Corporation | B04B 11/02                          |
| (51) B01F 23/451                        | (72) YU, Fengping                      | (11) EP4015089                      |
| B01F 23/47                              | TAO, Guiju                             | (21) EP20215439.9                   |
| B01F 25/313                             | HE, Wenjun                             | (22) 18.12.2020                     |
| B01F 25/4314                            | YANG, Weimin                           | (54) CENTRIFUGAL SEPARATOR          |
| (11) EP3735317                          | JIN, Shaoqing                          | (73) Alfdex AB                      |
| (21) EP19736143.9                       | (74) dr. ir. F.M. van Bouwelen         | (72) ÖRTEGREN, Anders               |
| (22) 03.01.2019                         | (31) 201811251045                      | (74) ir. H.A. Witmans c.s.          |
| (54) MIXING SYSTEM                      | 201811251064                           | (47) 09.10.2024                     |
| (73) Sabic Sk Nexlene Company Pte. Ltd. | 201810854835                           | (51) B23K 1/08                      |
| (72) KIM, Myoungil                      | (32) 25.10.2018                        | B23K 3/06                           |
| SHIM, Choonsik                          | 25.10.2018                             | B23K 3/08                           |
| JANG, Hyunmin                           | 31.07.2018                             | (11) EP3936271                      |
| JEONG, Minsu                            | (33) China                             | (21) EP21169170.4                   |
| SHIN, Daeho                             | China                                  | (22) 19.04.2021                     |
| (74) dr. R.C. van Duijvenbode c.s.      | China                                  | (54) SOLDERING NOZZLE, SYSTEM AND   |
| (31) 20180001571                        | (47) 27.11.2024                        | USE                                 |
| (32) 05.01.2018                         | (51) B01L 3/00                         | (73) Illinois Tool Works, Inc.      |
| (33) Korea (Republic)                   | B04B 5/02                              | (72) DIEPSTRATEN, Gerardus Johannes |
| (47) 04.12.2024                         | B04B 9/08                              | Adrianus Maria                      |
| (51) B01J 8/00                          | B04B 9/10                              | COLIJN, Antonie Cornelis            |
| B01J 8/26                               | B04B 9/14                              | (74) dr. W.A.H.M. Van Borm          |
| B01J 8/38                               | (11) EP4257244                         | (31) 20184808                       |
| (11) EP3356022                          | (21) EP23194418.2                      | (32) 08.07.2020                     |
| (21) EP16781251.0                       | (22) 23.06.2021                        | (33) European Patent Office (EPO)   |

|                                     |                                    |                                         |
|-------------------------------------|------------------------------------|-----------------------------------------|
| (47) 25.09.2024                     | (74) ir. F.A. Geurts c.s.          | (21) EP20789460.1                       |
| (51) B23K 3/06                      | (47) 18.09.2024                    | (22) 22.09.2020                         |
| (11) EP3785837                      | (51) B25F 5/02                     | (54) A METHOD AND A SYSTEM FOR          |
| (21) EP19193941.2                   | (11) EP4059666                     | ASSEMBLING BLADE PARTS OF A             |
| (22) 27.08.2019                     | (21) EP22160598.3                  | WIND TURBINE BLADE                      |
| (54) NOZZLE, SYSTEM AND METHOD      | (22) 07.03.2022                    | (73) Siemens Gamesa Renewable Energy A/ |
| (73) Illinois Tool Works, Inc.      | (54) MANUALLY OPERATED WORK DEVICE | S                                       |
| (72) DIEPSTRATEN, Gerjan            | (73) Andreas Stihl AG & Co. KG     | (72) HENRICHSEN, Soeren Randrup         |
| (74) dr. W.A.H.M. Van Borm          | (72) BEJBLIK, Jan                  | Daugaard                                |
| (47) 02.10.2024                     | HEFTI, Jonas                       | NIELSEN, Mogens                         |
| (51) B23K 35/02                     | MANDEL, Roland                     | (74) ir. W.J.J.M. Kempes                |
| B23K 35/26                          | (74) dr. R.C. van Duijvenbode c.s. | (31) 19204065                           |
| B23K 35/30                          | (31) 21162602                      | (32) 18.10.2019                         |
| B23K 35/36                          | (32) 15.03.2021                    | (33) European Patent Office (EPO)       |
| B22F 1/00                           | (33) European Patent Office (EPO)  | (47) 06.11.2024                         |
| B22F 1/107                          | (47) 25.09.2024                    | (51) B32B 17/10                         |
| B22F 1/12                           | (51) B28B 11/24                    | H01L 31/048                             |
| (11) EP3766631                      | B28B 11/12                         | B32B 27/32                              |
| (21) EP20181499.3                   | B28B 11/04                         | (11) EP3781395                          |
| (22) 02.08.2012                     | C04B 33/34                         | (21) EP19717910.4                       |
| (54) SOLDER COMPOSITIONS            | C04B 41/00                         | (22) 16.04.2019                         |
| (73) Alpha Assembly Solutions Inc.  | C04B 41/45                         | (54) A MULTILAYER LAYER ELEMENT         |
| (72) DE AVILA RIBAS, Morgana        | C04B 41/86                         | (73) Borealis AG                        |
| NANDI, Proloy                       | (11) EP3795320                     | (72) COSTA, Francis                     |
| LODGE, Dominic                      | (21) EP20180404.4                  | DOU, Qizheng                            |
| SINGH, Bawa                         | (22) 17.06.2020                    | YALALOV, Denis                          |
| SARKAR, Siuli                       | (54) METHOD FOR MANUFACTURING A    | ODERKERK, Jeroen                        |
| BHATKAL, Ravindra M                 | CERAMIC SANITARY ARTICLE           | (74) ir. H.Th. van den Heuvel c.s.      |
| RAUT, Rahul                         | (73) Duravit Aktiengesellschaft    | (31) 18167412                           |
| PANDHER, Ranjit                     | (72) STAMMEL, Thomas               | (32) 16.04.2018                         |
| CHATTOPADHYAY, Kamanio              | GILLES, Christian                  | (33) European Patent Office (EPO)       |
| (74) ir. W.J.J.M. Kempes            | (74) ir. W.J.J.M. Kempes           | (47) 09.10.2024                         |
| (31) 201161514396 P                 | (31) 102019125139                  | (51) B32B 38/14                         |
| (32) 02.08.2011                     | (32) 18.09.2019                    | B41J 15/16                              |
| (33) United States of America       | (33) Germany                       | B65H 23/04                              |
| (47) 27.11.2024                     | (47) 25.09.2024                    | (11) EP4228896                          |
| (51) B23K 35/363                    | (51) B29C 65/50                    | (21) EP21790894.6                       |
| B23K 35/26                          | B29C 65/48                         | (22) 13.10.2021                         |
| C22C 13/00                          | B29C 65/40                         | (54) A METHOD OF MANUFACTURING          |
| C22C 13/02                          | B29D 29/06                         | DECORATIVE PANELS                       |
| B23K 35/36                          | B65H 5/02                          | (73) AGFA NV                            |
| B23K 35/362                         | B29D 29/00                         | (72) VAN MOOTER, Patrick                |
| B23K 35/02                          | F16G 3/10                          | WOUTERS, Paul                           |
| (11) EP4108378                      | B65G 15/34                         | VAN DORPE, Jurgen                       |
| (21) EP21757935.8                   | (11) EP3715099                     | BAKS, Christof                          |
| (22) 17.02.2021                     | (21) EP18881538.5                  | (31) 20202554                           |
| (54) FLUX AND SOLDER PASTE          | (22) 27.09.2018                    | (32) 19.10.2020                         |
| (73) Senju Metal Industry Co., Ltd. | (54) ENDLESS BELT                  | (33) European Patent Office (EPO)       |
| (72) SHIRATORI, Masato              | (73) Nitta Corporation             | (47) 11.12.2024                         |
| KAWASAKI, Hiroyoshi                 | (72) KURIYA, Akihiko               | (51) B33Y 70/10                         |
| KAWAMATA, Yuji                      | Oi, Akito                          | B29C 64/153                             |
| MINEGISHI, Kazuhiro                 | KUBOTA, Takeshi                    | B33Y 40/20                              |
| (74) dr. R.C. van Duijvenbode c.s.  | KONISHI, Yoshihiro                 | (11) EP4210950                          |
| (31) 2020025679                     | (74) dr. A. Krebs                  | (21) EP21769390.2                       |
| (32) 18.02.2020                     | (31) 2018174283                    | (22) 25.08.2021                         |
| (33) Japan                          | 2017223954                         | (54) SELECTIVE LASER SINTERING OF       |
| (47) 27.11.2024                     | (32) 18.09.2018                    | POLYMERIC POWDERS EMBEDDED              |
| (51) B25B 23/142                    | 21.11.2017                         | WITH WATER-SOLUBLE FLOW                 |
| B25B 23/00                          | (33) Japan                         | ADDITIVES                               |
| B25B 13/56                          | Japan                              | (73) Evonik Operations GmbH             |
| B25B 15/02                          | (47) 13.11.2024                    | (72) ACREMAN, Kevin                     |
| (11) EP4088867                      | (51) B29C 65/78                    | DADSETAN, Mahrokh                       |
| (21) EP21173163.3                   | B29C 65/00                         | JONES, Marshall Scott                   |
| (22) 10.05.2021                     | F03D 1/06                          | HANSON, William                         |
| (54) TORQUE TOOL USING COLORS FOR   | F03D 13/10                         | (74) ir. W.J.J.M. Kempes                |
| IDENTIFICATION                      | B29C 70/44                         | (31) 202063075544 P                     |
| (73) Matatakitoyo Tool Co., Ltd.    | B29C 70/86                         | (32) 08.09.2020                         |
| (72) Wu, Yi-Min                     | (11) EP4013606                     | (33) United States of America           |

|                                         |                                        |                                          |
|-----------------------------------------|----------------------------------------|------------------------------------------|
| (47) 02.10.2024                         | WELDER, Gerhard                        | (47) 02.10.2024                          |
| (51) B41J 2/16                          | (74) dr. R.C. van Duijvenbode c.s.     | (51) B65C 1/02                           |
| H05K 1/02                               | (31) 202016812723                      | F15B 15/14                               |
| H05K 3/00                               | (32) 09.03.2020                        | F16F 9/02                                |
| H05K 3/02                               | (33) United States of America          | F16H 25/20                               |
| H05K 3/38                               | (47) 27.11.2024                        | B23Q 11/00                               |
| (11) EP4019256                          | (51) B60T 13/36                        | B65C 9/26                                |
| (21) EP21209829.7                       | B60T 13/38                             | F16F 9/43                                |
| (22) 15.04.2015                         | B60T 13/68                             | (11) EP3802339                           |
| (54) DROPLET ACTUATOR FABRICATION       | (11) EP4303085                         | (21) EP19807365.2                        |
| APPARATUS, SYSTEMS, AND                 | (21) EP22183440.1                      | (22) 14.05.2019                          |
| RELATED METHODS                         | (22) 06.07.2022                        | (54) A SAFETY LIFTING DEVICE             |
| (73) Abbott Laboratories                | (54) WORK MACHINE, DIAGNOSTIC          | (73) Evolabel AB                         |
| (72) FISCHER, Andrew                    | PROCEDURE AND USE OF THE               | (72) DIJKSTRA, Gerard                    |
| LAURENSEN, Sophie                       | WORK MACHINE                           | SÖDERGÅRD, Jonas                         |
| PETTY, Adrian                           | (73) KAMAG Transporttechnik GmbH & Co. | (74) dr. R.C. van Duijvenbode c.s.       |
| (74) ir. F.A. Geurts c.s.               | KG                                     | (31) 1850622                             |
| (31) 201461980422 P                     | (72) Riedel, Gerald                    | (32) 24.05.2018                          |
| (32) 16.04.2014                         | (74) dr. R.C. van Duijvenbode c.s.     | (33) Sweden                              |
| (33) United States of America           | (47) 18.09.2024                        | (47) 09.10.2024                          |
| (47) 13.11.2024                         | (51) B62M 6/65                         | (51) B65D 43/02                          |
| (51) B60N 2/28                          | B62K 25/02                             | B65D 81/20                               |
| (11) EP4222019                          | (11) EP4151513                         | B65D 53/04                               |
| (21) EP21798620.7                       | (21) EP22181282.9                      | B65D 51/14                               |
| (22) 20.10.2021                         | (22) 27.06.2022                        | B65D 51/16                               |
| (54) BASE STRUCTURE ADAPTED FOR         | (54) MOTOR DEVICE FOR AN ELECTRIC      | B65D 53/02                               |
| A SEAT BODY OF A CHILD SAFETY           | BICYCLE                                | B65D 41/04                               |
| SEAT                                    | (73) MAHLE International GmbH          | (11) EP3720782                           |
| (73) Bambino Prezioso Switzerland AG    | (72) GONZALEZ DE JUAN, Carlos          | (21) EP18821835.8                        |
| (72) ZHANG, Da Liang                    | PEREZ, Sergio                          | (22) 29.11.2018                          |
| (74) ir. A.R. Aalbers                   | ANTON, Ivan                            | (54) CLOSURE FOR CONTAINERS UNDER        |
| (31) 202011128258                       | JUMBERT, Jaume                         | VACUUM                                   |
| (32) 20.10.2020                         | GARCIA, Gonzalo                        | (73) Owens-Brockway Glass Container Inc. |
| (33) China                              | FRANCO REVILLA, Jose Vicente           | (72) BROZELL, Brian J.                   |
| (47) 09.10.2024                         | DE LA SERNA GONZALEZ, Marco            | (74) ir. W.J.J.M. Kempes                 |
| (51) B60R 16/00                         | Antonio                                | (31) 201715849211                        |
| G06F 13/38                              | (74) J.M.H. Duyver lic.                | (32) 20.12.2017                          |
| G06F 1/26                               | (31) 21197079                          | (33) United States of America            |
| G06F 13/40                              | (32) 16.09.2021                        | (47) 20.11.2024                          |
| (11) EP3838683                          | (33) European Patent Office (EPO)      | (51) B65D 43/04                          |
| (21) EP20177193.8                       | (47) 30.10.2024                        | B65D 81/38                               |
| (22) 28.05.2020                         | (51) B64F 1/305                        | B65D 21/08                               |
| (54) IN-VEHICLE DETECTION OF A          | (11) EP4103474                         | B65D 25/02                               |
| CHARGE-ONLY CONNECTION WITH A           | (21) EP21700958.8                      | B65D 43/02                               |
| MOBILE COMPUTING DEVICE                 | (22) 21.01.2021                        | (11) EP4245684                           |
| (73) Google LLC                         | (54) METHOD FOR OPERATING A            | (21) EP21891873.8                        |
| (72) KRAKOWIAK, Lukasz Pawel            | PASSENGER BOARDING BRIDGE OF           | (22) 09.11.2021                          |
| FENG, Dan                               | AN AIRPORT                             | (54) HEAT INSULATING CONTAINER           |
| KOH, Eugene                             | (73) TK Airport Solutions, S.A.        | (73) Asahi Kasei Kabushiki Kaisha        |
| VISWANATHAN, Sriram                     | (72) PETRY, Frederik                   | (72) KAMIYAMA, Kenji                     |
| (74) dr. A. Krebs                       | (74) ir. W.J.J.M. Kempes               | (74) dr. ir. F.M. van Bouwelen           |
| (31) 201916716702                       | (31) 20156870                          | (31) 2020188395                          |
| (32) 17.12.2019                         | (32) 12.02.2020                        | (32) 12.11.2020                          |
| (33) United States of America           | (33) European Patent Office (EPO)      | (33) Japan                               |
| (47) 16.10.2024                         | (47) 18.09.2024                        | (47) 20.11.2024                          |
| (51) B60T 8/48                          | (51) B65B 69/00                        | (51) B65D 47/08                          |
| B60T 8/88                               | (11) EP4100329                         | B65D 83/06                               |
| B60T 13/68                              | (21) EP21702520.4                      | B65D 43/02                               |
| (11) EP4117972                          | (22) 05.02.2021                        | (11) EP2800709                           |
| (21) EP21717607.2                       | (54) DEVICE, SYSTEM AND METHOD FOR     | (21) EP13700024.6                        |
| (22) 05.03.2021                         | REMOVING STRAPS FROM BOXES             | (22) 03.01.2013                          |
| (54) METHOD AND PARKING                 | (73) Marel Salmon A/S                  | (54) PACKAGING COMPRISING A              |
| BRAKE APPARATUS FOR AN                  | (72) SVOLDGAARD, Peter, Thisted        | CONTAINER AND A CAP WITH                 |
| AUTONOMOUSLY DRIVABLE VEHICLE           | DAHL, Mads, Aagaard                    | HINGED LID                               |
| (73) Bendix Commercial Vehicle Systems, | (74) dr. R.C. van Duijvenbode c.s.     | (73) Société des Produits Nestlé S.A.    |
| LLC                                     | (31) 20155544                          | (72) WOLFORD, Jeff                       |
| (72) LEIBBRAND, Jonas                   | (32) 05.02.2020                        | NGUYEN, Tran                             |
| HUTCHINS, Christopher                   | (33) European Patent Office (EPO)      | JENTIS, Richard                          |

|                                      |                                    |                                            |
|--------------------------------------|------------------------------------|--------------------------------------------|
| GREENBERG, Kelly                     | (47) 30.10.2024                    | (73) L'AIR LIQUIDE, SOCIÉTÉ ANONYME        |
| (74) dr. R.C. van Duijvenbode c.s.   | (51) B66F 9/065                    | POUR L'ÉTUDE ET L'EXPLOITATION             |
| (31) 201261584007 P                  | B66F 17/00                         | DES PROCÉDÉS GEORGES CLAUDE                |
| (32) 06.01.2012                      | (11) EP4023587                     | (72) Schmidt, Sophia                       |
| (33) United States of America        | (21) EP21214888.6                  | Schmid McGuinness, Teja                    |
| (47) 20.11.2024                      | (22) 15.12.2021                    | (74) ir. W.J.J.M. Kempes                   |
| (51) B65D 81/32                      | (54) TELEHANDLER WITH FACILITATED  | (47) 02.10.2024                            |
| B65D 1/32                            | ALIGNMENT ADJUSTMENT               | (51) C01B 32/194                           |
| B65D 35/22                           | (73) Manitou Italia S.r.l.         | H01J 37/20                                 |
| B65D 47/20                           | (72) IOTTI, Marco                  | C01B 32/196                                |
| A45D 19/02                           | (74) dr. R.C. van Duijvenbode c.s. | G01N 23/04                                 |
| A45D 19/00                           | (31) 202000032828                  | G01N 23/20025                              |
| (11) EP4045431                       | (32) 30.12.2020                    | (11) EP4144691                             |
| (21) EP19949101.0                    | (33) Italy                         | (21) EP22201031.6                          |
| (22) 16.10.2019                      | (47) 16.10.2024                    | (22) 07.08.2014                            |
| (54) DEVICE FOR SELECTIVELY STORING  | (51) B82Y 30/00                    | (54) GRAPHENE MODIFICATION                 |
| AND MIXING FIRST AND SECOND          | C01B 19/00                         | (73) United Kingdom Research and           |
| LIQUIDS                              | H01L 31/0352                       | Innovation                                 |
| (73) Creative Cosmetic Concepts, LLC | H01L 31/028                        | (72) PASSMORE, Lori A.                     |
| (72) SYBROWSKY, Joshua, B.           | G01N 27/22                         | RUSSO, Christopher J.                      |
| (74) ir. H.Th. van den Heuvel c.s.   | H10N 10/852                        | (74) dr. R.C. van Duijvenbode c.s.         |
| (47) 11.09.2024                      | H10N 10/857                        | (31) 201318463                             |
| (51) B65G 17/40                      | (11) EP3583066                     | 201361865359 P                             |
| B65G 21/18                           | (21) EP18784750.4                  | (32) 18.10.2013                            |
| B65G 17/06                           | (22) 16.02.2018                    | 13.08.2013                                 |
| (11) EP3283410                       | (54) COMPOSITE NANOPARTICLE        | (33) United Kingdom                        |
| (21) EP16780708.0                    | COMPOSITIONS AND ASSEMBLIES        | United States of America                   |
| (22) 14.04.2016                      | (73) Wake Forest University        | (47) 18.09.2024                            |
| (54) SELF-STACKING SPIRAL MODULAR    | (72) HEWITT, Corey                 | (51) C02F 3/28                             |
| PLASTIC CONVEYOR BELT WITH           | SUMMERS, Robert                    | C12M 1/107                                 |
| INTERMEDIATE SUPPORT                 | CARROLL, David, L.                 | C12M 1/00                                  |
| (73) Laitram, LLC                    | DUN, Chaochao                      | C02F 1/66                                  |
| (72) BOGLE, David W.                 | (74) J.M.H. Duyver lic.            | C02F 3/00                                  |
| (74) dr. R.C. van Duijvenbode c.s.   | (31) 201762459978 P                | C02F 103/28                                |
| (31) 201562147959 P                  | (32) 16.02.2017                    | C02F 103/32                                |
| (32) 15.04.2015                      | (33) United States of America      | C02F 103/36                                |
| (33) United States of America        | (47) 25.09.2024                    | (11) EP4119508                             |
| (47) 11.12.2024                      | (51) C01B 3/16                     | (21) EP22192674.4                          |
| (51) B65G 47/64                      | B01J 23/00                         | (22) 20.08.2019                            |
| B65G 47/96                           | B01J 23/06                         | (54) GRANULAR SLUDGE REACTOR               |
| (11) EP4215464                       | B01J 23/80                         | SYSTEM COMPRISING AN EXTERNAL              |
| (21) EP22153305.2                    | C01B 3/48                          | SEPARATOR                                  |
| (22) 25.01.2022                      | (11) EP4251560                     | (73) Veolia Water Solutions & Technologies |
| (54) A TRANSPORT APPARATUS           | (21) EP21814801.3                  | Support                                    |
| (73) Eurosort B.V.                   | (22) 24.11.2021                    | (72) ARNAUD, Thierry Alphonse              |
| (72) Van Haaster, Patrick Theodorus  | (54) METHOD OF STARTING-UP A WATER | VAN DER LUBBE, Jeronimus Gerardus          |
| Johannes                             | GAS SHIFT REACTOR                  | Maria                                      |
| Fry, Scott                           | (73) Topsoe A/S                    | LA VOS, Hendrik Richard Paul               |
| Diamanti, Peter                      | (72) MONTESANO LOPEZ, Raul         | PACHECO-RUIZ, Santiago                     |
| Green, Todd                          | JØRGENSEN, Susanne Lægsgaard       | (74) ir. H.A. Witmans c.s.                 |
| Dordai, Matthew                      | SCHJØDT, Niels Christian           | (31) 18190286                              |
| (74) ir. A.R. Aalbers                | SEHESTED, Jens                     | (32) 22.08.2018                            |
| (47) 09.10.2024                      | BURN, Jeremy Neil                  | (33) European Patent Office (EPO)          |
| (51) B65H 31/30                      | (74) J.M.H. Duyver lic.            | (47) 09.10.2024                            |
| B66C 1/12                            | (31) 20209525                      | (51) C03B 9/40                             |
| (11) EP4291519                       | (32) 24.11.2020                    | C03B 9/44                                  |
| (21) EP22732943.0                    | (33) European Patent Office (EPO)  | C03B 11/16                                 |
| (22) 31.05.2022                      | (47) 06.11.2024                    | (11) EP4222123                             |
| (54) METHOD FOR MOVING A STACK OF    | (51) C01B 3/48                     | (21) EP21798879.9                          |
| FLAT LAMINAR PRODUCTS, AND           | B01D 53/047                        | (22) 30.09.2021                            |
| MOVING DEVICE FOR MOVING A           | C01B 3/56                          | (54) GLASSWARE MANUFACTURING               |
| STACK A FLAT LAMINAR PRODUCTS        | C01B 32/50                         | WASTE HANDLING SYSTEM                      |
| (73) Palamides GmbH                  | (11) EP3954650                     | (73) Owens-Brockway Glass Container Inc.   |
| (72) PALAMIDES, Stefano              | (21) EP20020366.9                  | (72) RAUSCH, Philip, J.                    |
| (74) ir. J.C. Volmer c.s.            | (22) 11.08.2020                    | ASMUS, Joseph                              |
| (31) 102021114166                    | (54) METHOD AND SYSTEM FOR THE     | BEABER, Corey                              |
| (32) 01.06.2021                      | PRODUCTION OF HYDROGEN AND         | HOLMES-LIBBIS, John                        |
| (33) Germany                         | DEPOSITION OF CARBON DIOXIDE       | (74) ir. W.J.J.M. Kempes                   |

|                                                                                           |                                                                                                             |                                                                                           |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| (31) 202063085644 P                                                                       | C07D 401/14                                                                                                 | ZHANG, Guobiao                                                                            |
| (32) 30.09.2020                                                                           | C07D 403/12                                                                                                 | ZHENG, Dengyu                                                                             |
| (33) United States of America                                                             | C07D 403/14                                                                                                 | WANG, Yajun                                                                               |
| (47) 20.11.2024                                                                           | C07D 405/14                                                                                                 | NI, Jia                                                                                   |
| (51) C07C 27/16                                                                           | C07D 471/04                                                                                                 | CHEN, Lei                                                                                 |
| C07C 29/48                                                                                | C07D 513/04                                                                                                 | LIU, Xin                                                                                  |
| C07C 31/04                                                                                | A61P 29/00                                                                                                  | (74) dr. R.C. van Duijvenbode c.s.                                                        |
| C07C 31/08                                                                                | A61P 35/00                                                                                                  | (31) 202110167731                                                                         |
| C07C 45/30                                                                                | A61K 31/404                                                                                                 | 202011129809                                                                              |
| C07C 49/08                                                                                | (11) EP4247790                                                                                              | 202010871912                                                                              |
| C07C 51/29                                                                                | (21) EP21819328.2                                                                                           | (32) 07.02.2021                                                                           |
| C07C 53/02                                                                                | (22) 23.11.2021                                                                                             | 21.10.2020                                                                                |
| C07C 53/08                                                                                | (54) STING ANTAGONISTS AND USES THEREOF                                                                     | 26.08.2020                                                                                |
| C07C 53/122                                                                               | (73) Regor Pharmaceuticals, Inc.                                                                            | (33) China                                                                                |
| (11) EP3800172                                                                            | (72) LI, Hailong                                                                                            | China                                                                                     |
| (21) EP19822913.0                                                                         | HUANG, Wei                                                                                                  | China                                                                                     |
| (22) 18.06.2019                                                                           | ZHONG, Wenge                                                                                                | (47) 02.10.2024                                                                           |
| (54) METHOD FOR PRODUCING OXIDATION REACTION PRODUCT OF HYDROCARBON OR DERIVATIVE THEREOF | (74) ir. H.A. Witmans c.s.                                                                                  | (51) C07D 413/14                                                                          |
| (73) Osaka University                                                                     | (31) PCT/CN2020/130793                                                                                      | C07D 413/04                                                                               |
| (72) OHKUBO, Kei                                                                          | (32) 23.11.2020                                                                                             | C07D 417/04                                                                               |
| (74) dr. R.C. van Duijvenbode c.s.                                                        | (33) World Intellectual Property Office (WIPO)                                                              | C07D 417/14                                                                               |
| (31) 2018117453                                                                           | (47) 09.10.2024                                                                                             | A61P 25/00                                                                                |
| (32) 20.06.2018                                                                           | (51) C07D 213/82                                                                                            | A61K 31/438                                                                               |
| (33) Japan                                                                                | A61K 51/04                                                                                                  | C07D 401/04                                                                               |
| (47) 04.12.2024                                                                           | A61P 35/00                                                                                                  | C07D 471/04                                                                               |
| (51) C07C 41/06                                                                           | (11) EP3481804                                                                                              | C07D 471/08                                                                               |
| C07C 43/10                                                                                | (21) EP17811054.0                                                                                           | C07D 487/04                                                                               |
| C07C 43/13                                                                                | (22) 09.06.2017                                                                                             | C07D 513/04                                                                               |
| B01J 29/70                                                                                | (54) IMPROVED SYNTHESIS OF THE RADIOLABELED PROSTATE-SPECIFIC MEMBRANE ANTIGEN (PSMA) INHIBITOR [18F]DCFPyL | A61K 31/439                                                                               |
| (11) EP4038041                                                                            | (73) The Johns Hopkins University                                                                           | A61K 31/444                                                                               |
| (21) EP20789743.0                                                                         | (72) HOLT, Daniel P.                                                                                        | A61K 31/501                                                                               |
| (22) 23.09.2020                                                                           | POMPER, Martin G.                                                                                           | A61K 31/506                                                                               |
| (54) METHODS OF ETHERIFICATION                                                            | CHEN, Ying                                                                                                  | (11) EP3788043                                                                            |
| (73) Dow Global Technologies LLC                                                          | DANNALS, Robert F.                                                                                          | (21) EP19722488.4                                                                         |
| (72) LEE, Wen-Sheng                                                                       | RAVERT, Hayden T.                                                                                           | (22) 29.04.2019                                                                           |
| KING, Stephen W.                                                                          | MEASE, Ronnie C.                                                                                            | (54) SPIROPIPERIDINE ALLOSTERIC MODULATORS OF NICOTINIC ACETYLCHOLINE RECEPTORS           |
| KILOS, Beata A.                                                                           | FAN, Hong                                                                                                   | (73) Merck Sharp & Dohme LLC                                                              |
| KU, Sung-Yu                                                                               | (74) ir. J.D. de Zeeuw                                                                                      | (72) LEAVITT, Kenneth, J.                                                                 |
| (74) ir. W.J.J.M. Kempes                                                                  | (31) 201662348391 P                                                                                         | CHOBANIAN, Harry, R.                                                                      |
| (31) 201962907801 P                                                                       | (32) 10.06.2016                                                                                             | RADA, Vanessa, L.                                                                         |
| (32) 30.09.2019                                                                           | (33) United States of America                                                                               | CAMPBELL, Brian, T.                                                                       |
| (33) United States of America                                                             | (47) 27.11.2024                                                                                             | BELL, Ian, M.                                                                             |
| (47) 04.12.2024                                                                           | (51) C07D 267/10                                                                                            | GRESHOCK, Thomas, J.                                                                      |
| (51) C07C 59/90                                                                           | C07D 413/12                                                                                                 | FELLS, James, I.                                                                          |
| C07C 237/42                                                                               | C07D 413/14                                                                                                 | CROWLEY, Brendan, M.                                                                      |
| C07C 255/60                                                                               | C07D 417/12                                                                                                 | GUIADEEN, Deodial, G.                                                                     |
| C07D 401/14                                                                               | A61K 31/553                                                                                                 | (74) ir. H.A. Witmans c.s.                                                                |
| (11) EP3823953                                                                            | A61P 11/00                                                                                                  | (31) 201862665091 P                                                                       |
| (21) EP19773505.3                                                                         | (11) EP4129989                                                                                              | (32) 01.05.2018                                                                           |
| (22) 19.07.2019                                                                           | (21) EP21860426.2                                                                                           | (33) United States of America                                                             |
| (54) A NOVEL PROCESS FOR THE PREPARATION OF ANTHRANILIC DIAMIDES                          | (22) 25.08.2021                                                                                             | (47) 06.11.2024                                                                           |
| (73) PI Industries Ltd.                                                                   | (54) NITRILE DERIVATIVE THAT ACTS AS INHIBITOR OF DIPEPTIDYL PEPTIDASE 1 AND USE THEREOF                    | (51) C07D 487/22                                                                          |
| (72) KLAUSENER, Alexander G.M.                                                            | (73) Haisco Pharmaceuticals Pte. Ltd.                                                                       | C07D 487/14                                                                               |
| KALWAGHE, Amol Dnyaneshwar                                                                | (72) SHI, Zongjun                                                                                           | A61K 31/4188                                                                              |
| KARRI, Phaneendrasai                                                                      | WANG, Wenjing                                                                                               | A61K 31/551                                                                               |
| SHINDE, Bharat Uttamrao                                                                   | ZHANG, Chen                                                                                                 | A61K 31/787                                                                               |
| PABBA, Jagadish                                                                           | XU, Bo                                                                                                      | A61K 47/60                                                                                |
| (74) ir. W.J.J.M. Kempes                                                                  | TANG, Pingming                                                                                              | A61P 25/30                                                                                |
| (31) 201811027212                                                                         | ZHANG, Xiaobo                                                                                               | A61P 25/36                                                                                |
| (32) 20.07.2018                                                                           | LI, Yao                                                                                                     | (11) EP3207046                                                                            |
| (33) India                                                                                | YAN, Pangke                                                                                                 | (21) EP15850784.8                                                                         |
| (47) 11.09.2024                                                                           | YE, Fei                                                                                                     | (22) 19.10.2015                                                                           |
| (51) C07D 209/40                                                                          |                                                                                                             | (54) ACYCLIC CUCURBIT(N)URIL TYPE MOLECULAR CONTAINERS TO TREAT INTOXICATION AND DECREASE |

|                                                                                                                                                                                             |                                                                                                                                                                                                        |                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| RELAPSE RATE IN SUBSTANCE ABUSE DISORDERS                                                                                                                                                   | (74) ir. H.A. Witmans c.s.                                                                                                                                                                             | (54) LIQUID RESIN COMPOSITION FOR COMPRESSION MOLDING AND ELECTRONIC COMPONENT APPARATUS                                    |
| (73) University of Maryland, College Park<br>The General Hospital Corporation                                                                                                               | (31) 201762549033 P<br>201762549119 P<br>201762488741 P                                                                                                                                                | (73) Resonac Corporation<br>Namics Corporation                                                                              |
| (72) COTTEN, Joseph<br>CUSIN, Cristina<br>EIKERMANN, Matthias<br>ISAACS, Lyle David                                                                                                         | (32) 23.08.2017<br>23.08.2017<br>22.04.2017                                                                                                                                                            | (72) YOSHII, Haruyuki<br>MATSUZAKI, Takayuki<br>TAKAHASHI, Hisato<br>KAMIMURA, Tsuyoshi<br>INOUE, Hidetoshi                 |
| (74) ir. W.J.J.M. Kempes                                                                                                                                                                    | (33) United States of America<br>United States of America<br>United States of America                                                                                                                  | (74) ir. J.C. Volmer c.s.                                                                                                   |
| (31) 201462065627 P                                                                                                                                                                         | (47) 16.10.2024                                                                                                                                                                                        | (31) 2017108716                                                                                                             |
| (32) 18.10.2014                                                                                                                                                                             | (51) C07K 16/28<br>A61K 39/395<br>A61P 7/02                                                                                                                                                            | (32) 31.05.2017                                                                                                             |
| (33) United States of America                                                                                                                                                               | (11) EP3681911                                                                                                                                                                                         | (33) Japan                                                                                                                  |
| (47) 25.09.2024                                                                                                                                                                             | (21) EP18853261.8                                                                                                                                                                                      | (47) 27.11.2024                                                                                                             |
| (51) C07D 513/00<br>A61P 31/00<br>A61K 31/429                                                                                                                                               | (22) 11.09.2018                                                                                                                                                                                        | (51) C08G 77/08<br>C08G 77/18<br>B01D 19/04                                                                                 |
| (11) EP3585791                                                                                                                                                                              | (54) BINDING PROTEINS TO THE HUMAN THROMBIN RECEPTOR, PAR4                                                                                                                                             | (11) EP3744752                                                                                                              |
| (21) EP18719842.9                                                                                                                                                                           | (73) Monash University                                                                                                                                                                                 | (21) EP20174622.9                                                                                                           |
| (22) 23.04.2018                                                                                                                                                                             | (72) HAMILTON, Justin<br>SLEEMAN, Mark                                                                                                                                                                 | (22) 14.05.2020                                                                                                             |
| (54) NEW BICYCLIC PYRAZOLE DERIVATIVES                                                                                                                                                      | (74) dr. W.A.H.M. Van Borm                                                                                                                                                                             | (54) METHOD FOR THE PREPARATION OF NON-CYCLIC ALKOXYFUNCTIONAL POLYSILOXANES                                                |
| (73) Elanco Animal Health GmbH                                                                                                                                                              | (31) 2017903685                                                                                                                                                                                        | (73) Evonik Operations GmbH                                                                                                 |
| (72) GÖRGENS, Ulrich<br>KÖHLER, Adeline<br>GRIEBENOW, Nils<br>KULKE, Daniel<br>SCHWARZ, Hans-Georg<br>ZHUANG, Wei<br>KÖBBERLING, Johannes<br>WELZ, Claudia<br>ILG, Thomas<br>HÜBSCH, Walter | (32) 11.09.2017                                                                                                                                                                                        | (72) Favresse, Philippe<br>Fiedel, Michael<br>Hesse, Ute                                                                    |
| (74) ir. A. Blokland c.s.                                                                                                                                                                   | (33) Australia                                                                                                                                                                                         | (74) ir. W.J.J.M. Kempes                                                                                                    |
| (31) 17168558                                                                                                                                                                               | (47) 27.11.2024                                                                                                                                                                                        | (31) 19176885                                                                                                               |
| (32) 27.04.2017                                                                                                                                                                             | (51) C08G 18/08<br>C08G 18/12<br>C08G 18/28<br>C08G 18/32<br>C08G 18/38<br>C08G 18/40<br>C08G 18/44<br>C08G 18/48<br>C08G 18/73<br>C08G 18/75<br>C08G 18/79<br>A61L 15/42<br>C08G 101/00<br>A61L 15/26 | (32) 28.05.2019                                                                                                             |
| (33) European Patent Office (EPO)                                                                                                                                                           | (11) EP3931231                                                                                                                                                                                         | (33) European Patent Office (EPO)                                                                                           |
| (47) 16.10.2024                                                                                                                                                                             | (21) EP20705206.9                                                                                                                                                                                      | (47) 16.10.2024                                                                                                             |
| (51) C07H 19/10<br>C07H 21/02<br>C12N 15/11<br>A61K 31/7115                                                                                                                                 | (22) 18.02.2020                                                                                                                                                                                        | (51) C08J 3/12<br>C08J 3/14<br>C08G 63/00<br>C08G 63/90<br>C08L 67/04                                                       |
| (11) EP4108671                                                                                                                                                                              | (54) THERMOPLASTIC FOAM MADE FROM TWO SPECIFIC POLYURETHANE DISPERSIONS                                                                                                                                | (11) EP3039058                                                                                                              |
| (21) EP22173763.8                                                                                                                                                                           | (73) Covestro Deutschland AG                                                                                                                                                                           | (21) EP13753638.9                                                                                                           |
| (22) 03.10.2011                                                                                                                                                                             | (72) PLUG, Sascha<br>WEISER, Marc-Stephan<br>DÖRR, Sebastian                                                                                                                                           | (22) 29.08.2013                                                                                                             |
| (54) MODIFIED NUCLEOSIDES, NUCLEOTIDES, AND NUCLEIC ACIDS, AND USES THEREOF                                                                                                                 | (74) ir. W.J.J.M. Kempes                                                                                                                                                                               | (54) PROCESS FOR PREPARING A BIO-RESORBABLE POLYESTER IN THE FORM OF A POWDER                                               |
| (73) ModernaTX, Inc.                                                                                                                                                                        | (31) 19159939                                                                                                                                                                                          | (73) Evonik Operations GmbH                                                                                                 |
| (72) Ejebe, Kenechi<br>Siddiqi, Suhaib<br>Schrum, Jason P                                                                                                                                   | (32) 28.02.2019                                                                                                                                                                                        | (72) BLAESY, Julian<br>SCHMINKE, Silke<br>WAHL, Isabel<br>HOFMANN, Felix<br>BÄR, Hans                                       |
| (74) ir. W.J.J.M. Kempes                                                                                                                                                                    | (33) European Patent Office (EPO)                                                                                                                                                                      | (74) ir. W.J.J.M. Kempes                                                                                                    |
| (31) 40441310 P                                                                                                                                                                             | (47) 25.09.2024                                                                                                                                                                                        | (47) 23.10.2024                                                                                                             |
| (32) 01.10.2010                                                                                                                                                                             | (51) C08G 59/20<br>C08K 3/00<br>C08K 5/5435<br>C08L 63/00<br>H01L 23/29<br>H01L 23/31<br>C08G 59/22<br>C08G 59/50<br>C08G 59/28                                                                        | (51) C08K 3/22<br>C08K 3/38<br>C08K 5/3492<br>C08K 5/5313<br>C08K 7/14<br>D01F 1/07<br>D01F 6/60<br>C08K 5/00<br>C08K 3/016 |
| (33) United States of America                                                                                                                                                               | (11) EP3636688                                                                                                                                                                                         | (11) EP3781621                                                                                                              |
| (47) 20.11.2024                                                                                                                                                                             | (21) EP18809408.0                                                                                                                                                                                      | (21) EP19720343.3                                                                                                           |
| (51) C07K 14/705<br>C07K 19/00<br>A61K 39/00<br>A61K 38/17<br>A61K 38/00<br>A61P 35/00                                                                                                      | (22) 31.05.2018                                                                                                                                                                                        | (22) 17.04.2019                                                                                                             |
| (11) EP3612556                                                                                                                                                                              |                                                                                                                                                                                                        | (54) FLAME-RETARDANT POLYAMIDE COMPOSITION                                                                                  |
| (21) EP18726576.4                                                                                                                                                                           |                                                                                                                                                                                                        | (73) INVISTA Textiles (U.K.) Limited                                                                                        |
| (22) 22.04.2018                                                                                                                                                                             |                                                                                                                                                                                                        |                                                                                                                             |
| (54) IMPROVED LAMP CONSTRUCTS                                                                                                                                                               |                                                                                                                                                                                                        |                                                                                                                             |
| (73) Immunomic Therapeutics, Inc.                                                                                                                                                           |                                                                                                                                                                                                        |                                                                                                                             |
| (72) HEILAND, Teri                                                                                                                                                                          |                                                                                                                                                                                                        |                                                                                                                             |

|                                                                                                    |                                                     |                                                                                                       |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| (72) SARZOTTI, Deborah<br>LANGRICK, Charles Richard                                                | METHODS OF MAKING, AND<br>ARTICLES FORMED THEREFROM | DOLLASE, Thilo                                                                                        |
| (74) J.M.H. Duyver lic.                                                                            | (73) SHPP Global Technologies B.V.                  | (74) J.M.H. Duyver lic.                                                                               |
| (31) 201862659350 P                                                                                | (72) SYBERT, Paul Dean                              | (31) 102011089566                                                                                     |
| (32) 18.04.2018                                                                                    | CALVERAS, Jordi                                     | (32) 22.12.2011                                                                                       |
| (33) United States of America                                                                      | MAHOOD, James Alan                                  | (33) Germany                                                                                          |
| (47) 13.11.2024                                                                                    | HOOVER, James Franklin                              | (47) 16.10.2024                                                                                       |
| (51) C08L 23/12                                                                                    | (74) ir. J.D. de Zeeuw                              | (51) C10B 53/07                                                                                       |
| (11) EP4141067                                                                                     | (31) 18209602                                       | C10B 47/30                                                                                            |
| (21) EP21192526.8                                                                                  | (32) 30.11.2018                                     | (11) EP4306618                                                                                        |
| (22) 23.08.2021                                                                                    | (33) European Patent Office (EPO)                   | (21) EP22184071.3                                                                                     |
| (54) HIGH MELT FLOW POLYPROPYLENE<br>COMPOSITION                                                   | (47) 25.09.2024                                     | (22) 11.07.2022                                                                                       |
| (73) Borealis AG                                                                                   | (51) C09D 11/03                                     | (54) SYSTEM AND METHOD FOR<br>TREATMENT OF POLYMER WASTE                                              |
| (72) KAHLEN, Susanne                                                                               | C09D 11/033                                         | (73) Neste Oyj                                                                                        |
| BRAUN, Hermann                                                                                     | C09D 11/037                                         | (72) SILTALA, Olli                                                                                    |
| JERABEK, Michael                                                                                   | C09D 11/101                                         | TUOHI, Eetu                                                                                           |
| KRALICEK, Markus                                                                                   | C09D 11/106                                         | UOTILA, Perttu                                                                                        |
| (74) ir. H.Th. van den Heuvel c.s.                                                                 | C09D 11/50                                          | KUOKKA, Santeri                                                                                       |
| (47) 02.10.2024                                                                                    | (11) EP4244297                                      | KETTUNEN, Mika T                                                                                      |
| (51) C08L 25/14                                                                                    | (21) EP21805968.1                                   | KETOMÄKI, Mika                                                                                        |
| C08K 5/3435                                                                                        | (22) 09.11.2021                                     | (74) dr. R.C. van Duijvenbode c.s.                                                                    |
| C08K 5/3475                                                                                        | (54) UV-VIS RADIATION CURABLE                       | (47) 27.11.2024                                                                                       |
| C08K 5/3492                                                                                        | SECURITY INKS FOR PRODUCING                         | (51) C11B 1/00                                                                                        |
| C08F 212/08                                                                                        | DICHROIC SECURITY FEATURES                          | C11B 1/02                                                                                             |
| C08F 220/14                                                                                        | (73) SICPA HOLDING SA                               | (11) EP4206308                                                                                        |
| (11) EP4251696                                                                                     | (72) VEYA, Patrick                                  | (21) EP23151749.1                                                                                     |
| (21) EP21819131.0                                                                                  | DEMARTIN MAEDER, Marlyse                            | (22) 16.12.2019                                                                                       |
| (22) 30.11.2021                                                                                    | OSWALD, Andre                                       | (54) A METHOD FOR TREATING LIPID<br>MATERIALS                                                         |
| (54) UV RESISTANT SMMA COPOLYMERS<br>WITH LOW HAZE AND HIGH CLARITY                                | GRIGORENKO, Nikolay                                 | (73) Neste Oyj                                                                                        |
| (73) INEOS Styrolution Group GmbH                                                                  | PITTET, Hervé                                       | (72) TOPPINEN, Sami                                                                                   |
| (72) COCHRAN, Thomas W.                                                                            | (74) dr. W.A.H.M. Van Borm                          | SIPPOLA, Väinö                                                                                        |
| ROWLETT, Jarrett R.                                                                                | (31) 20206794                                       | LINDQVIST, Petri                                                                                      |
| (74) dr. R.C. van Duijvenbode c.s.                                                                 | (32) 10.11.2020                                     | VISURI, Olli                                                                                          |
| (31) 20210539                                                                                      | (33) European Patent Office (EPO)                   | PASANEN, Jukka-Pekka                                                                                  |
| (32) 30.11.2020                                                                                    | (47) 09.10.2024                                     | HALTTUNEN, Jarmo                                                                                      |
| (33) European Patent Office (EPO)                                                                  | (51) C09D 11/50                                     | PASANEN, Antti                                                                                        |
| (47) 20.11.2024                                                                                    | C09D 11/037                                         | (74) dr. R.C. van Duijvenbode c.s.                                                                    |
| (51) C08L 67/03                                                                                    | C09D 11/03                                          | (31) 20186137                                                                                         |
| C08L 77/02                                                                                         | C09D 11/101                                         | (32) 28.12.2018                                                                                       |
| C08K 5/132                                                                                         | C09D 11/106                                         | (33) Finland                                                                                          |
| H01M 50/107                                                                                        | B41M 3/14                                           | (47) 30.10.2024                                                                                       |
| C08L 67/02                                                                                         | (11) EP4244298                                      | (51) C11B 1/02                                                                                        |
| (11) EP3531465                                                                                     | (21) EP21805967.3                                   | C11B 1/10                                                                                             |
| (21) EP17886393.2                                                                                  | (22) 09.11.2021                                     | A23K 10/12                                                                                            |
| (22) 26.12.2017                                                                                    | (54) UV-VIS RADIATION CURABLE                       | A23K 50/10                                                                                            |
| (54) CYLINDRICAL BATTERY CELL<br>HAVING HEAT-SHRINKABLE TUBE<br>COMPRISING ULTRAVIOLET<br>ABSORBER | SECURITY INKS FOR PRODUCING                         | A23K 10/20                                                                                            |
| (73) LG Energy Solution, Ltd.                                                                      | DICHROIC SECURITY FEATURES                          | (11) EP3794097                                                                                        |
| (72) LEE, Je-Jun                                                                                   | (73) SICPA HOLDING SA                               | (21) EP19721299.6                                                                                     |
| LEE, Gil-Young                                                                                     | (72) VEYA, Patrick                                  | (22) 07.05.2019                                                                                       |
| HWANG BO, Kwang-Su                                                                                 | GRIGORENKO, Nikolay                                 | (54) METHOD OF ISOLATING LIPIDS FROM<br>A LIPIDS CONTAINING BIOMASS WITH<br>AID OF HYDROPHOBIC SILICA |
| KIM, Jun-Tak                                                                                       | PITTET, Hervé                                       | (73) DSM IP Assets B.V.                                                                               |
| JUNG, Sang-Sok                                                                                     | OSWALD, Andre                                       | Evonik Operations GmbH                                                                                |
| (74) dr. R.C. van Duijvenbode c.s.                                                                 | DEMARTIN MAEDER, Marlyse                            | (72) HEINING, Martin                                                                                  |
| (31) 20160178728                                                                                   | (74) dr. W.A.H.M. Van Borm                          | HEINING, Annika                                                                                       |
| (32) 26.12.2016                                                                                    | (31) 20206740                                       | (74) ir. W.J.J.M. Kempes                                                                              |
| (33) Korea (Republic)                                                                              | (32) 10.11.2020                                     | (31) 18172317                                                                                         |
| (47) 06.11.2024                                                                                    | (33) European Patent Office (EPO)                   | (32) 15.05.2018                                                                                       |
| (51) C08L 69/00                                                                                    | (47) 09.10.2024                                     | (33) European Patent Office (EPO)                                                                     |
| (11) EP3887450                                                                                     | (51) C09J 7/40                                      | (47) 23.10.2024                                                                                       |
| (21) EP19821228.4                                                                                  | (11) EP2607439                                      | (51) C11B 9/00                                                                                        |
| (22) 25.11.2019                                                                                    | (21) EP12193853.4                                   | A23L 27/20                                                                                            |
| (54) SULFUR-STABILIZED<br>THERMOPLASTIC COMPOSITIONS,                                              | (22) 22.11.2012                                     | (11) EP3931290                                                                                        |
|                                                                                                    | (54) Liner for the protection of adhesive<br>masses | (21) EP20705972.6                                                                                     |
|                                                                                                    | (73) tesa SE                                        | (22) 19.02.2020                                                                                       |
|                                                                                                    | (72) BAI, Minyoung                                  |                                                                                                       |
|                                                                                                    | LÜHMANN, Bernd                                      |                                                                                                       |
|                                                                                                    | KEITE-TELGENBÜSCHER, Klaus                          |                                                                                                       |



|                                                                  |                                                                                                                                                |                                                                                             |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| (54) IMPROVEMENTS IN OR RELATING TO DERIVATIVES OF ROTUNDONE     | Japan                                                                                                                                          | (21) EP21730296.7                                                                           |
| (73) Givaudan SA                                                 | Japan                                                                                                                                          | (22) 07.06.2021                                                                             |
| (72) GRANIER, Thierry                                            | (47) 25.09.2024                                                                                                                                | (54) METHOD OF MANUFACTURING AN ALUMINIUM ALLOY PLATE FOR VACUUM CHAMBER ELEMENTS           |
| GOEKE, Andreas                                                   | (51) C12N 9/10                                                                                                                                 | (73) Novelis Koblenz GmbH                                                                   |
| CHARPENTIER, Julie                                               | C12N 15/77                                                                                                                                     | (72) AUST, Dennis                                                                           |
| FLACHSMANN, Felix                                                | C12P 19/32                                                                                                                                     | JACOBY, Bernd                                                                               |
| BRUNNER, Gerhard                                                 | (11) EP4105324                                                                                                                                 | RITZ, Fabian                                                                                |
| DOSENBACH, Sandro                                                | (21) EP21823717.0                                                                                                                              | (74) ir. W.J.J.M. Kempes                                                                    |
| (74) ir. W.J.J.M. Kempes                                         | (22) 15.07.2021                                                                                                                                | (31) 20179258                                                                               |
| (31) 201902566                                                   | (54) NOVEL BIFUNCTIONAL PYR OPERON TRANSCRIPTIONAL REGULATOR/URACIL PHOSPHORIBOSYLTRANSFERASE VARIANT, AND METHOD FOR PRODUCING IMP USING SAME | (32) 10.06.2020                                                                             |
| (32) 26.02.2019                                                  | (73) CJ Cheiljedang Corporation                                                                                                                | (33) European Patent Office (EPO)                                                           |
| (33) United Kingdom                                              | (72) RHO, Jin Ah                                                                                                                               | (47) 13.11.2024                                                                             |
| (47) 09.10.2024                                                  | LEE, Ji Hye                                                                                                                                    | (51) C23C 16/02                                                                             |
| (51) C12N 5/0783                                                 | KIM, Bina                                                                                                                                      | C23C 16/04                                                                                  |
| A61K 35/17                                                       | SON, Sung Kwang                                                                                                                                | C23C 16/27                                                                                  |
| A61K 39/00                                                       | KWON, Hee Su                                                                                                                                   | C23C 28/04                                                                                  |
| A61P 35/00                                                       | KWON, Nara                                                                                                                                     | (11) EP4259843                                                                              |
| (11) EP3710576                                                   | BONG, Hyun-Ju                                                                                                                                  | (21) EP21835760.6                                                                           |
| (21) EP18827296.7                                                | YOO, Hyeryun                                                                                                                                   | (22) 14.12.2021                                                                             |
| (22) 19.11.2018                                                  | HUH, Lan                                                                                                                                       | (54) METHOD FOR SELECTIVE DEPOSITION OF DIAMOND COATINGS                                    |
| (54) TIL EXPANSION FROM FINE NEEDLE ASPIRATES AND SMALL BIOPSIES | (31) 20210055714                                                                                                                               | (73) Oerlikon Surface Solutions AG, Pfäffikon                                               |
| (73) Iovance Biotherapeutics, Inc.                               | (32) 29.04.2021                                                                                                                                | (72) BREIDT, Dirk                                                                           |
| (72) CHARTIER-COURTAUD, Cecile                                   | (33) Korea (Republic)                                                                                                                          | DIETRICH, Olaf                                                                              |
| SIMPSON-ABELSON, Michelle                                        | (47) 30.10.2024                                                                                                                                | (74) dr. R.C. van Duijvenbode c.s.                                                          |
| (74) drs. C.M.A. Quintelier                                      | (51) C12N 15/10                                                                                                                                | (31) 102020133403                                                                           |
| (31) 201862756038 P                                              | C12N 15/09                                                                                                                                     | (32) 14.12.2020                                                                             |
| 201862621515 P                                                   | C07K 14/725                                                                                                                                    | (33) Germany                                                                                |
| 201762588044 P                                                   | C07K 16/00                                                                                                                                     | (47) 13.11.2024                                                                             |
| (32) 05.11.2018                                                  | C12Q 1/68                                                                                                                                      | (51) C25B 1/04                                                                              |
| 24.01.2018                                                       | C12Q 1/6806                                                                                                                                    | C08J 5/22                                                                                   |
| 17.11.2017                                                       | (11) EP3443087                                                                                                                                 | C25B 9/77                                                                                   |
| (33) United States of America                                    | (21) EP17783053.6                                                                                                                              | C25B 13/05                                                                                  |
| United States of America                                         | (22) 12.04.2017                                                                                                                                | C25B 13/07                                                                                  |
| United States of America                                         | (54) IMMUNE REPERTOIRE MINING                                                                                                                  | C08J 5/04                                                                                   |
| (47) 02.10.2024                                                  | (73) Medimmune, LLC                                                                                                                            | (11) EP3974559                                                                              |
| (51) C12N 5/0783                                                 | (72) CHOWDHURY, Partha, S.                                                                                                                     | (21) EP20198114.9                                                                           |
| A61K 39/00                                                       | KIERNY, Michael, Robert                                                                                                                        | (22) 24.09.2020                                                                             |
| A61P 35/00                                                       | RAJAN, Saravanan                                                                                                                               | (54) A MANUFACTURING METHOD FOR A REINFORCED SEPARATOR                                      |
| C07K 14/54                                                       | (74) ir. W.J.J.M. Kempes                                                                                                                       | (73) AGFA-GEVAERT NV                                                                        |
| C07K 14/74                                                       | (31) 201662321278 P                                                                                                                            | (72) TUDISCO, Cristina                                                                      |
| C07K 14/78                                                       | (32) 12.04.2016                                                                                                                                | MUES, Willem                                                                                |
| C07K 16/28                                                       | (33) United States of America                                                                                                                  | VERWAEST, Hanne                                                                             |
| C07K 17/00                                                       | (47) 18.09.2024                                                                                                                                | (47) 06.11.2024                                                                             |
| (11) EP3835415                                                   | (51) C12Q 1/6806                                                                                                                               | (51) C25B 1/042                                                                             |
| (21) EP19847695.4                                                | (11) EP4211263                                                                                                                                 | C25B 1/23                                                                                   |
| (22) 08.08.2019                                                  | (21) EP21791448.0                                                                                                                              | H01M 4/88                                                                                   |
| (54) METHOD FOR PRODUCING CD3-POSITIVE CELL                      | (22) 13.09.2021                                                                                                                                | H01M 4/90                                                                                   |
| (73) Kyoto University                                            | (54) CYTOSINE MODIFICATION ANALYSIS                                                                                                            | H01M 8/04007                                                                                |
| Takeda Pharmaceutical Company Limited                            | (73) Ludwig Institute for Cancer Research Ltd                                                                                                  | H01M 8/0637                                                                                 |
| (72) KASSAI, Yoshiaki                                            | (72) LIU, Yibin                                                                                                                                | H01M 8/1253                                                                                 |
| HAYASHI, Akira                                                   | SONG, Chunxiao                                                                                                                                 | (11) EP4347924                                                                              |
| ARIMA, Suguru                                                    | (74) dr. R.C. van Duijvenbode c.s.                                                                                                             | (21) EP22751967.5                                                                           |
| NAKAYAMA, Kazuhide                                               | (31) 202063078181 P                                                                                                                            | (22) 06.07.2022                                                                             |
| TAKIGUCHI, Maiko                                                 | (32) 14.09.2020                                                                                                                                | (54) SOLID OXIDE ELECTROLYTIC CELLS USING ZEOLITE-TEMPLATED CARBON (ZTC) AS ELECTROCATALYST |
| KANEKO, Shin                                                     | (33) United States of America                                                                                                                  | (73) Saudi Arabian Oil Company                                                              |
| KAWAI, Yohei                                                     | (47) 11.12.2024                                                                                                                                | (72) LITHOXOOS, Georgios                                                                    |
| (74) ir. J.C. Volmer c.s.                                        | (51) C22C 21/02                                                                                                                                | WANG, Yuguo                                                                                 |
| (31) 2019117878                                                  | C22C 21/06                                                                                                                                     | HAMMAD, Ahmad D.                                                                            |
| 2019042666                                                       | C22C 21/08                                                                                                                                     | OTHMAN, Rashid M.                                                                           |
| 2018151580                                                       | C22F 1/00                                                                                                                                      | AMR, Issam T.                                                                               |
| (32) 25.06.2019                                                  | C22F 1/05                                                                                                                                      | (74) dr. R.C. van Duijvenbode c.s.                                                          |
| 08.03.2019                                                       | C25D 11/08                                                                                                                                     | (31) 20210100471                                                                            |
| 10.08.2018                                                       | (11) EP4165223                                                                                                                                 |                                                                                             |
| (33) Japan                                                       |                                                                                                                                                |                                                                                             |

|                                    |                                  |                                    |
|------------------------------------|----------------------------------|------------------------------------|
| 202117450406                       | (47) 20.11.2024                  | (72) OKADA, Tadashi                |
| (32) 14.07.2021                    | (51) E04B 1/00                   | (74) dr. R.C. van Duijvenbode c.s. |
| 08.10.2021                         | (11) EP4339383                   | (31) 2020189351                    |
| (33) Greece                        | (21) EP23193694.9                | (32) 13.11.2020                    |
| United States of America           | (22) 28.08.2023                  | (33) Japan                         |
| (47) 04.12.2024                    | (54) CONNECTION ASSEMBLY FOR     | (47) 04.12.2024                    |
| (51) D21J 7/00                     | FORCE-TRANSMITTING CONNECTION    | (51) E05B 19/00                    |
| D21J 3/10                          | OF A FIRST FORCE-ABSORBING       | (11) EP3696352                     |
| (11) EP4240908                     | CONSTRUCTION PART TO A SECOND    | (21) EP20154080.4                  |
| (21) EP21811433.8                  | FORCE-ABSORBING CONSTRUCTION     | (22) 28.01.2020                    |
| (22) 04.11.2021                    | PART, AND CONSTRUCTION           | (54) KEY FOR A LOCKING CYLINDER    |
| (54) A MOULD FOR FORMING A UNITARY | (73) Leviat AG                   | (73) Aug. Winkhaus GmbH & Co. KG   |
| ARTICLE FROM PULP                  | (72) Keller, Tina                | (72) Rasecke, Marc                 |
| (73) Diageo Great Britain Limited  | Heidolf, Thorsten                | (74) ir. W.J.J.M. Kempes           |
| (72) LANZON-MILLER, Joshua         | (74) ir. A. Blokland c.s.        | (31) 102019201995                  |
| TURNER, Adam Richard               | (31) 202022105156 U              | (32) 14.02.2019                    |
| WILSON, Natasha                    | (32) 13.09.2022                  | (33) Germany                       |
| MORRIS, Jonathan                   | (33) Germany                     | (47) 30.10.2024                    |
| (74) mr. ir. J. van Breda c.s.     | (47) 13.11.2024                  | (51) E05D 3/00                     |
| (31) 202019305                     | (51) E04B 5/48                   | E04F 11/06                         |
| 202017432                          | E04F 15/04                       | (11) EP4249716                     |
| (32) 08.12.2020                    | F16L 5/00                        | (21) EP23163017.9                  |
| 04.11.2020                         | F24D 3/14                        | (22) 21.03.2023                    |
| (33) United Kingdom                | (11) EP3610090                   | (54) CONNECTOR FOR ARTICULATED     |
| United Kingdom                     | (21) EP18785118.3                | AND FIXED COMPONENTS OF A          |
| (47) 09.10.2024                    | (22) 13.04.2018                  | STRUCTURAL ELEMENT, AND IN         |
| (51) E02F 5/10                     | (54) TECHNOLOGIES FOR UNDERFLOOR | PARTICULAR FOR ATTIC STAIRS        |
| E02F 5/12                          | FLUID CONDUCTION                 | (73) FAKRO PP Sp. z o.o.           |
| E02F 5/14                          | (73) Scandic Builders, Inc.      | (72) Kasinski, Boguslaw            |
| (11) EP3677727                     | (72) JEPSEN, Mads                | Mos, Bartlomiej                    |
| (21) EP20153086.2                  | JEPSEN, Kimo                     | (31) 44074822                      |
| (22) 08.03.2016                    | (74) ir. W.J.J.M. Kempes         | (32) 24.03.2022                    |
| (54) METHOD AND APPARATUS FOR      | (31) 201715727008                | (33) Poland                        |
| FORMING A TRENCH IN A SEA FLOOR    | 201762485504 P                   | (47) 16.10.2024                    |
| (73) Soil Machine Dynamics Limited | (32) 06.10.2017                  | (51) E06B 3/02                     |
| (72) WHITE, Roger Paul             | 14.04.2017                       | E06B 3/66                          |
| WALKER, John Graeme                | (33) United States of America    | E06B 7/14                          |
| BATESON, Simon Vivian Ranulf       | United States of America         | (11) EP3402954                     |
| (74) ir. J.D. de Zeeuw             | (47) 20.11.2024                  | (21) EP16825746.7                  |
| (47) 09.10.2024                    | (51) E04F 11/06                  | (22) 22.12.2016                    |
| (51) E02F 9/28                     | (11) EP4249698                   | (54) FRAMELESS GLASS DOOR OR       |
| (11) EP3959386                     | (21) EP23163014.6                | WINDOW ARRANGEMENT WITH DRIP       |
| (21) EP20717048.1                  | (22) 21.03.2023                  | GROOVE                             |
| (22) 12.03.2020                    | (54) ATTIC STAIRS WITH A SUPPORT | (73) AGC Glass Europe              |
| (54) GROUND ENGAGING TIP AND       | BEAM                             | (72) SPACEK, Miroslav              |
| GROUND ENGAGING TOOL               | (73) FAKRO PP Sp. z o.o.         | CUMPELIK, Pavel                    |
| ASSEMBLY                           | (72) Kasinski, Boguslaw          | BOUESNARD, Olivier                 |
| (73) Caterpillar Inc.              | Mos, Bartlomiej                  | CHORINE, Nicolas                   |
| (72) BALAN, Mihai M.               | (31) 44074722                    | (74) ir. W.J.J.M. Kempes           |
| MCCAFFREY, Brandon H.              | (32) 24.03.2022                  | (31) 16152227                      |
| (74) ir. W.J.J.M. Kempes           | (33) Poland                      | 16150851                           |
| (31) 201916393458                  | (47) 14.08.2024                  | (32) 21.01.2016                    |
| (32) 24.04.2019                    | (51) E05B 13/10                  | 12.01.2016                         |
| (33) United States of America      | E05B 47/00                       | (33) European Patent Office (EPO)  |
| (47) 20.11.2024                    | E05B 65/00                       | European Patent Office (EPO)       |
| (51) E02F 9/28                     | F25D 23/02                       | (47) 23.10.2024                    |
| (11) EP4093923                     | E05B 15/00                       | (51) E06B 9/84                     |
| (21) EP20845500.6                  | E05B 7/00                        | E05D 13/00                         |
| (22) 28.12.2020                    | E05B 17/00                       | E05F 15/665                        |
| (54) BOLT RETENTION ASSEMBLY WITH  | E05B 47/06                       | (11) EP4204656                     |
| EXTENDED TRAVEL FOR A WORK         | E05C 3/04                        | (21) EP21770170.5                  |
| TOOL                               | E05B 63/00                       | (22) 27.08.2021                    |
| (73) Caterpillar Inc.              | (11) EP4180594                   | (54) SAFETY SYSTEM FOR A DRIVE,    |
| (72) BJERKE, Nathan R.             | (21) EP21891538.7                | WHICH HAS A CIRCULATING            |
| (74) ir. W.J.J.M. Kempes           | (22) 06.10.2021                  | TRACTION MECHANISM, OF A GATE,     |
| (31) 202016750092                  | (54) LOCKING DEVICE AND          | IN PARTICULAR A LIFTING GATE,      |
| (32) 23.01.2020                    | REFRIGERATION DEVICE             | MORE PARTICULARLY A HIGH-          |
| (33) United States of America      | (73) PHC Holdings Corporation    |                                    |

|                                                               |                                            |                                        |
|---------------------------------------------------------------|--------------------------------------------|----------------------------------------|
| SPEED LIFTING GATE, AND GATE<br>COMPRISING SAID SAFETY SYSTEM | C10G 11/00                                 | F04D 29/08                             |
| (73) Efaflex Inzeniring D.O.O. Ljubljana                      | C10G 9/36                                  | F04D 29/42                             |
| (72) URBAS, Primož                                            | (11) EP3488091                             | F04D 29/44                             |
| (74) ir. J.C. Volmer c.s.                                     | (21) EP17755251.0                          | F04D 29/62                             |
| (31) 102020122719                                             | (22) 24.07.2017                            | (11) EP3922857                         |
| (32) 31.08.2020                                               | (54) PROCESS FOR CRACKING                  | (21) EP19914194.6                      |
| (33) Germany                                                  | HYDROCARBON STREAM USING                   | (22) 30.12.2019                        |
| (47) 02.10.2024                                               | FLUE GAS FROM GAS TURBINE                  | (54) EXTRACTOR ASSEMBLY TO BE          |
| (51) E21B 23/04                                               | (73) SABIC Global Technologies B.V.        | INSTALLED INSIDE IN AN AIR DUCT        |
| E21B 33/04                                                    | (72) VAN WILLIGENBURG, Joris               | (73) Soler & Palau Research, S.L.      |
| E21B 23/06                                                    | (74) J.M.H. Duyver lic.                    | (72) BACH-ESTEVE BURCH, Albert         |
| E21B 34/06                                                    | (31) 16180943                              | (74) dr. R.C. van Duijvenbode c.s.     |
| E21B 34/14                                                    | (32) 25.07.2016                            | (31) 201930092                         |
| E21B 34/10                                                    | (33) European Patent Office (EPO)          | (32) 06.02.2019                        |
| (11) EP4045759                                                | (47) 20.11.2024                            | (33) Spain                             |
| (21) EP20801084.3                                             | (51) F02C 6/08                             | (47) 18.09.2024                        |
| (22) 14.10.2020                                               | B64F 5/60                                  | (51) F04D 19/00                        |
| (54) SETTING TOOL FOR A LINER HANGER                          | (11) EP4056825                             | F04D 25/06                             |
| (73) Weatherford Technology Holdings, LLC                     | (21) EP21161673.5                          | F04D 29/52                             |
| (72) MURRAY, Mark J.                                          | (22) 10.03.2021                            | F04D 29/64                             |
| TRINE, Zach                                                   | (54) METHOD AND COMPUTER PROGRAM           | (11) EP4063661                         |
| ZAVALA, Jose V.                                               | PRODUCT FOR MONITORING AN                  | (21) EP22160566.0                      |
| (74) ir. H.A. Witmans c.s.                                    | AIRCRAFT BLEED AIR SYSTEM                  | (22) 07.03.2022                        |
| (31) 201916656198                                             | (73) Lufthansa Technik AG                  | (54) FAN WITH MULTIFUNCTIONAL          |
| (32) 17.10.2019                                               | (72) Demeschkin, Alexej                    | HOUSING COVER                          |
| (33) United States of America                                 | Steude, Henrik Sebastian                   | (73) EBM-PAPST ST. GEORGEN GMBH &      |
| (47) 09.10.2024                                               | (74) J.M.H. Duyver lic.                    | CO. KG                                 |
| (51) E21B 47/117                                              | (47) 13.11.2024                            | (72) BRUCKER, Tobias                   |
| E21B 47/11                                                    | (51) F03D 7/02                             | LANGENECK, Gunter                      |
| G01M 3/28                                                     | F02C 9/00                                  | MAYER, Stefan                          |
| (11) EP3951134                                                | F03D 15/20                                 | (74) ir. W.J.J.M. Kempes               |
| (21) EP21198542.9                                             | (11) EP3987175                             | (31) 102021107359                      |
| (22) 05.01.2018                                               | (21) EP20754646.6                          | (32) 24.03.2021                        |
| (54) PLUG, SYSTEM AND METHOD FOR                              | (22) 24.07.2020                            | (33) Germany                           |
| TESTING THE INTEGRITY OF A WELL                               | (54) METHOD FOR COMPUTER-                  | (47) 18.09.2024                        |
| BARRIER                                                       | IMPLEMENTED DETERMINATION                  | (51) F04D 25/16                        |
| (73) Exedra AS                                                | OF CONTROL PARAMETERS OF A                 | F04D 27/00                             |
| (72) Pedersen, Bernt Reinhardt                                | TURBINE                                    | F24F 11/74                             |
| (74) ir. A. Blokland c.s.                                     | (73) Siemens Gamesa Renewable Energy A/    | (11) EP3655663                         |
| (31) 20171031                                                 | S                                          | (21) EP18740797.8                      |
| 20170248                                                      | (72) THOMAS, Arwyn                         | (22) 12.07.2018                        |
| 20170026                                                      | DUKE, Alexander                            | (54) METHOD FOR CONTROLLING AT         |
| (32) 23.06.2017                                               | WU, Zhan-Yuan                              | LEAST TWO FANS                         |
| 21.02.2017                                                    | AZAR, Ziad                                 | (73) ebm-papst Mulfingen GmbH & Co. KG |
| 06.01.2017                                                    | CLARK, Richard                             | (72) FESSEL, Andreas                   |
| (33) Norway                                                   | (74) ir. W.J.J.M. Kempes                   | EBERLE, Walter                         |
| Norway                                                        | (31) 19191776                              | SCHWAB, Stefan                         |
| Norway                                                        | (32) 14.08.2019                            | (74) ir. W.J.J.M. Kempes               |
| (47) 06.11.2024                                               | (33) European Patent Office (EPO)          | (31) 102017116399                      |
| (51) F01K 3/18                                                | (47) 16.10.2024                            | (32) 20.07.2017                        |
| F01K 23/06                                                    | (51) F04B 43/04                            | (33) Germany                           |
| (11) EP4187061                                                | F04B 49/06                                 | (47) 09.10.2024                        |
| (21) EP21020600.9                                             | F04B 49/12                                 | (51) F16K 1/46                         |
| (22) 26.11.2021                                               | (11) EP4168676                             | F16K 31/06                             |
| (54) METHOD FOR CO-GENERATING                                 | (21) EP20735496.0                          | (11) EP3557100                         |
| ELECTRICITY IN A PROCESS PLANT                                | (22) 17.06.2020                            | (21) EP19169248.2                      |
| INTEGRATED WITH A THERMAL                                     | (54) MICRO DIAPHRAGM PUMPING               | (22) 15.04.2019                        |
| POWER GENERATOR                                               | DEVICE                                     | (54) MODULAR VALVE WITH O-RING VALVE   |
| (73) L'Air Liquide, Société Anonyme pour                      | (73) Fraunhofer-Gesellschaft zur Förderung | SEAT                                   |
| l'Etude et l'Exploitation des Procédés                        | der angewandten Forschung e.V.             | (73) MAC Valves, Inc.                  |
| Georges Claude                                                | (72) WALD, Christian                       | (72) NEFF, Matthew                     |
| (72) SCHMID MC GUINNESS, Teja                                 | BUSSMANN, Agnes                            | LANDACRE, Brett                        |
| ROESCH, Alexander                                             | KIBLER, Sebastian                          | SIMMONDS, Jeffrey                      |
| (74) ir. W.J.J.M. Kempes                                      | GRÜNERBEL, Lorenz                          | (74) J.M.H. Duyver lic.                |
| (47) 02.10.2024                                               | (74) ir. F.A. Geurts c.s.                  | (31) 201815954815                      |
| (51) F02C 3/00                                                | (47) 11.09.2024                            | (32) 17.04.2018                        |
| F02C 6/18                                                     | (51) F04D 17/06                            | (33) United States of America          |
|                                                               | F04D 17/16                                 | (47) 20.11.2024                        |

|                                    |                                    |                                           |
|------------------------------------|------------------------------------|-------------------------------------------|
| (51) F21V 5/04                     | (74) dr. R.C. van Duijvenbode c.s. | (22) 16.07.2015                           |
| (11) EP3816504                     | (47) 23.10.2024                    | (54) AN APPARATUS AND ASSOCIATED          |
| (21) EP20204887.2                  | (51) F25B 49/02                    | METHODS FOR DESIGNATING A                 |
| (22) 30.10.2020                    | F24F 11/43                         | TRAFFIC LANE                              |
| (54) SYSTEM AND METHOD FOR         | F24F 11/89                         | (73) HERE Global B.V.                     |
| PRODUCING A BLENDING LIGHT         | F25D 21/08                         | (72) STENNETH, Leon Oliver                |
| DISTRIBUTION FROM LED              | F25B 49/00                         | (74) ir. W.J.J.M. Kempes                  |
| LUMINAIRES                         | (11) EP4025848                     | (31) 201414445977                         |
| (73) ROBE lighting s.r.o.          | (21) EP20775115.7                  | (32) 29.07.2014                           |
| (72) DAVID, Tomas                  | (22) 02.09.2020                    | (33) United States of America             |
| VALCHAR, Josef                     | (54) REFRIGERANT SYSTEM OPERATION  | (47) 20.11.2024                           |
| VILEM, Jan                         | SEQUENCES FOR LEAK PREVENTION      | (51) G01F 1/002                           |
| (74) ir. J.D. de Zeeuw             | (73) Carrier Corporation           | G01F 1/84                                 |
| (31) 201962928984 P                | (72) LI, Hui                       | G01F 23/296                               |
| (32) 31.10.2019                    | TANG, Chengwei                     | G01N 9/00                                 |
| (33) United States of America      | TIAN, Hai                          | (11) EP4018163                            |
| (47) 04.12.2024                    | MI, Tingcan                        | (21) EP19762560.1                         |
| (51) F23N 5/00                     | (74) J.M.H. Duyver lic.            | (22) 20.08.2019                           |
| F22B 35/18                         | (31) 201910841812                  | (54) STABILIZED MODE SPLITTING FIN        |
| F23B 90/00                         | (32) 06.09.2019                    | SENSOR                                    |
| F23G 5/50                          | (33) China                         | (73) Micro Motion Inc.                    |
| F23L 1/02                          | (47) 04.12.2024                    | (72) SCHLOSSER, Martin Andrew             |
| F23N 3/00                          | (51) F25J 1/00                     | SCHOLLENBERGER, Frederick Scott           |
| F23B 30/02                         | B29C 53/08                         | WEINSTEIN, Joel                           |
| F23B 40/06                         | B29C 53/60                         | (74) dr. R.C. van Duijvenbode c.s.        |
| F23G 7/10                          | (11) EP4042082                     | (47) 06.11.2024                           |
| (11) EP3682168                     | (21) EP20800402.8                  | (51) G01F 1/34                            |
| (21) EP18853702.1                  | (22) 08.10.2020                    | G01F 1/50                                 |
| (22) 11.09.2018                    | (54) HEAT EXCHANGE SYSTEM AND      | G01F 1/58                                 |
| (54) DYNAMIC HEAT RELEASE          | METHOD OF ASSEMBLY                 | G01F 1/66                                 |
| CALCULATION FOR IMPROVED           | (73) Hercules Project Company LLC  | G01F 1/704                                |
| FEEDBACK CONTROL OF SOLID-         | (72) RANELLA, Christopher J.       | G01F 1/86                                 |
| FUEL-BASED COMBUSTION              | GARCIA, Adam R.                    | G01F 25/10                                |
| PROCESSES                          | VODA, Joseph E.                    | G01F 1/32                                 |
| (73) Enero Inventions Inc.         | DEBRAH, Paul I.                    | G01F 1/684                                |
| (72) JANVIER, Benoît               | TIEMANN, Kevin E.                  | G01F 5/00                                 |
| (74) J.M.H. Duyver lic.            | (74) ir. W.J.J.M. Kempes           | G01F 7/00                                 |
| (31) 201762557120 P                | (31) 201962912246 P                | G01F 15/02                                |
| (32) 11.09.2017                    | (32) 08.10.2019                    | G01F 1/325                                |
| (33) United States of America      | (33) United States of America      | (11) EP3735570                            |
| (47) 13.11.2024                    | (47) 23.10.2024                    | (21) EP18898012.2                         |
| (51) F24F 7/007                    | (51) F26B 15/18                    | (22) 30.12.2018                           |
| F24F 7/00                          | F26B 21/12                         | (54) USING LOCALIZED FLOW                 |
| (11) EP4174391                     | H01L 21/67                         | CHARACTERISTICS ON ELECTRONIC             |
| (21) EP21382969.0                  | H05K 3/22                          | FLOW METER TO QUANTIFY                    |
| (22) 27.10.2021                    | H01L 21/677                        | VOLUMETRIC FLOW                           |
| (54) VENTILATION SYSTEM WITH       | (11) EP3842721                     | (73) Natural Gas Solutions North America, |
| CONTROLLED MECHANICAL              | (21) EP21157651.7                  | LLC                                       |
| VENTILATION UNIT AND ELECTRICAL    | (22) 05.07.2018                    | (72) BERKCAN, Ertugrul                    |
| JUNCTION BOX                       | (54) SYSTEMS AND METHODS FOR       | CHEN, Nannan                              |
| (73) Soler & Palau Research, S.L.  | SOLVENT EXTRACTION                 | ARTIUCH, Roman Leon                       |
| (72) FAIG DURAN, JULI              | (73) Nordson Corporation           | (74) ir. W.J.J.M. Kempes                  |
| BACH -ESTEVE BURCH, ALBERT         | (72) ETIENNE, Stephane             | (31) 201815859835                         |
| SUMARROCA VERGE, MARTÍ             | ORLA-JENSEN, Per                   | (32) 02.01.2018                           |
| (74) dr. R.C. van Duijvenbode c.s. | (74) dr. R.C. van Duijvenbode c.s. | (33) United States of America             |
| (47) 18.09.2024                    | (31) 201816017386                  | (47) 25.09.2024                           |
| (51) F24F 13/02                    | 201762529144 P                     | (51) G01N 1/34                            |
| F24F 13/20                         | (32) 25.06.2018                    | G01N 1/38                                 |
| F24F 7/00                          | 06.07.2017                         | G01N 1/40                                 |
| (11) EP4269899                     | (33) United States of America      | G01N 33/20                                |
| (21) EP22382399.8                  | United States of America           | (11) EP3457110                            |
| (22) 27.04.2022                    | (47) 25.09.2024                    | (21) EP18194235.0                         |
| (54) CONTROLLED MECHANICAL         | (51) G01C 21/32                    | (22) 13.09.2018                           |
| VENTILATION UNIT                   | G08G 1/01                          | (54) METHOD FOR ANALYSING PARTICLES       |
| (73) Soler & Palau Research, S.L.  | G08G 1/127                         | IN STEEL, IN PARTICULAR DEPOSIT           |
| (72) FAIG DURAN, JULI              | G01C 21/00                         | FORMATION OR/AND INCLUSIONS               |
| BACH-ESTEVE BURCH, ALBERT          | (11) EP3175203                     | (73) Aktiengesellschaft der Dillinger     |
| SUMARROCA VERGE, MARTÍ             | (21) EP15742398.9                  | Hüttenwerke                               |

|                                                                                                                                                                     |                                                                                                                                                 |                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) Kraus, Tobias<br>Hegetschweiler, Andreas<br>Staudt, Thorsten                                                                                                   | (33) European Patent Office (EPO)<br>(47) 11.09.2024                                                                                            | (72) OHTA, Eiji<br>KAWAMURA, Satoshi<br>YOSHIDA, Emi                                                                                             |
| (74) ir. F.A. Geurts c.s.<br>(31) 102017121595<br>(32) 18.09.2017<br>(33) Germany<br>(47) 06.11.2024                                                                | (51) G01R 33/24<br>G01R 33/16<br>G01R 33/56<br>G06T 11/00<br>G01R 33/565<br>G06N 3/02<br>G06N 3/08                                              | NISHIMURA, Kimitaka<br>TAKENOUCHI, Masaki<br>KAKINUMA, Masayasu<br>TANIFUJI, Kiyooki<br>KAJIYA, Shunichi<br>OGAWA, Maki<br>OHKAWARA, Shigehisa   |
| (51) G01N 33/24<br>G01N 1/38                                                                                                                                        | (11) EP3749973                                                                                                                                  | (74) dr. R.C. van Duijvenbode c.s.                                                                                                               |
| (11) EP4184165                                                                                                                                                      | (21) EP19750909.4                                                                                                                               | (31) 2016094023                                                                                                                                  |
| (21) EP20967226.0                                                                                                                                                   | (22) 07.02.2019                                                                                                                                 | 2015103711                                                                                                                                       |
| (22) 30.12.2020                                                                                                                                                     | (54) MULTI-RESOLUTION QUANTITATIVE<br>SUSCEPTIBILITY MAPPING WITH<br>MAGNETIC RESONANCE IMAGING                                                 | (32) 09.05.2016<br>21.05.2015                                                                                                                    |
| (54) PORTABLE MODULAR<br>GASTROINTESTINAL SIMULATOR<br>SYSTEM THAT QUANTIFIES<br>BIOACCESSIBILITY OF METALS IN A<br>SAMPLE REMOTELY AND IN REAL<br>TIME, AND METHOD | (73) The Medical College of Wisconsin, Inc.<br>(72) LIU, Juan<br>KOCH, Kevin, M.<br>NENCKA, Andrew, S.                                          | (33) Japan<br>Japan<br>(47) 04.12.2024                                                                                                           |
| (73) Universidad Tecnológica Metropolitana                                                                                                                          | (74) dr. ir. G.J.C. Verdijk c.s.                                                                                                                | (51) G02B 6/36                                                                                                                                   |
| (72) ALENCAR DA SILVA, Keyla<br>MIRANDA SANDOVAL, Michael<br>PARODI DÁVILA, María Carolina                                                                          | (31) 201862627335 P<br>(32) 07.02.2018<br>(33) United States of America<br>(47) 25.09.2024                                                      | G02B 6/26<br>A61B 1/07<br>A61B 1/06<br>G02B 26/10                                                                                                |
| (74) ir. W.J.J.M. Kempes<br>(47) 27.11.2024                                                                                                                         | (51) G01R 33/565<br>G01R 33/567                                                                                                                 | (11) EP4191298                                                                                                                                   |
| (51) G01N 33/574<br>C12Q 1/6886<br>G01N 33/50                                                                                                                       | (11) EP3870990                                                                                                                                  | (21) EP23153361.3                                                                                                                                |
| (11) EP3415915                                                                                                                                                      | (21) EP19798755.5                                                                                                                               | (22) 29.05.2018                                                                                                                                  |
| (21) EP18175350.0                                                                                                                                                   | (22) 27.10.2019                                                                                                                                 | (54) MECHANICAL JOINT FOR USE IN<br>FIBER OPTIC IMAGING SYSTEMS                                                                                  |
| (22) 22.02.2013                                                                                                                                                     | (54) SYSTEMS AND METHODS FOR MRI<br>MOTION CORRECTION DURING MRI<br>IMAGE ACQUISITION                                                           | (73) Magic Leap, Inc.                                                                                                                            |
| (54) METHODS FOR PREDICTING<br>RESPONSE TO PARP INHIBITORS                                                                                                          | (73) Aspect Imaging Ltd.                                                                                                                        | (72) JOHNSON, Michael Robert<br>CARLOMAGNO, Albert Daniel<br>DUENNER, Andrew C.<br>ZHANG, Xiaoyang<br>DALRYMPLE, Timothy Mark<br>MATHUR, Vaibhav |
| (73) The Brigham and Women's Hospital, Inc.<br>The Technical University of Denmark<br>Dana-Farber Cancer Institute, Inc.<br>Children's Medical Center Corporation   | (72) STRAUSS, Noa<br>AZULAY, Shmuel                                                                                                             | (74) ir. W.J.J.M. Kempes                                                                                                                         |
| (72) WANG, Zhigang<br>RICHARDSON, Andrea<br>BIRKBAK, Nicolai Juul<br>SZALLASI, Zoltan<br>EKLUND, Aron<br>SILVER, Daniel                                             | (74) dr. R.C. van Duijvenbode c.s.<br>(31) 201862751035 P<br>(32) 26.10.2018<br>(33) United States of America<br>(47) 11.12.2024                | (31) 201762513082 P<br>(32) 31.05.2017<br>(33) United States of America<br>(47) 09.10.2024                                                       |
| (74) ir. F.A. Geurts c.s.<br>(31) 201261604810 P<br>201261602460 P<br>(32) 29.02.2012<br>23.02.2012                                                                 | (51) G01T 1/24<br>G01T 1/17<br>A61B 6/00                                                                                                        | (51) G02B 6/42<br>H01L 25/16<br>H01L 25/10<br>H01L 23/36<br>H01L 23/538                                                                          |
| (33) United States of America<br>United States of America<br>(47) 23.10.2024                                                                                        | (11) EP3593170                                                                                                                                  | (11) EP4020038                                                                                                                                   |
| (51) G01R 31/08<br>G01R 19/25<br>H04B 3/46<br>H02J 13/00                                                                                                            | (21) EP18763080.1                                                                                                                               | (21) EP21196513.2                                                                                                                                |
| (11) EP3982131                                                                                                                                                      | (22) 05.02.2018                                                                                                                                 | (22) 14.09.2021                                                                                                                                  |
| (21) EP21201657.0                                                                                                                                                   | (54) X-RAY DETECTOR SYSTEM BASED<br>ON PHOTON COUNTING                                                                                          | (54) MICRO SOCKET ELECTRICAL<br>COUPLINGS FOR DIES                                                                                               |
| (22) 08.10.2021                                                                                                                                                     | (73) Prismatic Sensors AB                                                                                                                       | (73) Intel Corporation                                                                                                                           |
| (54) SYSTEM FOR THE COMBINED<br>LOCATION, TIME AND FREQUENCY-<br>DEPENDENT DETERMINATION OF<br>ELECTRICAL PARAMETERS IN A<br>POWER SUPPLY NETWORK                   | (72) SVENSSON, Christer<br>(74) ir. W.J.J.M. Kempes<br>(31) 201715450653<br>(32) 06.03.2017<br>(33) United States of America<br>(47) 20.11.2024 | (72) MOHAMMAD, Feroz<br>NEKKANTY, Srikant<br>JAYARAMAN, Saikumar<br>WALCZYK, Joe F.<br>MALLIK, Debendra                                          |
| (73) Helmut-Schmidt-Universität                                                                                                                                     | (51) G02B 1/118<br>A61F 9/02<br>C08F 220/34<br>G02B 1/111<br>C08F 220/58<br>C08F 222/10<br>C09D 4/00<br>G02B 1/18                               | (74) ir. W.J.J.M. Kempes                                                                                                                         |
| (72) SCHULZ, Detlef                                                                                                                                                 | (11) EP3882673                                                                                                                                  | (31) 202017132921                                                                                                                                |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                                                                  | (21) EP21163236.9                                                                                                                               | (32) 23.12.2020                                                                                                                                  |
| (31) 20200834                                                                                                                                                       | (22) 13.05.2016                                                                                                                                 | (33) United States of America                                                                                                                    |
| (32) 08.10.2020                                                                                                                                                     | (54) TRANSPARENT LAMINATE                                                                                                                       | (47) 09.10.2024                                                                                                                                  |
|                                                                                                                                                                     | (73) Dexerials Corporation                                                                                                                      | (51) G02B 27/01<br>G02C 9/00<br>G02C 11/00                                                                                                       |
|                                                                                                                                                                     |                                                                                                                                                 | (11) EP3206076                                                                                                                                   |
|                                                                                                                                                                     |                                                                                                                                                 | (21) EP17164274.7                                                                                                                                |
|                                                                                                                                                                     |                                                                                                                                                 | (22) 10.06.2013                                                                                                                                  |

|                                           |                                        |                                       |
|-------------------------------------------|----------------------------------------|---------------------------------------|
| (54) HEADS UP DISPLAY SYSTEMS FOR GLASSES | H01L 27/12                             | G06F 3/0362                           |
| (73) INTEL Corporation                    | (11) EP3745189                         | G06F 3/0482                           |
| (72) LEUNG, Raymond C. M.                 | (21) EP20176678.9                      | G06F 3/0485                           |
| ABDOLLAHI, Hamid                          | (22) 26.05.2020                        | G06F 3/04883                          |
| (74) ir. W.J.J.M. Kempes                  | (54) DISPLAY-DEVICE                    | G06F 3/04842                          |
| (31) 201361799466 P                       | (73) Samsung Display Co., Ltd.         | (11) EP4134797                        |
| 201261658731 P                            | (72) CHO, Seunghwan                    | (21) EP21908641.0                     |
| (32) 15.03.2013                           | KIM, Minsoo                            | (22) 26.08.2021                       |
| 12.06.2012                                | (74) J.M.H. Duyver lic.                | (54) APPLICATION ICON MANAGEMENT      |
| (33) United States of America             | (31) 20190062050                       | METHOD, TERMINAL DEVICE AND           |
| United States of America                  | (32) 27.05.2019                        | STORAGE MEDIUM                        |
| (47) 25.09.2024                           | (33) Korea (Republic)                  | (73) Honor Device Co., Ltd.           |
| (51) G02B 27/10                           | (47) 13.11.2024                        | (72) HAN, Yi                          |
| G02B 27/28                                | (51) G03G 15/08                        | ZHANG, Ting                           |
| G02B 27/01                                | (11) EP2646881                         | WU, Yu                                |
| (11) EP3249446                            | (21) EP11845366.1                      | (74) ir. W.J.J.M. Kempes              |
| (21) EP16777519.6                         | (22) 02.12.2011                        | (31) 202011564302                     |
| (22) 21.03.2016                           | (54) POWDER CONTAINER, POWDER          | (32) 25.12.2020                       |
| (54) SHORT-DISTANCE OPTICAL               | SUPPLY DEVICE AND IMAGE                | (33) China                            |
| MAGNIFICATION MODULE, GLASSES,            | FORMING APPARATUS                      | (47) 20.11.2024                       |
| HELMET AND VR SYSTEM                      | (73) Ricoh Company, Ltd.               | (51) G06F 1/324                       |
| (73) Shenzhen Dlodlo New Technology Co.,  | (72) MATSUMOTO, Junichi                | G06F 1/3234                           |
| Ltd.                                      | KAI, Tsukuru                           | (11) EP3948489                        |
| (72) LI, Gang                             | KOMATSU, Makoto                        | (21) EP20782635.5                     |
| TANG, Weiping                             | HAYAKAWA, Tadashi                      | (22) 11.03.2020                       |
| (74) ir. H.Th. van den Heuvel c.s.        | OZAWA, Yuzuru                          | (54) ADJUSTING A THROTTLING           |
| (47) 18.09.2024                           | HOSOKAWA, Hiroshi                      | THRESHOLD IN A PROCESSOR              |
| (51) G02C 7/08                            | (74) ir. H.A. Witmans c.s.             | (73) Intel Corporation                |
| G02B 3/14                                 | (31) 2011197303                        | (72) BERGER, Gavri                    |
| G02B 26/06                                | 2010270370                             | MAKOVSKY, Lev                         |
| (11) EP4010759                            | (32) 09.09.2011                        | GENDLER, Alexander                    |
| (21) EP20757241.3                         | 03.12.2010                             | KAUFMAN, Daniela                      |
| (22) 06.08.2020                           | (33) Japan                             | YANOVER, Igor                         |
| (54) SPECTACLES WITH SANDWICHED           | Japan                                  | HACHAMO, Edo                          |
| POLYMER STRUCTURE                         | (47) 09.10.2024                        | SHOMRONI, Hanan                       |
| (73) poLight ASA                          | (51) G03G 15/20                        | KOREM, Elkana                         |
| (72) KILPINEN, Janne Tapani               | (11) EP4053638                         | GRANOT, Haim                          |
| HENRIKSEN, Lars                           | (21) EP22150720.5                      | (74) ir. W.J.J.M. Kempes              |
| CRAEN, Pierre                             | (22) 10.01.2022                        | (31) 201916369793                     |
| KARTASHOV, Vladimir                       | (54) IMAGE FORMING APPARATUS           | (32) 29.03.2019                       |
| (74) ir. A. Blokland c.s.                 | (73) Ricoh Company, Ltd.               | (33) United States of America         |
| (31) 19190462                             | (72) KUMAGAI, Naohiro                  | (47) 09.10.2024                       |
| (32) 07.08.2019                           | ADACHI, Tomoya                         | (51) G06F 3/041                       |
| (33) European Patent Office (EPO)         | FURUICHI, Yuusuke                      | G06F 1/20                             |
| (47) 09.10.2024                           | (74) ir. H.A. Witmans c.s.             | (11) EP3605273                        |
| (51) G02F 1/01                            | (31) 2021034375                        | (21) EP19189183.7                     |
| G02F 1/313                                | (32) 04.03.2021                        | (22) 30.07.2019                       |
| G02F 3/02                                 | (33) Japan                             | (54) DISPLAY DEVICE HAVING AN OPTICAL |
| (11) EP3944005                            | (47) 16.10.2024                        | SENSOR                                |
| (21) EP21191016.1                         | (51) G05D 1/00                         | (73) Samsung Display Co., Ltd.        |
| (22) 15.09.2016                           | B62D 15/02                             | (72) Joo, So Yeon                     |
| (54) PHOTONIC DEVICE                      | (11) EP4127852                         | Park, Chang Mo                        |
| (73) Oxford University Innovation Limited | (21) EP21724025.8                      | Hwang, Hyeon Deuk                     |
| (72) STEGMAIER, Matthias                  | (22) 01.04.2021                        | Wang, Ji Young                        |
| BHASKARAN, Harish                         | (54) CONTROL LOOP FOR NAVIGATING A     | Park, Se Hun                          |
| PERNICE, Wolfram                          | VEHICLE                                | Bae, Jong Man                         |
| RIOS OCAMPO, Carlos A                     | (73) Mobileye Vision Technologies Ltd. | Lee, Hyun Hee                         |
| (74) dr. A. Krebs                         | (72) ROJAS, Ronen                      | (74) J.M.H. Duyver lic.               |
| (31) 201607344                            | SELIG, Ilan                            | (31) 20180089089                      |
| 201516579                                 | MOLNAR, Moran                          | (32) 31.07.2018                       |
| (32) 27.04.2016                           | (74) dr. A. Krebs                      | (33) Korea (Republic)                 |
| 18.09.2015                                | (31) 202063003487 P                    | (47) 20.11.2024                       |
| (33) United Kingdom                       | (32) 01.04.2020                        | (51) G06F 3/06                        |
| United Kingdom                            | (33) United States of America          | (11) EP4152140                        |
| (47) 23.10.2024                           | (47) 18.09.2024                        | (21) EP21821554.9                     |
| (51) G02F 1/1345                          | (51) G06F 1/16                         | (22) 30.04.2021                       |
| H01L 27/02                                | G06F 3/04817                           | (54) NETWORK CARD AND METHOD FOR      |
|                                           | H04M 1/72469                           | NETWORK CARD TO PROCESS DATA          |

|                                          |                                     |                                    |
|------------------------------------------|-------------------------------------|------------------------------------|
| (73) Huawei Technologies Co. Ltd.        | G06F 12/121                         | 201462053905 P                     |
| (72) LU, Shengwen                        | (11) EP4155947                      | (32) 04.12.2014                    |
| (74) ir. W.J.J.M. Kempes                 | (21) EP22184591.0                   | 23.09.2014                         |
| (31) 202011038826                        | (22) 13.07.2022                     | (33) United States of America      |
| 202010519685                             | (54) SELECTION OF VICTIM ENTRY IN A | United States of America           |
| (32) 28.09.2020                          | DATA STRUCTURE                      | (47) 30.10.2024                    |
| 09.06.2020                               | (73) INTEL Corporation              | (51) G06N 3/042                    |
| (33) China                               | (72) Hilewitz, Yedidya              | G06N 3/092                         |
| China                                    | Liu, Yen-Cheng                      | G06N 3/008                         |
| (47) 30.10.2024                          | Zhang, Yongmei                      | G06N 3/045                         |
| (51) G06F 9/4401                         | (74) ir. W.J.J.M. Kempes            | G06N 3/0442                        |
| G06F 11/14                               | (31) 202117448604                   | G06N 3/084                         |
| G06F 8/65                                | (32) 23.09.2021                     | (11) EP3756139                     |
| (11) EP3853720                           | (33) United States of America       | (21) EP19718138.1                  |
| (21) EP19737431.7                        | (47) 09.10.2024                     | (22) 12.04.2019                    |
| (22) 25.06.2019                          | (51) G06F 12/0864                   | (54) GRAPH NEURAL NETWORKS         |
| (54) UPDATING AN EDGE COMPUTING          | G06F 12/1081                        | REPRESENTING PHYSICAL SYSTEMS      |
| DEVICE                                   | G06F 12/1027                        | (73) DeepMind Technologies Limited |
| (73) Microsoft Technology Licensing, LLC | G06F 9/445                          | (72) RIEDMILLER, Martin            |
| (72) KUMAR, Vikas                        | G06F 12/1036                        | SPRINGENBERG, Jost                 |
| D'AMATO, Andrea                          | G06F 12/0846                        | HEESS, Nicolas Manfred Otto        |
| SEETHARAM, Ravindra Mysore               | G06F 13/40                          | MEREL, Joshua                      |
| GOYAL, Kanika                            | G06F 9/455                          | HADSELL, Raia Thais                |
| SARKAR, Deepanjyoti                      | (11) EP4191420                      | BATTAGLIA, Peter William           |
| KOVURI RAJALIAH, Srikanth Kumar          | (21) EP22203192.4                   | SANCHEZ, Alvaro                    |
| JOSHI, Devidas                           | (22) 24.10.2022                     | (74) ir. H.A. Witmans c.s.         |
| (74) dr. W.A.H.M. Van Borm               | (54) ADDRESS TRANSLATION CACHE AND  | (31) 201862656904 P                |
| (31) 201816224480                        | SYSTEM INCLUDING THE SAME           | (32) 12.04.2018                    |
| 201862733907 P                           | (73) Samsung Electronics Co., Ltd.  | (33) United States of America      |
| (32) 18.12.2018                          | (72) MOON, Youngsuk                 | (47) 18.09.2024                    |
| 20.09.2018                               | PARK, Jaegeun                       | (51) G06N 3/0495                   |
| (33) United States of America            | HWANG, Sangmuk                      | G06N 3/063                         |
| United States of America                 | KANG, Hyunwoo                       | (11) EP4343631                     |
| (47) 06.11.2024                          | (74) ir. H.A. Witmans c.s.          | (21) EP23187208.6                  |
| (51) G06F 9/50                           | (31) 20220063986                    | (22) 24.07.2023                    |
| G06F 9/54                                | 20210169763                         | (54) WEIGHT-SPARSE NPU WITH FINE-  |
| G06F 9/48                                | (32) 25.05.2022                     | GRAINED STRUCTURED SPARSITY        |
| (11) EP3742293                           | 01.12.2021                          | (73) Samsung Electronics Co., Ltd. |
| (21) EP18905106.3                        | (33) Korea (Republic)               | (72) SHIN, Jong Hoon               |
| (22) 29.12.2018                          | Korea (Republic)                    | HASSOUN, Joseph                    |
| (54) EVENT DRIVING METHOD AND            | (47) 16.10.2024                     | PEDRAM, Ardavan                    |
| DEVICE                                   | (51) G06F 21/60                     | (74) ir. H.A. Witmans c.s.         |
| (73) HUAWEI TECHNOLOGIES CO., LTD.       | F03D 7/04                           | (31) 202217980544                  |
| (72) YAN, Wei                            | (11) EP4198781                      | 202263408828 P                     |
| LING, Wei                                | (21) EP21215563.4                   | 202263408827 P                     |
| (74) ir. W.J.J.M. Kempes                 | (22) 17.12.2021                     | (32) 03.11.2022                    |
| (31) 201810153094                        | (54) METHOD FOR MANAGING ACCESS     | 21.09.2022                         |
| (32) 12.02.2018                          | TO A CONTROL SYSTEM OF A WIND       | 21.09.2022                         |
| (33) China                               | POWER PLANT AND WIND POWER          | (33) United States of America      |
| (47) 06.11.2024                          | PLANT CONTROL SYSTEM AND WIND       | United States of America           |
| (51) G06F 11/10                          | POWER PLANT FOR THE METHOD          | United States of America           |
| (11) EP4246329                           | (73) Wobben Properties GmbH         | (47) 09.10.2024                    |
| (21) EP21899740.1                        | (72) Gehl, Harald                   | (51) G06N 3/092                    |
| (22) 14.10.2021                          | Fuchs, Andreas                      | G06N 3/045                         |
| (54) ERROR CORRECTION METHOD AND         | (74) dr. R.C. van Duijvenbode c.s.  | G06N 3/006                         |
| APPARATUS                                | (47) 06.11.2024                     | G06N 3/098                         |
| (73) Huawei Technologies Co. Ltd.        | (51) G06K 19/06                     | (11) EP3559865                     |
| (72) LI, Wei                             | G06K 7/14                           | (21) EP18707406.7                  |
| ZHANG, Xu                                | (11) EP4109336                      | (22) 31.01.2018                    |
| ZHANG, Kun                               | (21) EP22182789.2                   | (54) DATA-EFFICIENT REINFORCEMENT  |
| YIN, Wen                                 | (22) 22.09.2015                     | LEARNING FOR CONTINUOUS            |
| LI, Yuwei                                | (54) METHODS AND A SYSTEM FOR       | CONTROL TASKS                      |
| (74) ir. W.J.J.M. Kempes                 | VERIFYING THE AUTHENTICITY OF A     | (73) DeepMind Technologies Limited |
| (31) 202011406212                        | MARK                                | (72) RIEDMILLER, Martin            |
| (32) 03.12.2020                          | (73) Sys-Tech Solutions, Inc.       | HAFNER, Roland                     |
| (33) China                               | (72) SOBORSKI, Michael L.           | LILLICRAP, Timothy, Paul           |
| (47) 06.11.2024                          | (74) J.M.H. Duyver lic.             | BARTH-MARON, Gabriel               |
| (51) G06F 12/0831                        | (31) 201414561215                   | POPOV, Iyaylo                      |

|                                    |                                      |                                       |
|------------------------------------|--------------------------------------|---------------------------------------|
| VECERIK, Mel                       | (33) United States of America        | (31) 201762548757 P                   |
| LAMPE, Thomas                      | (47) 02.10.2024                      | (32) 22.08.2017                       |
| HEESS, Nicolas, Manfred, Otto      | (51) G06T 5/50                       | (33) United States of America         |
| (74) ir. H.A. Witmans c.s.         | (11) EP3350769                       | (47) 02.10.2024                       |
| (31) 201762452930 P                | (21) EP16769961.0                    | (51) G06T 7/80                        |
| (32) 31.01.2017                    | (22) 16.09.2016                      | (11) EP3899870                        |
| (33) United States of America      | (54) LIGHT FIELD DATA REPRESENTATION | (21) EP19817779.2                     |
| (47) 16.10.2024                    | (73) InterDigital VC Holdings, Inc.  | (22) 17.12.2019                       |
| (51) G06N 10/40                    | (72) DRAZIC, Valter                  | (54) CLOUD-BASED CAMERA               |
| G06N 10/70                         | SEIFI, Mozhddeh                      | CALIBRATION                           |
| H03K 19/195                        | BOISSON, Guillaume                   | (73) NEDERLANDSE ORGANISATIE          |
| G06N 10/20                         | (74) dr. R.C. van Duijvenbode c.s.   | VOOR TOEGEPAST-                       |
| (11) EP3593298                     | (31) 15306434                        | NATUURWETENSCHAPPELIJK                |
| (21) EP18764972.8                  | 15306436                             | ONDERZOEK TNO                         |
| (22) 09.03.2018                    | (32) 17.09.2015                      | Koninklijke KPN N.V.                  |
| (54) PERFORMING A CALIBRATION      | 17.09.2015                           | (72) GUNKEL, Simon, Norbert, Bernhard |
| PROCESS IN A QUANTUM               | (33) European Patent Office (EPO)    | STOKKING, Hans, Maarten               |
| COMPUTING SYSTEM                   | European Patent Office (EPO)         | TER HAAR, Frank                       |
| (73) Rigetti & Co, LLC             | (47) 13.11.2024                      | (74) ir. W.J.J.M. Kempes              |
| (72) REAGOR, Matthew J.            | (51) G06T 7/00                       | (31) 18215277                         |
| CALDWELL, Shane Arthur             | G06T 7/62                            | (32) 21.12.2018                       |
| BLOOM, Benjamin Jacob              | (11) EP3973502                       | (33) European Patent Office (EPO)     |
| TEZAK, Nikolas Anton               | (21) EP20721512.0                    | (47) 09.10.2024                       |
| ALIDOUST, Nasser                   | (22) 22.04.2020                      | (51) G06T 9/00                        |
| CURTIS, Michael James              | (54) A SYSTEM AND METHOD FOR         | (11) EP3740938                        |
| RIGETTI, Chad Tyler                | DETERMINING WHETHER A CAMERA         | (21) EP19706311.8                     |
| ZENG, William J.                   | COMPONENT IS DAMAGED                 | (22) 21.01.2019                       |
| KARALEKAS, Peter Jonathan          | (73) Blancco Technology Group IP Oy  | (54) PROCESSING A POINT CLOUD         |
| SETE, Eyob A.                      | (72) PÖRHÖNEN, Juho                  | (73) InterDigital VC Holdings, Inc.   |
| (74) dr. R.C. van Duijvenbode c.s. | VALTONEN, Markku                     | (72) GUEDE, Céline                    |
| (31) 201762469648 P                | LALLI, Lauri                         | LLACH PINSACH, Joan                   |
| (32) 10.03.2017                    | (74) ir. H.A. Witmans c.s.           | OLIVIER, Yannick                      |
| (33) United States of America      | (31) 201907221                       | GENDRON, David                        |
| (47) 20.11.2024                    | (32) 22.05.2019                      | RICARD, Julien                        |
| (51) G06N 99/00                    | (33) United Kingdom                  | (74) dr. R.C. van Duijvenbode c.s.    |
| B82Y 10/00                         | (47) 02.10.2024                      | (31) 18305928                         |
| G06F 9/48                          | (51) G06T 7/593                      | 18305420                              |
| G06F 9/54                          | (11) EP3489898                       | 18305048                              |
| G06F 15/76                         | (21) EP18189033.6                    | (32) 11.07.2018                       |
| G06N 10/00                         | (22) 14.08.2018                      | 10.04.2018                            |
| (11) EP3593296                     | (54) METHOD AND APPARATUS FOR        | 19.01.2018                            |
| (21) EP18763996.8                  | ESTIMATING DISPARITY                 | (33) European Patent Office (EPO)     |
| (22) 09.03.2018                    | (73) Samsung Electronics Co., Ltd.   | European Patent Office (EPO)          |
| (54) EVENT SCHEDULING IN A HYBRID  | (72) Lee, Wonhee                     | European Patent Office (EPO)          |
| COMPUTING SYSTEM                   | Jung, Kyungboo                       | (47) 06.11.2024                       |
| (73) Rigetti & Co, LLC             | (74) dr. ir. G.J.C. Verdijck c.s.    | (51) G06T 15/06                       |
| (72) SMITH, Robert Stanley         | (31) 20170157352                     | G06T 15/50                            |
| (74) dr. R.C. van Duijvenbode c.s. | (32) 23.11.2017                      | G06N 3/08                             |
| (31) 201762521646 P                | (33) Korea (Republic)                | G06N 3/045                            |
| 201762469949 P                     | (47) 25.09.2024                      | G06T 5/60                             |
| (32) 19.06.2017                    | (51) G06T 7/73                       | G06T 5/70                             |
| 10.03.2017                         | H04N 7/18                            | (11) EP3618007                        |
| (33) United States of America      | G06V 10/44                           | (21) EP19193591.5                     |
| United States of America           | G06V 10/82                           | (22) 26.08.2019                       |
| (47) 09.10.2024                    | G06V 20/52                           | (54) APPARATUS AND METHOD FOR         |
| (51) G06Q 20/20                    | (11) EP3673413                       | RUNTIME TRAINING OF A DENOISING       |
| (11) EP3770837                     | (21) EP18848602.1                    | MACHINE LEARNING ENGINE               |
| (21) EP20187626.5                  | (22) 22.08.2018                      | (73) INTEL Corporation                |
| (22) 24.07.2020                    | (54) PRESERVING PRIVACY IN           | (72) AFRA, Attila Tamas               |
| (54) ADVANCED HARDWARE SYSTEM FOR  | SURVEILLANCE                         | WALD, Ingo                            |
| SELF SERVICE CHECKOUT KIOSK        | (73) Alarm.com Incorporated          | BENTHIN, Carsten                      |
| (73) Clover Network, LLC           | (72) HUTZ, David James               | (74) ir. W.J.J.M. Kempes              |
| (72) RAJAGOPAL, Nagalakshmi        | MADDEN, Donald                       | (31) 201816114537                     |
| DURIEUX, Vincent                   | RAMANATHAN, Narayanan                | (32) 28.08.2018                       |
| WHITAKER, Jacob                    | BERG, Benjamin Asher                 | (33) United States of America         |
| (74) dr. R.C. van Duijvenbode c.s. | BEACH, Allison                       | (47) 09.10.2024                       |
| (31) 201916523947                  | SILVERMAN, Christopher               | (51) G06V 20/64                       |
| (32) 26.07.2019                    | (74) dr. R.C. van Duijvenbode c.s.   | (11) EP3539053                        |



|                                                                                             |                                                                                                                                                                 |                                                                                                                                                           |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| (21) EP17817236.7                                                                           | G11C 16/12                                                                                                                                                      | (21) EP21306304.3                                                                                                                                         |
| (22) 14.11.2017                                                                             | G11C 16/30                                                                                                                                                      | (22) 21.09.2021                                                                                                                                           |
| (54) SHIP IDENTIFICATION SYSTEM AND METHOD                                                  | H02M 3/07                                                                                                                                                       | (54) PACKAGING FOR TRANSPORTING AND/OR STORING RADIOACTIVE MATERIALS, COMPRISING A RADIOLOGICAL PROTECTION DEVICE REDUCING THE RISK OF RADIOLOGICAL LEAKS |
| (73) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO            | (11) EP4040438                                                                                                                                                  | (73) ORANO NUCLEAR PACKAGES AND SERVICES                                                                                                                  |
| (72) TER HAAR, Frank Bart                                                                   | (21) EP22163226.8                                                                                                                                               | (72) BORDES, Frédéric                                                                                                                                     |
| VAN DEN BROEK, Sebastianus Petrus                                                           | (22) 14.01.2014                                                                                                                                                 | RIPERT, Hervé                                                                                                                                             |
| VAN ANTWERPEN, Gerrit                                                                       | (54) INVERTER CIRCUIT                                                                                                                                           | GOURDON, Yves                                                                                                                                             |
| VAN EEKEREN, Adam Wilhelmus Maria                                                           | (73) Silicon Storage Technology, Inc.                                                                                                                           | (74) ir. F.A. Geurts c.s.                                                                                                                                 |
| TEN HOVE, Raoul Johan-Martijn                                                               | (72) Tran, Hieu Van                                                                                                                                             | (31) 2010235                                                                                                                                              |
| SHUTTE, Klamer                                                                              | Ly, Anh                                                                                                                                                         | (32) 07.10.2020                                                                                                                                           |
| (74) ir. H.A. Witmans c.s.                                                                  | Nguyen, Hung Quoc                                                                                                                                               | (33) France                                                                                                                                               |
| (31) 16198740                                                                               | Vu, Thuan                                                                                                                                                       | (47) 06.11.2024                                                                                                                                           |
| (32) 14.11.2016                                                                             | (74) ir. H.Th. van den Heuvel c.s.                                                                                                                              | (51) H01L 21/285                                                                                                                                          |
| (33) European Patent Office (EPO)                                                           | (31) 201313958410                                                                                                                                               | H01L 21/205                                                                                                                                               |
| (47) 11.09.2024                                                                             | 201361792643 P                                                                                                                                                  | H01L 21/768                                                                                                                                               |
| (51) G08B 13/16                                                                             | (32) 02.08.2013                                                                                                                                                 | H01L 21/66                                                                                                                                                |
| G01N 29/04                                                                                  | 15.03.2013                                                                                                                                                      | (11) EP3602610                                                                                                                                            |
| G01N 29/12                                                                                  | (33) United States of America                                                                                                                                   | (21) EP17903305.5                                                                                                                                         |
| G01N 29/42                                                                                  | United States of America                                                                                                                                        | (22) 30.03.2017                                                                                                                                           |
| G01N 29/44                                                                                  | (47) 18.09.2024                                                                                                                                                 | (54) METAL CHEMICAL VAPOR DEPOSITION APPROACHES FOR FABRICATING WRAP-AROUND CONTACTS AND RESULTING STRUCTURES                                             |
| G01N 29/50                                                                                  | (51) G11C 11/4078                                                                                                                                               | (73) INTEL Corporation                                                                                                                                    |
| H04R 29/00                                                                                  | G11C 11/4096                                                                                                                                                    | (72) WIEGAND, Christopher, J.                                                                                                                             |
| (11) EP4086869                                                                              | G11C 7/24                                                                                                                                                       | LEIB, Jeffrey, S.                                                                                                                                         |
| (21) EP21172680.7                                                                           | G11C 11/406                                                                                                                                                     | BERGSTROM, Daniel, B.                                                                                                                                     |
| (22) 07.05.2021                                                                             | G11C 7/10                                                                                                                                                       | (74) ir. W.J.J.M. Kempes                                                                                                                                  |
| (54) METHOD AND DEVICE FOR DETECTING AND LOCATING A DEFECT OF A HOUSING                     | G11C 7/02                                                                                                                                                       | (47) 09.10.2024                                                                                                                                           |
| (73) MUSE Electronics GmbH                                                                  | (11) EP4141873                                                                                                                                                  | (51) H01L 23/48                                                                                                                                           |
| (72) ZACH, Gerald                                                                           | (21) EP22174258.8                                                                                                                                               | H01L 21/768                                                                                                                                               |
| KIRSCHNER, Markus                                                                           | (22) 19.05.2022                                                                                                                                                 | H01L 29/06                                                                                                                                                |
| RAINER, Max                                                                                 | (54) METHOD FOR ACCESSING MEMORY CELLS, SEMICONDUCTOR MEMORY DEVICE INCLUDING MEMORY CELLS, AND OPERATING METHOD OF MEMORY CONTROLLER CONTROLLING MEMORY DEVICE | H01L 29/775                                                                                                                                               |
| (74) dr. R.C. van Duijvenbode c.s.                                                          | (73) Samsung Electronics Co., Ltd.                                                                                                                              | H01L 29/786                                                                                                                                               |
| (47) 16.10.2024                                                                             | (72) YOU, Jung Min                                                                                                                                              | H01L 29/417                                                                                                                                               |
| (51) G10L 15/26                                                                             | CHO, Seong-Jin                                                                                                                                                  | H01L 29/423                                                                                                                                               |
| G10L 15/30                                                                                  | SONG, Won-Hyung                                                                                                                                                 | H01L 23/485                                                                                                                                               |
| (11) EP4078574                                                                              | (74) ir. H.A. Witmans c.s.                                                                                                                                      | H01L 23/528                                                                                                                                               |
| (21) EP19856504.6                                                                           | (31) 20210111938                                                                                                                                                | (11) EP4318576                                                                                                                                            |
| (22) 20.12.2019                                                                             | 202217734508                                                                                                                                                    | (21) EP23165051.6                                                                                                                                         |
| (54) METHODS TO EMPLOY CONCATENATION IN ASR SERVICE USAGE                                   | (32) 24.08.2021                                                                                                                                                 | (22) 29.03.2023                                                                                                                                           |
| (73) Adeia Guides Inc.                                                                      | 02.05.2022                                                                                                                                                      | (54) SEMICONDUCTOR DEVICE                                                                                                                                 |
| (72) AHER, Ankur, Anil                                                                      | (33) Korea (Republic)                                                                                                                                           | (73) Samsung Electronics Co., Ltd.                                                                                                                        |
| ROBERT JOSE, Jeffry, Cops                                                                   | United States of America                                                                                                                                        | (72) KIM, Young Woo                                                                                                                                       |
| (74) ir. W.J.J.M. Kempes                                                                    | (47) 16.10.2024                                                                                                                                                 | KIM, Guk Hee                                                                                                                                              |
| (47) 06.11.2024                                                                             | (51) G11C 13/00                                                                                                                                                 | LEE, Kyoung Woo                                                                                                                                           |
| (51) G10L 19/008                                                                            | (11) EP3985671                                                                                                                                                  | NA, Sang Cheol                                                                                                                                            |
| (11) EP4246511                                                                              | (21) EP21202523.3                                                                                                                                               | LEE, Anthony Dongick                                                                                                                                      |
| (21) EP23168515.7                                                                           | (22) 13.10.2021                                                                                                                                                 | GWAK, Min Chan                                                                                                                                            |
| (22) 06.05.2013                                                                             | (54) MEMORY DEVICE INCLUDING PHASE CHANGE MEMORY CELL AND OPERATION METHOD THEREOF                                                                              | (74) J.M.H. Duyver lic.                                                                                                                                   |
| (54) METHOD AND APPARATUS FOR DECOMPRESSING A HIGHER ORDER AMBISONICS SIGNAL REPRESENTATION | (73) Samsung Electronics Co., Ltd.                                                                                                                              | (31) 20220097089                                                                                                                                          |
| (73) Dolby International AB                                                                 | (72) PARK, Hyunkook                                                                                                                                             | (32) 04.08.2022                                                                                                                                           |
| (72) KORDON, Sven                                                                           | KIM, Jongryul                                                                                                                                                   | (33) Korea (Republic)                                                                                                                                     |
| BATKE, Johann-Markus                                                                        | LEE, Jungyu                                                                                                                                                     | (47) 20.11.2024                                                                                                                                           |
| BOEHM, Johannes                                                                             | (74) ir. H.A. Witmans c.s.                                                                                                                                      | (51) H01L 25/075                                                                                                                                          |
| KRUEGER, Alexander                                                                          | (31) 20200133765                                                                                                                                                | H01L 25/16                                                                                                                                                |
| (74) J.M.H. Duyver lic.                                                                     | (32) 15.10.2020                                                                                                                                                 | G02F 1/1345                                                                                                                                               |
| (31) 12305537                                                                               | (33) Korea (Republic)                                                                                                                                           | H01L 33/62                                                                                                                                                |
| (32) 14.05.2012                                                                             | (47) 09.10.2024                                                                                                                                                 | (11) EP4080568                                                                                                                                            |
| (33) European Patent Office (EPO)                                                           | (51) G21F 5/06                                                                                                                                                  | (21) EP22168901.1                                                                                                                                         |
| (47) 13.11.2024                                                                             | G21F 3/04                                                                                                                                                       | (22) 19.04.2022                                                                                                                                           |
| (51) G11C 5/14                                                                              | G21F 5/005                                                                                                                                                      |                                                                                                                                                           |
|                                                                                             | G21F 5/008                                                                                                                                                      |                                                                                                                                                           |
|                                                                                             | (11) EP3982375                                                                                                                                                  |                                                                                                                                                           |

|                                      |                                          |                                        |
|--------------------------------------|------------------------------------------|----------------------------------------|
| (54) DISPLAY DEVICE                  | H01M 4/13                                | H01M 50/578                            |
| (73) Samsung Display Co., Ltd.       | H01M 10/052                              | H01M 50/581                            |
| (72) KIM, Kyung Bae                  | H01M 4/02                                | (11) EP3848999                         |
| LEE, Ji Hye                          | H01M 4/131                               | (21) EP19869602.3                      |
| LEE, Yong Hee                        | H01M 10/0525                             | (22) 04.10.2019                        |
| (74) J.M.H. Duyver lic.              | (11) EP3951953                           | (54) SECONDARY BATTERY                 |
| (31) 20210051289                     | (21) EP20872186.0                        | (73) LG Energy Solution, Ltd.          |
| (32) 20.04.2021                      | (22) 29.09.2020                          | (72) KIM, Ki Youn                      |
| (33) Korea (Republic)                | (54) ELECTRODE AND SECONDARY             | KO, Myung Hoon                         |
| (47) 13.11.2024                      | BATTERY INCLUDING SAME                   | KIM, Jee Ho                            |
| (51) H01L 27/146                     | (73) LG Energy Solution, Ltd.            | KANG, Gyung Soo                        |
| H01L 31/0352                         | (72) MOON, Il Jae                        | PARK, Jung Il                          |
| H01L 31/103                          | KWAK, Min                                | LEE, Yong Tae                          |
| (11) EP3552236                       | CHO, Hyung Man                           | (74) dr. R.C. van Duijvenbode c.s.     |
| (21) EP17809058.5                    | PARK, Sun Wook                           | (31) 20190122402                       |
| (22) 17.11.2017                      | KIM, Tae Gon                             | 20180118867                            |
| (54) LIGHT-RECEIVING DEVICE, IMAGING | (74) dr. ir. F.M. van Bouwelen           | (32) 02.10.2019                        |
| DEVICE, AND ELECTRONIC               | (31) 20190122963                         | 05.10.2018                             |
| APPARATUS                            | (32) 04.10.2019                          | (33) Korea (Republic)                  |
| (73) Sony Semiconductor Solutions    | (33) Korea (Republic)                    | Korea (Republic)                       |
| Corporation                          | (47) 20.11.2024                          | (47) 27.11.2024                        |
| (72) HIRANO, Tomoyuki                | (51) H01M 10/36                          | (51) H02J 7/00                         |
| MANDA, Shuji                         | H01M 12/08                               | B60L 50/50                             |
| (74) ir. W.J.J.M. Kempes             | (11) EP3437153                           | H01M 10/42                             |
| (31) 2016237296                      | (21) EP17716386.2                        | (11) EP3678276                         |
| (32) 07.12.2016                      | (22) 29.03.2017                          | (21) EP18851100.0                      |
| (33) Japan                           | (54) ELECTROLYTE FOR RECHARGEABLE        | (22) 31.08.2018                        |
| (47) 06.11.2024                      | ELECTROCHEMICAL CELL                     | (54) BATTERY BALANCING SYSTEM,         |
| (51) H01L 27/15                      | (73) EOS Energy Technology Holdings, LLC | VEHICLE, BATTERY BALANCING             |
| H01L 33/24                           | (72) ADAMSON, George, W.                 | METHOD, AND STORAGE MEDIUM             |
| (11) EP3979325                       | BOWERS, Sara, S.                         | (73) BYD Company Limited               |
| (21) EP21180803.5                    | RICHEY, Francis W.                       | (72) WANG, Chengzhi                    |
| (22) 22.06.2021                      | (74) ir. A. Blokland c.s.                | WANG, Chao                             |
| (54) MICRO LIGHT-EMITTING DISPLAY    | (31) 201615083558                        | ZENG, Qiuyong                          |
| APPARATUS AND METHOD OF              | (32) 29.03.2016                          | LUO, Hongbin                           |
| MANUFACTURING THE SAME               | (33) United States of America            | SHEN, Xiaofeng                         |
| (73) Samsung Electronics Co., Ltd.   | (47) 13.11.2024                          | (74) ir. W.J.J.M. Kempes               |
| (72) LEE, Eunsung                    | (51) H01M 10/658                         | (31) 201710776104                      |
| KIM, Nakhyun                         | H01M 10/6556                             | (32) 31.08.2017                        |
| KIM, Dongho                          | H01M 10/625                              | (33) China                             |
| KONG, Kiho                           | H01M 10/613                              | (47) 13.11.2024                        |
| PARK, Jinjoo                         | H01M 10/617                              | (51) H02P 9/00                         |
| PARK, Junghun                        | H01M 10/647                              | H02P 21/05                             |
| HAN, Joohun                          | H01M 10/6557                             | (11) EP3991289                         |
| CHOI, Junhee                         | H01M 10/6567                             | (21) EP20734733.7                      |
| (74) J.M.H. Duyver lic.              | H01M 50/211                              | (22) 25.06.2020                        |
| (31) 20200128269                     | H01M 50/293                              | (54) METHOD FOR MINIMISING             |
| (32) 05.10.2020                      | (11) EP3675275                           | GENERATOR VIBRATIONS AND               |
| (33) Korea (Republic)                | (21) EP19792407.9                        | CONTROL UNIT THEREOF                   |
| (47) 13.11.2024                      | (22) 26.02.2019                          | (73) Wobben Properties GmbH            |
| (51) H01L 31/0224                    | (54) BATTERY MODULE, BATTERY PACK        | (72) CASSOLI, Jair                     |
| H01L 31/068                          | INCLUDING THE BATTERY MODULE,            | ROSSO, Roberto                         |
| (11) EP3750191                       | AND VEHICLE INCLUDING THE                | (74) dr. R.C. van Duijvenbode c.s.     |
| (21) EP19718056.5                    | BATTERY PACK                             | (31) 102019117477                      |
| (22) 05.02.2019                      | (73) LG Energy Solution, Ltd.            | (32) 28.06.2019                        |
| (54) METHOD FOR IMPROVING THE        | (72) SEONG, Jun-Yeob                     | (33) Germany                           |
| OHMIC CONTACT BEHAVIOR               | CHO, Yong-Jin                            | (47) 20.11.2024                        |
| BETWEEN A CONTACT GRID AND AN        | PARK, Jun-Kyu                            | (51) H02P 29/024                       |
| EMITTER LAYER OF A SILICON SOLAR     | (74) dr. R.C. van Duijvenbode c.s.       | G01R 31/34                             |
| CELL                                 | (31) 20180047843                         | H02H 7/08                              |
| (73) CE Cell Engineering GmbH        | (32) 25.04.2018                          | H02P 23/00                             |
| (72) ZHAO, Hongming                  | (33) Korea (Republic)                    | (11) EP3652855                         |
| (74) dr. ir. G.J.C. Verdijk c.s.     | (47) 27.11.2024                          | (21) EP18755947.1                      |
| (31) 102018001057                    | (51) H01M 50/107                         | (22) 12.07.2018                        |
| (32) 07.02.2018                      | H01M 50/119                              | (54) TECHNIQUE FOR SELF LEARNING       |
| (33) Germany                         | H01M 50/121                              | MOTOR LOAD PROFILE                     |
| (47) 11.09.2024                      | H01M 50/126                              | (73) ITT Manufacturing Enterprises LLC |
| (51) H01M 4/62                       | H01M 50/545                              | (72) GEORGE, Naveen                    |

|                                                                                                                      |                                                                                                                |                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| HAUENSTEIN, Ken                                                                                                      | (22) 09.03.2022                                                                                                | Lee, Hyo Jin                                                                                              |
| WILLIAMS, Dean Patrick                                                                                               | (54) FLEXO/ZR SUBRATING AND PARTIAL SURVIVABILITY                                                              | Kim, Ki Il                                                                                                |
| (74) dr. A. Krebs                                                                                                    | (73) Ciena Corporation                                                                                         | (74) dr. R.C. van Duijvenbode c.s.                                                                        |
| (31) 201715648838                                                                                                    | (72) GAREAU, Sebastien                                                                                         | (31) 20120008868                                                                                          |
| (32) 13.07.2017                                                                                                      | (74) J.M.H. Duyver lic.                                                                                        | 20110117483                                                                                               |
| (33) United States of America                                                                                        | (31) 202117197573                                                                                              | 20110113894                                                                                               |
| (47) 06.11.2024                                                                                                      | (32) 10.03.2021                                                                                                | 201261636989 P                                                                                            |
| (51) H02S 40/34                                                                                                      | (33) United States of America                                                                                  | 201161547294 P                                                                                            |
| (11) EP3595170                                                                                                       | (47) 20.11.2024                                                                                                | 201161546294 P                                                                                            |
| (21) EP17899848.0                                                                                                    | (51) H04L 1/00                                                                                                 | (32) 30.01.2012                                                                                           |
| (22) 06.12.2017                                                                                                      | (11) EP4030657                                                                                                 | 11.11.2011                                                                                                |
| (54) LOW-PRESSURE CHIP PACKAGING TYPE JUNCTION BOX AND PROCESSING METHOD THEREOF FOR SOLAR POWER GENERATION ASSEMBLY | (21) EP22150964.9                                                                                              | 03.11.2011                                                                                                |
| (73) Jiangsu Tonglin Electric Co., Ltd                                                                               | (22) 11.01.2022                                                                                                | 23.04.2012                                                                                                |
| (72) JIANG, Liwang                                                                                                   | (54) ENHANCED ERROR PROTECTION OF PAYLOAD USING DOUBLE CRC                                                     | 14.10.2011                                                                                                |
| ZHANG, Daoyuan                                                                                                       | (73) Avago Technologies International Sales Pte. Limited                                                       | 12.10.2011                                                                                                |
| LI, Qianjin                                                                                                          | (72) Shah, Sameer Kanhaiyalal                                                                                  | (33) Korea (Republic)                                                                                     |
| ZHU, Dibao                                                                                                           | Chadha, Nishant                                                                                                | Korea (Republic)                                                                                          |
| (74) drs. P.A. van Essen c.s.                                                                                        | Chidambara, Sundararajan                                                                                       | Korea (Republic)                                                                                          |
| (31) 201710142905                                                                                                    | (74) ir. W.J.J.M. Kempes                                                                                       | United States of America                                                                                  |
| (32) 10.03.2017                                                                                                      | (31) 202117152677                                                                                              | United States of America                                                                                  |
| (33) China                                                                                                           | (32) 19.01.2021                                                                                                | United States of America                                                                                  |
| (47) 23.10.2024                                                                                                      | (33) United States of America                                                                                  | United States of America                                                                                  |
| (51) H04B 7/0404                                                                                                     | (47) 02.10.2024                                                                                                | (47) 27.11.2024                                                                                           |
| H04B 7/06                                                                                                            | (51) H04L 1/08                                                                                                 | (51) H04L 5/14                                                                                            |
| H04L 1/1822                                                                                                          | H04W 80/02                                                                                                     | (11) EP3442157                                                                                            |
| H04L 1/1829                                                                                                          | H04L 1/1822                                                                                                    | (21) EP18188137.6                                                                                         |
| H04W 72/232                                                                                                          | H04W 76/14                                                                                                     | (22) 09.08.2018                                                                                           |
| H04W 72/563                                                                                                          | (11) EP3860015                                                                                                 | (54) DEVICE AND METHOD OF HANDLING FLEXIBLE DUPLEXING                                                     |
| (11) EP3958637                                                                                                       | (21) EP19867554.8                                                                                              | (73) Acer Incorporated                                                                                    |
| (21) EP20804785.2                                                                                                    | (22) 19.09.2019                                                                                                | (72) Lee, Chien-Min                                                                                       |
| (22) 13.05.2020                                                                                                      | (54) CONFIGURATION METHOD FOR PDCP DUPLICATION, TERMINAL DEVICE AND COMPUTER-READABLE STORAGE MEDIUM           | Hsieh, Chia-Wen                                                                                           |
| (54) CONTROL INFORMATION TRANSMISSION METHOD AND DEVICE IN WIRELESS COMMUNICATION SYSTEM                             | (73) VIVO MOBILE COMMUNICATION CO., LTD.                                                                       | Pao, Wei-Chen                                                                                             |
| (73) Samsung Electronics Co., Ltd.                                                                                   | (72) YANG, Xiaodong                                                                                            | (74) ir. A.R. Aalbers                                                                                     |
| (72) JUNG, Euichang                                                                                                  | (74) J.M.H. Duyver lic.                                                                                        | (31) 201762542850 P                                                                                       |
| NOH, Hoondong                                                                                                        | (31) 201811133676                                                                                              | 201816057836                                                                                              |
| YOON, Suha                                                                                                           | (32) 27.09.2018                                                                                                | (32) 09.08.2017                                                                                           |
| YEO, Jeongho                                                                                                         | (33) China                                                                                                     | 08.08.2018                                                                                                |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                   | (47) 13.11.2024                                                                                                | (33) United States of America                                                                             |
| (31) 20190056517                                                                                                     | (51) H04L 1/18                                                                                                 | United States of America                                                                                  |
| (32) 14.05.2019                                                                                                      | H04L 1/16                                                                                                      | (47) 06.11.2024                                                                                           |
| (33) Korea (Republic)                                                                                                | H04W 72/04                                                                                                     | (51) H04L 9/00                                                                                            |
| (47) 27.11.2024                                                                                                      | (11) EP4307810                                                                                                 | G01R 31/317                                                                                               |
| (51) H04B 10/2507                                                                                                    | (21) EP23213781.0                                                                                              | G06F 21/75                                                                                                |
| H04B 10/272                                                                                                          | (22) 08.08.2018                                                                                                | (11) EP4082152                                                                                            |
| H04B 10/69                                                                                                           | (54) HYBRID AUTOMATIC REPEAT REQUEST HARQ FEEDBACK METHOD AND APPARATUS                                        | (21) EP20833708.9                                                                                         |
| H04J 14/02                                                                                                           | (73) Beijing Xiaomi Mobile Software Co., Ltd.                                                                  | (22) 21.12.2020                                                                                           |
| H04Q 11/00                                                                                                           | (72) MU, Qin                                                                                                   | (54) METHOD FOR DETECTING PERTURBATIONS IN A LOGIC CIRCUIT AND LOGIC CIRCUIT FOR IMPLEMENTING THIS METHOD |
| (11) EP3836430                                                                                                       | (74) J.M.H. Duyver lic.                                                                                        | (73) Nagravision Sarl                                                                                     |
| (21) EP19216020.8                                                                                                    | (47) 13.11.2024                                                                                                | (72) HAUTIER, Roan                                                                                        |
| (22) 13.12.2019                                                                                                      | (51) H04L 5/00                                                                                                 | MARTIN, Jean-Marie                                                                                        |
| (54) AN OPTICAL LINE TERMINAL AND A METHOD THEREFOR                                                                  | (11) EP3800824                                                                                                 | (74) ir. W.J.J.M. Kempes                                                                                  |
| (73) Nokia Solutions and Networks Oy                                                                                 | (21) EP20211166.2                                                                                              | (31) 19219480                                                                                             |
| (72) Bonk, Rene                                                                                                      | (22) 12.10.2012                                                                                                | (32) 23.12.2019                                                                                           |
| Borkowski, Robert                                                                                                    | (54) METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING FEEDBACK INFORMATION IN A MOBILE COMMUNICATION SYSTEM | (33) European Patent Office (EPO)                                                                         |
| Van Hoof, Werner                                                                                                     | (73) Samsung Electronics Co., Ltd.                                                                             | (47) 20.11.2024                                                                                           |
| (74) ir. W.J.J.M. Kempes                                                                                             | (72) Kim, Youn-Sun                                                                                             | (51) H04L 9/40                                                                                            |
| (47) 27.11.2024                                                                                                      |                                                                                                                | G06F 16/16                                                                                                |
| (51) H04J 3/16                                                                                                       |                                                                                                                | (11) EP3854054                                                                                            |
| (11) EP4282095                                                                                                       |                                                                                                                | (21) EP19770144.4                                                                                         |
| (21) EP22713162.0                                                                                                    |                                                                                                                | (22) 14.09.2019                                                                                           |
|                                                                                                                      |                                                                                                                | (54) TRANSFERRING ELECTRONIC INFORMATION BETWEEN NETWORKS OVER DIFFERING LEVELS OF TRUST                  |
|                                                                                                                      |                                                                                                                | (73) The Secretary of State for Foreign and Commonwealth Affairs                                          |

|                                            |                                      |                                            |
|--------------------------------------------|--------------------------------------|--------------------------------------------|
| (72) DALE, Robert John<br>THORP, John Alan | H04N 13/268<br>H04N 13/20            | (74) dr. R.C. van Duijvenbode c.s.         |
| (74) dr. R.C. van Duijvenbode c.s.         | (11) EP4020982                       | (31) 19290045                              |
| (31) 201815120                             | (21) EP22157426.2                    | 19305698                                   |
| (32) 17.09.2018                            | (22) 19.03.2018                      | (32) 21.06.2019                            |
| (33) United Kingdom                        | (54) DEPTH SENSING TECHNIQUES FOR    | 31.05.2019                                 |
| (47) 06.11.2024                            | VIRTUAL, AUGMENTED, AND MIXED        | (33) European Patent Office (EPO)          |
| (51) H04L 45/24                            | REALITY SYSTEMS                      | European Patent Office (EPO)               |
| H04L 49/253                                | (73) Magic Leap, Inc.                | (47) 06.11.2024                            |
| H04L 49/00                                 | (72) SMITH, Brian Keith              | (51) H04N 19/176                           |
| H04L 45/00                                 | LINK, Gregory Michael                | H04N 19/11                                 |
| (11) EP3829116                             | SHEE, Koon Keong                     | H04N 19/154                                |
| (21) EP20210253.9                          | (74) ir. W.J.J.M. Kempes             | H04N 19/147                                |
| (22) 27.11.2020                            | (31) 201762474503 P                  | (11) EP3453174                             |
| (54) ADAPTIVE ROUTING                      | (32) 21.03.2017                      | (21) EP17724201.3                          |
| (73) Google LLC                            | (33) United States of America        | (22) 05.05.2017                            |
| (72) SINGH, Arjun                          | (47) 04.12.2024                      | (54) METHOD AND SYSTEM FOR                 |
| McLAREN, Moray                             | (51) H04N 13/232                     | DECODER-SIDE INTRA MODE                    |
| McDONALD, Nicholas                         | G06T 5/70                            | DERIVATION FOR BLOCK-BASED                 |
| (74) ir. H.Th. van den Heuvel c.s.         | G06T 5/00                            | VIDEO CODING                               |
| (31) 201916697339                          | (11) EP3291535                       | (73) InterDigital Madison Patent Holdings, |
| (32) 27.11.2019                            | (21) EP17184960.7                    | SAS                                        |
| (33) United States of America              | (22) 04.08.2017                      | (72) YE, Yan                               |
| (47) 18.09.2024                            | (54) METHOD AND APPARATUS            | XIU, Xiaoyu                                |
| (51) H04L 51/52                            | FOR GENERATING DATA                  | HE, Yuwen                                  |
| H04L 51/10                                 | REPRESENTATIVE OF A BOKEH            | (74) dr. R.C. van Duijvenbode c.s.         |
| H04L 12/18                                 | ASSOCIATED TO LIGHT-FIELD DATA       | (31) 201662367414 P                        |
| H04L 51/04                                 | (73) InterDigital CE Patent Holdings | 201662335512 P                             |
| (11) EP3998756                             | (72) VANDAME, Benoît                 | 201662332871 P                             |
| (21) EP21199167.4                          | BLONDÉ, Laurent                      | (32) 27.07.2016                            |
| (22) 22.11.2017                            | BOISSON, Guillaume                   | 12.05.2016                                 |
| (54) SYSTEM AND METHOD FOR GROUP           | (74) dr. R.C. van Duijvenbode c.s.   | 06.05.2016                                 |
| STREAM BROADCASTING WITH                   | (31) 16306082                        | (33) United States of America              |
| STATELESS QUEUING FEATURE                  | (32) 25.08.2016                      | United States of America                   |
| (73) Adeia Media Holdings LLC              | (33) European Patent Office (EPO)    | United States of America                   |
| (72) Savenok., Alexander                   | (47) 13.11.2024                      | (47) 27.11.2024                            |
| Savenok., Pavel                            | (51) H04N 19/119                     | (51) H04N 19/51                            |
| Chow., Sai H.                              | H04N 19/577                          | H04N 19/583                                |
| Leekley., Gregory H.                       | (11) EP3890325                       | H04N 19/70                                 |
| (74) ir. W.J.J.M. Kempes                   | (21) EP19897262.2                    | H04N 19/134                                |
| (31) 201715670847                          | (22) 03.12.2019                      | H04N 19/109                                |
| (32) 07.08.2017                            | (54) INTER-FRAME PREDICTION METHOD   | H04N 19/503                                |
| (33) United States of America              | AND DEVICE                           | (11) EP3840383                             |
| (47) 30.10.2024                            | (73) Huawei Technologies Co., Ltd.   | (21) EP21155916.6                          |
| (51) H04L 67/1001                          | (72) YANG, Haitao                    | (22) 23.09.2013                            |
| H04L 67/51                                 | CHEN, Jianle                         | (54) CONDITIONAL SIGNALLING OF             |
| H04W 4/70                                  | CHEN, Huanbang                       | REFERENCE PICTURE LIST                     |
| H04L 69/40                                 | (74) ir. W.J.J.M. Kempes             | MODIFICATION INFORMATION                   |
| (11) EP3688967                             | (31) 201910325612                    | (73) Microsoft Technology Licensing, LLC   |
| (21) EP18793520.0                          | 201811530481                         | (72) KANUMURI., Sandeep                    |
| (22) 28.09.2018                            | (32) 22.04.2019                      | SULLIVAN., Gary J.                         |
| (54) SERVICE REGISTRATION BASED            | 13.12.2018                           | (74) dr. W.A.H.M. Van Borm                 |
| ON SERVICE CAPABILITIES                    | (33) China                           | (31) 201313781710                          |
| REQUIREMENTS AND PREFERENCES               | China                                | 201261708042 P                             |
| (73) Convida Wireless, LLC                 | (47) 18.09.2024                      | (32) 28.02.2013                            |
| (72) CHEN, Zhuo                            | (51) H04N 19/12                      | 30.09.2012                                 |
| LY, Quang                                  | H04N 19/176                          | (33) United States of America              |
| FLYNN, William, Robert, IV                 | H04N 19/463                          | United States of America                   |
| LOEB, Shoshana                             | H04N 19/70                           | (47) 06.11.2024                            |
| MLADIN, Catalina, Mihaela                  | (11) EP3977732                       | (51) H04N 21/235                           |
| DI GIROLAMO, Rocco                         | (21) EP20732456.7                    | H04N 9/64                                  |
| SEED, Dale, N.                             | (22) 28.05.2020                      | H04N 21/435                                |
| (74) dr. R.C. van Duijvenbode c.s.         | (54) IMPLICIT MULTIPLE TRANSFORM     | H04N 21/488                                |
| (31) 201762565750 P                        | SELECTION                            | H04N 5/278                                 |
| (32) 29.09.2017                            | (73) InterDigital VC Holdings, Inc.  | (11) EP3783902                             |
| (33) United States of America              | (72) POIRIER, Tangi                  | (21) EP20189755.0                          |
| (47) 06.11.2024                            | NASER, Karam                         | (22) 28.09.2017                            |
| (51) H04N 13/128                           | LELEANNEC, Fabrice                   | (54) RECEIVING DEVICE AND RECEIVING        |
|                                            |                                      | METHOD FOR SUBTITLES                       |

|                                               |                                                |                                               |
|-----------------------------------------------|------------------------------------------------|-----------------------------------------------|
| (73) Saturn Licensing, LLC                    | (47) 20.11.2024                                | (47) 27.11.2024                               |
| (72) TSUKAGOSHI, Ikuo                         | (51) H04W 4/40                                 | (51) H04W 36/18                               |
| (74) dr. R.C. van Duijvenbode c.s.            | H04W 36/06                                     | H04W 28/06                                    |
| (31) 2016200179                               | H04W 72/02                                     | H04L 69/04                                    |
| (32) 11.10.2016                               | H04W 4/70                                      | (11) EP3993500                                |
| (33) Japan                                    | H04W 72/52                                     | (21) EP20848660.5                             |
| (47) 06.11.2024                               | (11) EP4164259                                 | (22) 28.07.2020                               |
| (51) H04W 4/02                                | (21) EP22209505.1                              | (54) PACKET REDUNDANCY PROCESSING             |
| H04N 21/239                                   | (22) 03.05.2018                                | METHOD FOR SUPPORTING                         |
| H04N 21/262                                   | (54) METHOD FOR SELECTING CARRIER              | ENHANCED HANDOVER IN                          |
| H04N 21/40                                    | AND COMMUNICATION DEVICE                       | NEXT GENERATION MOBILE                        |
| H04N 21/258                                   | (73) GUANGDONG OPPO MOBILE                     | COMMUNICATION SYSTEM, METHOD                  |
| H04N 21/6547                                  | TELECOMMUNICATIONS CORP., LTD.                 | FOR PREVENTING HEADER                         |
| (11) EP3625980                                | (72) TANG, Hai                                 | DECOMPRESSION FAILURE DURING                  |
| (21) EP18728478.1                             | (74) ir. W.J.J.M. Kempes                       | HANDOVER AND APPARATUS                        |
| (22) 02.05.2018                               | (31) PCT/CN2018/080715                         | THEREFOR                                      |
| (54) SYSTEM AND METHOD FOR                    | PCT/CN2017/103819                              | (73) Samsung Electronics Co., Ltd.            |
| IMPLEMENTING MASTER/SLAVE                     | PCT/CN2017/101903                              | (72) KIM, Donggun                             |
| CONFIGURATION DATA TO REDUCE                  | (32) 27.03.2018                                | KIM, Soenghun                                 |
| AN AMOUNT OF CONFIGURATION                    | 27.09.2017                                     | (74) dr. R.C. van Duijvenbode c.s.            |
| DATA THAT NEEDS TO BE CENTRALLY               | 15.09.2017                                     | (31) 20200027391                              |
| STORED FOR LARGE-SCALE                        | (33) World Intellectual Property Office (WIPO) | 20190115657                                   |
| DISTRIBUTION                                  | World Intellectual Property Office (WIPO)      | 20190091556                                   |
| (73) Adeia Guides Inc.                        | World Intellectual Property Office (WIPO)      | (32) 04.03.2020                               |
| (72) PURCELL, Randon                          | (47) 30.10.2024                                | 19.09.2019                                    |
| ROE, Glen, E.                                 | (51) H04W 16/32                                | 29.07.2019                                    |
| (74) ir. W.J.J.M. Kempes                      | (11) EP4132058                                 | (33) Korea (Republic)                         |
| (31) 201862650224 P                           | (21) EP22197646.7                              | Korea (Republic)                              |
| (32) 29.03.2018                               | (22) 07.06.2018                                | Korea (Republic)                              |
| (33) United States of America                 | (54) SYSTEM AND METHOD FOR                     | (47) 20.11.2024                               |
| (47) 30.10.2024                               | TRIGGERING BEAM RECOVERY                       | (51) H04W 36/30                               |
| (51) H04W 4/029                               | (73) Huawei Technologies Co., Ltd.             | H04W 36/36                                    |
| H04W 36/16                                    | (72) LIU, Bin                                  | (11) EP4038970                                |
| G08G 5/00                                     | XIA, Pengfei                                   | (21) EP20790154.7                             |
| H04W 4/40                                     | (74) ir. W.J.J.M. Kempes                       | (22) 29.09.2020                               |
| H04W 36/32                                    | (31) 201715707590                              | (54) CONDITIONAL MOBILITY WITH MULTI-         |
| H04W 88/02                                    | 201762521088 P                                 | CONNECTIVITY                                  |
| (11) EP3809730                                | (32) 18.09.2017                                | (73) InterDigital Patent Holdings, Inc.       |
| (21) EP18922906.5                             | 16.06.2017                                     | (72) PELLETIER, Ghyslain                      |
| (22) 14.06.2018                               | (33) United States of America                  | FREDA, Martino, M.                            |
| (54) INFORMATION TRANSMISSION                 | United States of America                       | MARINIER, Paul                                |
| METHOD AND DEVICE                             | (47) 27.11.2024                                | DEENOO, Yugeswar                              |
| (73) Beijing Xiaomi Mobile Software Co., Ltd. | (51) H04W 36/00                                | (74) dr. R.C. van Duijvenbode c.s.            |
| (72) HONG, Wei                                | H04W 36/06                                     | (31) 202063061225 P                           |
| (74) J.M.H. Duyver lic.                       | (11) EP3439365                                 | 202062972842 P                                |
| (47) 20.11.2024                               | (21) EP18186719.3                              | 201962930891 P                                |
| (51) H04W 4/40                                | (22) 31.07.2018                                | 201962908876 P                                |
| H04L 9/08                                     | (54) BASE STATION AND METHOD OF                | (32) 05.08.2020                               |
| H04L 9/40                                     | HANDLING BANDWIDTH PARTS                       | 11.02.2020                                    |
| (11) EP4104466                                | (73) HTC Corporation                           | 05.11.2019                                    |
| (21) EP21710157.5                             | (72) WU, Chih-Hsiang                           | 01.10.2019                                    |
| (22) 12.02.2021                               | (74) dr. R.C. van Duijvenbode c.s.             | (33) United States of America                 |
| (54) METHODS, APPARATUS AND                   | (31) 201762540045 P                            | United States of America                      |
| SYSTEMS USING VEHICLE-TO-                     | (32) 01.08.2017                                | United States of America                      |
| EVERYTHING (V2X) ENHANCEMENTS                 | (33) United States of America                  | United States of America                      |
| TO SUPPORT VEHICLE-TO-                        | (47) 27.11.2024                                | (47) 13.11.2024                               |
| PEDESTRIAN (V2P) COMMUNICATION                | (51) H04W 36/14                                | (51) H04W 48/12                               |
| (73) InterDigital Patent Holdings, Inc.       | H04W 36/00                                     | H04L 5/00                                     |
| (72) PERRAS, Michelle                         | (11) EP3643112                                 | H04W 72/23                                    |
| FERDI, Samir                                  | (21) EP17737720.7                              | H04W 28/08                                    |
| AHMAD, Saad                                   | (22) 23.06.2017                                | H04W 28/02                                    |
| (74) dr. R.C. van Duijvenbode c.s.            | (54) NETWORK ACCESS ENTITY FOR                 | H04W 72/0453                                  |
| (31) 202063008253 P                           | DYNAMICALLY RECONFIGURABLE                     | (11) EP3661258                                |
| 202062976174 P                                | NETWORKS                                       | (21) EP17919560.7                             |
| (32) 10.04.2020                               | (73) Blackned GmbH                             | (22) 28.07.2017                               |
| 13.02.2020                                    | (72) HAAS, Timo                                | (54) METHODS AND A TERMINAL FOR               |
| (33) United States of America                 | SCHOLLKOPF, Heiner                             | ACQUIRING CONTROL INFORMATION                 |
| United States of America                      | (74) ir. A. Blokland c.s.                      | (73) Beijing Xiaomi Mobile Software Co., Ltd. |

|                                                             |                                                                                                                  |                                                                                                                                 |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| (72) ZHOU, Juejia<br>ZHU, Yajun                             | NETWORK SLICING AND THE POLICY<br>FRAMEWORK OF 5G NETWORK                                                        | (72) PAN, Xueming<br>JI, Zichao                                                                                                 |
| (74) J.M.H. Duyver lic.                                     | (73) IPLA Holdings Inc.                                                                                          | (74) J.M.H. Duyver lic.                                                                                                         |
| (47) 06.11.2024                                             | (72) NINGLEKHU, Jiwan L.                                                                                         | (31) 201810136167                                                                                                               |
| (51) H04W 52/02                                             | STARSINIC, Michael F.                                                                                            | (32) 09.02.2018                                                                                                                 |
| H04W 56/00                                                  | ADJAKPLE, Pascal M.                                                                                              | (33) China                                                                                                                      |
| (11) EP3689041                                              | LY, Quang                                                                                                        | (47) 20.11.2024                                                                                                                 |
| (21) EP18780069.3                                           | MLADIN, Catalina Mihaela                                                                                         | (51) H04W 72/21                                                                                                                 |
| (22) 25.09.2018                                             | LI, Hongkun                                                                                                      | H04W 76/19                                                                                                                      |
| (54) RADIO SYNCHRONIZATION<br>TECHNIQUE                     | (74) ir. W.J.J.M. Kempes                                                                                         | H04W 76/27                                                                                                                      |
| (73) Telefonaktiebolaget LM Ericsson (Publ)                 | (31) 201962887881 P                                                                                              | H04W 12/106                                                                                                                     |
| (72) ÅSTRÖM, Magnus                                         | 201962861841 P                                                                                                   | H04W 12/037                                                                                                                     |
| LIN, Xingqin                                                | (32) 16.08.2019                                                                                                  | (11) EP4209040                                                                                                                  |
| HÖGLUND, Andreas                                            | 14.06.2019                                                                                                       | (21) EP21878032.8                                                                                                               |
| BERGMAN, Johan                                              | (33) United States of America                                                                                    | (22) 07.10.2021                                                                                                                 |
| WALLÉN, Anders                                              | United States of America                                                                                         | (54) METHOD FOR HANDLING NON SMALL<br>DATA TRANSMISSION RADIO BEARER<br>DURING SMALL DATA TRANSMISSION<br>AND APPARATUS THEREOF |
| (74) ir. A. Blokland c.s.                                   | (47) 13.11.2024                                                                                                  | (73) Samsung Electronics Co., Ltd.                                                                                              |
| (31) 201762564704 P                                         | (51) H04W 64/00                                                                                                  | (72) JANG, Jaehyuk                                                                                                              |
| (32) 28.09.2017                                             | G01S 5/00                                                                                                        | AGIWAL, Anil                                                                                                                    |
| (33) United States of America                               | G01S 5/02                                                                                                        | KIM, Soenghun                                                                                                                   |
| (47) 06.11.2024                                             | (11) EP3986042                                                                                                   | (74) dr. R.C. van Duijvenbode c.s.                                                                                              |
| (51) H04W 52/02                                             | (21) EP21201826.1                                                                                                | (31) 20210023589                                                                                                                |
| H04W 76/28                                                  | (22) 11.10.2021                                                                                                  | 20200129196                                                                                                                     |
| (11) EP3927024                                              | (54) METHOD AND USER EQUIPMENT<br>CAPABLE OF ADAPTING TO LINE-<br>OF-SIGHT AND NON-LINE-OF SIGHT<br>ENVIRONMENTS | (32) 22.02.2021                                                                                                                 |
| (21) EP19915125.9                                           | (73) Samsung Electronics Co., Ltd.                                                                               | 07.10.2020                                                                                                                      |
| (22) 11.02.2019                                             | (72) ZHOU, Yuhua                                                                                                 | (33) Korea (Republic)                                                                                                           |
| (54) CHANNEL MONITORING METHOD<br>AND DEVICE                | BAE, Jung Hyun                                                                                                   | Korea (Republic)                                                                                                                |
| (73) Beijing Xiaomi Mobile Software Co., Ltd.               | (74) ir. H.A. Witmans c.s.                                                                                       | (47) 27.11.2024                                                                                                                 |
| (72) LI, Yanhua                                             | (31) 202117482255                                                                                                | (51) H04W 74/00                                                                                                                 |
| (74) J.M.H. Duyver lic.                                     | 202163134421 P                                                                                                   | H04W 80/00                                                                                                                      |
| (47) 20.11.2024                                             | 202063091153 P                                                                                                   | H04B 7/0452                                                                                                                     |
| (51) H04W 56/00                                             | (32) 22.09.2021                                                                                                  | (11) EP3592094                                                                                                                  |
| (11) EP3618516                                              | 06.01.2021                                                                                                       | (21) EP19193557.6                                                                                                               |
| (21) EP19193826.5                                           | 13.10.2020                                                                                                       | (22) 08.01.2016                                                                                                                 |
| (22) 27.08.2019                                             | (33) United States of America                                                                                    | (54) METHOD AND APPARATUS FOR<br>SUPPORTING MULTI-USER<br>TRANSMISSIONS IN A WIRELESS<br>LOCAL AREA NETWORK (WLAN)<br>SYSTEM    |
| (54) FRAME FORMATS FOR DISTRIBUTED<br>MIMO                  | United States of America                                                                                         | (73) InterDigital Patent Holdings, Inc.                                                                                         |
| (73) Avago Technologies International Sales<br>Pte. Limited | United States of America                                                                                         | (72) LOU, Hanqing                                                                                                               |
| (72) Zheng, Jun                                             | (47) 09.10.2024                                                                                                  | WANG, Xiaofei                                                                                                                   |
| Puducheri Sundaravaradhan, Srinath                          | (51) H04W 64/00                                                                                                  | ZHANG, Guodong                                                                                                                  |
| Porat, Ron                                                  | H04W 4/021                                                                                                       | OLESEN, Robert L.                                                                                                               |
| Nassiri Toussi, Karim                                       | H04W 4/02                                                                                                        | (74) dr. R.C. van Duijvenbode c.s.                                                                                              |
| (74) ir. W.J.J.M. Kempes                                    | (11) EP4052518                                                                                                   | (31) 201562129469 P                                                                                                             |
| (31) 201916551429                                           | (21) EP20812483.4                                                                                                | 201562101890 P                                                                                                                  |
| 201962828874 P                                              | (22) 30.10.2020                                                                                                  | (32) 06.03.2015                                                                                                                 |
| 201962805821 P                                              | (54) METHOD AND APPARATUS FOR<br>PROBING ACCESS POINTS                                                           | 09.01.2015                                                                                                                      |
| 201862724294 P                                              | (73) MARS, INCORPORATED                                                                                          | (33) United States of America                                                                                                   |
| (32) 26.08.2019                                             | (72) AGUILAR, Ernie                                                                                              | United States of America                                                                                                        |
| 03.04.2019                                                  | YANG, Xin                                                                                                        | (47) 13.11.2024                                                                                                                 |
| 14.02.2019                                                  | MOTT, Robert W.                                                                                                  | (51) H04W 74/08                                                                                                                 |
| 29.08.2018                                                  | (74) ir. W.J.J.M. Kempes                                                                                         | H04W 74/02                                                                                                                      |
| (33) United States of America                               | (31) 201962929626 P                                                                                              | H04W 84/12                                                                                                                      |
| United States of America                                    | (32) 01.11.2019                                                                                                  | (11) EP3979756                                                                                                                  |
| United States of America                                    | (33) United States of America                                                                                    | (21) EP21211177.7                                                                                                               |
| United States of America                                    | (47) 02.10.2024                                                                                                  | (22) 11.01.2018                                                                                                                 |
| (47) 09.10.2024                                             | (51) H04W 72/02                                                                                                  | (54) WIRELESS COMMUNICATION<br>SYSTEM, ACCESS POINT, TERMINAL,<br>AND COMMUNICATION METHOD                                      |
| (51) H04W 60/00                                             | H04L 5/00                                                                                                        | (73) NEC Corporation                                                                                                            |
| H04W 88/02                                                  | H04L 27/26                                                                                                       | (72) OCHI, Hiroshi                                                                                                              |
| H04W 48/06                                                  | H04W 72/1268                                                                                                     | NAGAO, Yuhei                                                                                                                    |
| (11) EP3984300                                              | (11) EP4149185                                                                                                   | LANANTE, Leonardo                                                                                                               |
| (21) EP20735751.8                                           | (21) EP22203088.4                                                                                                |                                                                                                                                 |
| (22) 12.06.2020                                             | (22) 02.02.2019                                                                                                  |                                                                                                                                 |
| (54) APPARATUS, SYSTEM AND<br>METHOD FOR ENHANCEMENTS TO    | (54) METHOD FOR TRANSMITTING UCI,<br>AND USER TERMINAL                                                           |                                                                                                                                 |
|                                                             | (73) Vivo Mobile Communication Co., Ltd.                                                                         |                                                                                                                                 |

|                                                                                                                        |                                                                                                |                                                                     |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| (74) ir. J.C. Volmer c.s.                                                                                              | H05B 45/46                                                                                     | WANG, Xing                                                          |
| (31) 2017004668                                                                                                        | (11) EP3675603                                                                                 | (74) ir. W.J.J.M. Kempes                                            |
| (32) 13.01.2017                                                                                                        | (21) EP19219127.8                                                                              | (31) 202110985072                                                   |
| (33) Japan                                                                                                             | (22) 20.12.2019                                                                                | (32) 25.08.2021                                                     |
| (47) 06.11.2024                                                                                                        | (54) DRIVING CIRCUIT AND DRIVING METHOD FOR DRIVING LIGHT EMITTING DIODE LOAD                  | (33) China                                                          |
| (51) H04W 74/0808                                                                                                      | (73) Silergy Semiconductor Technology (Hangzhou) Ltd                                           | (47) 27.11.2024                                                     |
| H04W 16/28                                                                                                             | (72) HUANG, Qiukai                                                                             | (51) H10K 59/131                                                    |
| H04W 74/08                                                                                                             | WANG, Jianxin                                                                                  | (11) EP3457436                                                      |
| (11) EP3520546                                                                                                         | CHEN, Huiqiang                                                                                 | (21) EP18194587.4                                                   |
| (21) EP17861901.1                                                                                                      | (74) dr. R.C. van Duijvenbode c.s.                                                             | (22) 14.09.2018                                                     |
| (22) 23.10.2017                                                                                                        | (31) 201811602750                                                                              | (54) ORGANIC LIGHT EMITTING DISPLAY DEVICE                          |
| (54) APPARATUS AND METHOD FOR CHANNEL ACCESS FRAMEWORK ON THE UNLICENSED SPECTRUM                                      | (32) 26.12.2018                                                                                | (73) Samsung Display Co., Ltd                                       |
| (73) Samsung Electronics Co., Ltd.                                                                                     | (33) China                                                                                     | (72) KIM, Taehyun                                                   |
| (72) NG, Boon Loong                                                                                                    | (47) 13.11.2024                                                                                | CHOI, Seonyoung                                                     |
| SI, Hongbo                                                                                                             | (51) H05B 47/18                                                                                | LEE, Seungmin                                                       |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                     | H05B 47/19                                                                                     | PARK, Sangho                                                        |
| (31) 201715789770                                                                                                      | (11) EP3858110                                                                                 | SHIM, Donghwan                                                      |
| 201762572623 P                                                                                                         | (21) EP19769181.9                                                                              | CHO, Seunghwan                                                      |
| 201662411198 P                                                                                                         | (22) 19.09.2019                                                                                | LEE, Jungkyu                                                        |
| (32) 20.10.2017                                                                                                        | (54) MULTI-PROTOCOL LUMINAIRE SYSTEM                                                           | (74) J.M.H. Duyver lic.                                             |
| 16.10.2017                                                                                                             | (73) SCHREDER SA                                                                               | (31) 20170117728                                                    |
| 21.10.2016                                                                                                             | (72) SECRETIN, Laurent                                                                         | (32) 14.09.2017                                                     |
| (33) United States of America                                                                                          | (74) dr. ir. G.J.C. Verdijck c.s.                                                              | (33) Korea (Republic)                                               |
| United States of America                                                                                               | (31) 2021705                                                                                   | (47) 13.11.2024                                                     |
| United States of America                                                                                               | (32) 25.09.2018                                                                                | (51) H10K 59/38                                                     |
| (47) 27.11.2024                                                                                                        | (33) Netherlands                                                                               | (11) EP3910683                                                      |
| (51) H04W 76/15                                                                                                        | (47) 11.09.2024                                                                                | (21) EP21173460.3                                                   |
| H04W 28/18                                                                                                             | (51) H05H 1/46                                                                                 | (22) 12.05.2021                                                     |
| H04W 28/02                                                                                                             | (11) EP3571900                                                                                 | (54) DISPLAY DEVICE                                                 |
| H04W 28/08                                                                                                             | (21) EP18748206.2                                                                              | (73) Samsung Display Co., Ltd.                                      |
| H04W 28/082                                                                                                            | (22) 17.01.2018                                                                                | (72) Choi, Beohm Rock                                               |
| H04W 28/086                                                                                                            | (54) DEVICE COMPRISING A WAVEGUIDE WITH AN INVERTED IMPEDANCE MATCHER AND SYSTEM WITH THE SAME | Im, Choong Youl                                                     |
| H04W 92/20                                                                                                             | (73) SHINE Technologies, LLC                                                                   | Jeon, Ha Seok                                                       |
| H04W 28/24                                                                                                             | (72) SEYFERT, Chris                                                                            | (74) J.M.H. Duyver lic.                                             |
| H04W 36/00                                                                                                             | SENGBUSCH, Evan                                                                                | (31) 20200058377                                                    |
| H04W 72/12                                                                                                             | KOBERNIK, Arne                                                                                 | (32) 15.05.2020                                                     |
| (11) EP4114131                                                                                                         | LEE, Jin                                                                                       | (33) Korea (Republic)                                               |
| (21) EP22191389.0                                                                                                      | RADEL, Ross                                                                                    | (47) 13.11.2024                                                     |
| (22) 26.03.2018                                                                                                        | BECERRA, Gabriel                                                                               | (51) H10N 50/10                                                     |
| (54) METHODS, PRIMARY BASE STATION AND SECONDARY BASE STATION FOR DATA TRANSMISSION IN A WIRELESS COMMUNICATION SYSTEM | BARROWS, Preston                                                                               | H10N 50/80                                                          |
| (73) Samsung Electronics Co., Ltd.                                                                                     | THOMAS, Mark                                                                                   | H10B 12/00                                                          |
| (72) WANG, Hong                                                                                                        | CAMPBELL, Logan                                                                                | (11) EP3985748                                                      |
| KE, Xiaowan                                                                                                            | LAMERS, Casey                                                                                  | (21) EP21192567.2                                                   |
| XU, Lixiang                                                                                                            | GRIBB, Tye                                                                                     | (22) 23.08.2021                                                     |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                     | SHERVEN, Carl                                                                                  | (54) SEMICONDUCTOR MEMORY DEVICE AND A METHOD OF OPERATING THE SAME |
| (31) 201710794902                                                                                                      | TAYLOR, Michael                                                                                | (73) Samsung Electronics Co., Ltd.                                  |
| 201710458127                                                                                                           | (74) ir. W.J.J.M. Kempes                                                                       | (72) PARK, Jiho                                                     |
| 201710461743                                                                                                           | (31) 201762447685 P                                                                            | (74) ir. H.A. Witmans c.s.                                          |
| 201710313118                                                                                                           | (32) 18.01.2017                                                                                | (31) 20200134688                                                    |
| 201710187052                                                                                                           | (33) United States of America                                                                  | (32) 16.10.2020                                                     |
| (32) 05.09.2017                                                                                                        | (47) 13.11.2024                                                                                | (33) Korea (Republic)                                               |
| 16.06.2017                                                                                                             | (51) H05K 9/00                                                                                 | (47) 16.10.2024                                                     |
| 16.06.2017                                                                                                             | H04B 1/12                                                                                      |                                                                     |
| 05.05.2017                                                                                                             | H04B 1/10                                                                                      |                                                                     |
| 24.03.2017                                                                                                             | (11) EP4164356                                                                                 |                                                                     |
| (33) China                                                                                                             | (21) EP22793619.2                                                                              |                                                                     |
| China                                                                                                                  | (22) 06.05.2022                                                                                |                                                                     |
| China                                                                                                                  | (54) ANTI-INTERFERENCE MODULE AND TERMINAL DEVICE                                              |                                                                     |
| China                                                                                                                  | (73) Honor Device Co., Ltd.                                                                    |                                                                     |
| (47) 27.11.2024                                                                                                        | (72) ZHANG, Lixin                                                                              |                                                                     |
| (51) H05B 45/10                                                                                                        |                                                                                                |                                                                     |
| H05B 45/14                                                                                                             |                                                                                                |                                                                     |

## EP4

**Voor Nederland verleende gewijzigde Europese octrooien.  
European patents granted in amended form for the Netherlands.**

|                                          |                                          |                          |
|------------------------------------------|------------------------------------------|--------------------------|
| (51) A22C 21/04                          | Beutler, Jörg                            | (21) EP14701683.6        |
| A22B 5/08                                | (47) 25.04.2018                          | (22) 13.01.2014          |
| (11) EP2046132                           | (51) B62J 11/00                          | (54) USER IDENTIFICATION |
| (21) EP07793848.8                        | B62J 45/20                               | (73) IDnow GmbH          |
| (22) 12.07.2007                          | B62J 50/20                               | (74) J.M.H. Duyver lic.  |
| (54) DEVICE FOR SCALDING POULTRY         | B62K 21/12                               | (72) BAUER, Armin        |
| (73) Marel Stork Poultry Processing B.V. | (11) EP3753825                           | (31) 102013100635        |
| (72) VAN DEN GRIEND, Erik, Jan           | (21) EP20178916.1                        | (32) 22.01.2013          |
| GERRITS, Johannes, Gerardus, Maria       | (22) 09.06.2020                          | (33) Germany             |
| VAN ESBROECK, Maurice, Eduardus,         | (54) DEVICE FOR CONNECTING IN A          | (47) 18.05.2016          |
| Theodorus                                | TORQUE-RESISTANT MANNER A                |                          |
| VAN DE NIEUWELAAR, Adrianus,             | HANDLEBAR WITH A HANDLEBAR               |                          |
| Josephes                                 | STEM                                     |                          |
| (31) 2000158                             | (73) ZEG Zweirad-Einkaufs-Genossenschaft |                          |
| (32) 24.07.2006                          | eG                                       |                          |
| (33) Netherlands                         | (74) J.M.H. Duyver lic.                  |                          |
| (47) 08.06.2011                          | (72) Honkomp, Georg                      |                          |
| (51) A47C 23/00                          | (31) 202019103437 U                      |                          |
| (11) EP3669704                           | (32) 19.06.2019                          |                          |
| (21) EP19215745.1                        | (33) Germany                             |                          |
| (22) 12.12.2019                          | (47) 26.01.2022                          |                          |
| (54) SUPPORT SYSTEM                      | (51) C07K 16/22                          |                          |
| (73) Diemer & Dr. Jaspert GbR            | A61K 39/395                              |                          |
| (74) ir. M.F.J.M. Ketelaars c.s.         | A61P 19/08                               |                          |
| (72) Diemer, Gregor                      | A61K 39/00                               |                          |
| Jaspert, Bodo F.                         | (11) EP3478719                           |                          |
| (31) 202018107196 U                      | (21) EP17823190.8                        |                          |
| (32) 17.12.2018                          | (22) 21.12.2017                          |                          |
| (33) Germany                             | (54) USE OF ANTI-SCLEROSTIN              |                          |
| (47) 24.02.2021                          | ANTIBODIES IN THE TREATMENT OF           |                          |
| (51) B01D 61/00                          | OSTEOGENESIS IMPERFECTA                  |                          |
| C02F 1/44                                | (73) Mereo Biopharma 3 Limited           |                          |
| C12G 3/08                                | (74) ir. M.F.J.M. Ketelaars c.s.         |                          |
| B01D 3/00                                | (72) HALL, Anthony Kent                  |                          |
| B01D 61/02                               | KNEISSEL, Michaela                       |                          |
| (11) EP3313786                           | RIGGS, Matthew Manning                   |                          |
| (21) EP16815432.6                        | EUDY, Rena Joy                           |                          |
| (22) 24.06.2016                          | JUNKER, Uwe                              |                          |
| (54) METHODS OF DEWATERING OF            | (31) 201662437353 P                      |                          |
| ALCOHOLIC SOLUTIONS VIA                  | (32) 21.12.2016                          |                          |
| FORWARD OSMOSIS                          | (33) United States of America            |                          |
| (73) Porifera, Inc.                      | (47) 20.01.2021                          |                          |
| (74) ir. W.J.J.M. Kempes                 | (51) E02F 3/28                           |                          |
| (72) KLARE, Jennifer                     | E02F 9/20                                |                          |
| REVANUR, Ravindra                        | (11) EP3358087                           |                          |
| BAKAJIN, Olgica                          | (21) EP18152866.2                        |                          |
| BENTON, Charles                          | (22) 23.01.2018                          |                          |
| (31) 201562184159 P                      | (54) CONSTRUCTION MACHINE, IN            |                          |
| (32) 24.06.2015                          | PARTICULAR FOR CONSTRUCTION              |                          |
| (33) United States of America            | SITE, AND METHOD FOR                     |                          |
| (47) 29.04.2020                          | CONTROLLING SUCH A MACHINE               |                          |
| (51) B60T 7/12                           | (73) MANITOU BF                          |                          |
| B60T 8/17                                | (74) ir. W.J.J.M. Kempes                 |                          |
| B60T 13/66                               | (72) RIOT, Antoine                       |                          |
| (11) EP2949523                           | (31) 1750901                             |                          |
| (21) EP14169949.6                        | (32) 03.02.2017                          |                          |
| (22) 27.05.2014                          | (33) France                              |                          |
| (54) Weight-independent safety brake     | (47) 14.08.2019                          |                          |
| (73) Beutler, Jörg                       | (51) G06F 21/32                          |                          |
| (74) ir. M.B. Plaggenborg                | H04L 9/32                                |                          |
| (72) Günther, Thomas                     | (11) EP2948891                           |                          |



## EP5

**Voor Nederland verleende gewijzigde Europese octrooien waarvoor een gewijzigde vertaling is ingediend ex artikel 52 lid 6 van de Rijksoctrooiwet 1995.**

**European patents granted in amended form for the Netherlands in which an amended translation was filed ex Article 52 par. 6 of the NL Patent Law 1995.**

|                                          |                                    |                                      |
|------------------------------------------|------------------------------------|--------------------------------------|
| (51) A23L 33/19                          | (74) dr. W.A.H.M. Van Borm         | (32) 19.12.2018                      |
| A23C 9/15                                | (31) 09252687                      | 27.03.2018                           |
| A23C 9/146                               | (32) 27.11.2009                    | (33) Sweden                          |
| A23L 2/66                                | (33) European Patent Office (EPO)  | Sweden                               |
| A23C 9/142                               | (47) 04.04.2018                    | (47) 13.01.2021                      |
| A23J 3/08                                | (51) A24F 40/465                   | (51) C12C 13/00                      |
| B01D 15/08                               | A24F 40/51                         | F02G 5/04                            |
| A23L 33/10                               | A24F 40/20                         | (11) EP3204482                       |
| (11) EP2592938                           | (11) EP3760062                     | (21) EP15784586.8                    |
| (21) EP11807119.0                        | (21) EP19184512.2                  | (22) 07.10.2015                      |
| (22) 15.07.2011                          | (22) 04.07.2019                    | (54) FOOD-TECHNOLOGICAL PROCESS      |
| (54) DAIRY PRODUCT AND PROCESS           | (54) INDUCTIVE HEATING ARRANGEMENT | PLANT, IN PARTICULAR BREWERY         |
| (73) Fonterra Co-Operative Group Limited | COMPRISING A TEMPERATURE           | PLANT WITH COMBINED HEAT AND         |
| (72) GAO, Hongping                       | SENSOR                             | POWER                                |
| BHASKAR, Ganugapati Vijaya               | (73) Philip Morris Products S.A.   | (73) Kronos Aktiengesellschaft       |
| DONK, Rochelle Kathleen                  | (72) MIRONOV, Oleg                 | (72) KAMMERLOHER, Helmut             |
| (74) dr. W.A.H.M. Van Borm               | STURA, Enrico                      | (74) dr. R.C. van Duijvenbode c.s.   |
| (31) 58684810                            | COURBAT, Jerome Christian          | (31) 102014220334                    |
| (32) 16.07.2010                          | (74) dr. W.A.H.M. Van Borm         | (32) 07.10.2014                      |
| (33) New Zealand                         | (47) 01.09.2021                    | (33) Germany                         |
| (47) 24.11.2021                          | (51) A61N 5/02                     | (47) 13.01.2021                      |
| (51) A24C 5/24                           | A61B 18/14                         | (51) C12N 7/04                       |
| A24C 5/47                                | A61B 18/18                         | C12N 7/06                            |
| B05C 1/08                                | A61N 1/05                          | C07K 1/16                            |
| B05C 1/16                                | A61N 1/36                          | C07K 1/36                            |
| (11) EP3235388                           | A61N 1/375                         | (11) EP2867359                       |
| (21) EP17166539.1                        | A61N 1/04                          | (21) EP13810248.8                    |
| (22) 13.04.2017                          | (11) EP3700626                     | (22) 13.06.2013                      |
| (54) DEVICE FOR APPLYING A GLUE          | (21) EP18801134.0                  | (54) METHODS FOR INACTIVATING        |
| TRACK TO A COVERING STRIP OF             | (22) 23.10.2018                    | VIRUSES DURING A PROTEIN             |
| A ROD-SHAPED PRODUCT OF THE              | (54) MEDICAL DEVICES FOR CANCER    | PURIFICATION PROCESS                 |
| TOBACCO PROCESSING INDUSTRY              | THERAPY WITH ELECTRIC FIELD        | (73) EMD Millipore Corporation       |
| (73) Körber Technologies GmbH            | SHAPING ELEMENTS                   | (72) XENOPOULOS, Alex                |
| (72) SCHMICK, Clemens                    | (73) Cardiac Pacemakers, Inc.      | (74) ir. W.J.J.M. Kempes             |
| LEICHSENDRING, Nadine                    | (72) LUDWIG, Jacob M.              | (31) 201261666145 P                  |
| SOLTOW, Ralf                             | SCHMIDT, Brian L.                  | (32) 29.06.2012                      |
| HÜSER, Reiko                             | KANE, Michael J.                   | (33) United States of America        |
| SCHAFFORZ, Mathias                       | HAASL, Benjamin J.                 | (47) 15.09.2021                      |
| JANZ, Dietmar                            | (74) ir. A.R. Aalbers              | (51) G09B 1/34                       |
| (74) ir. F.A. Geurts c.s.                | (31) 201816167116                  | G09B 19/08                           |
| (31) 102016107290                        | 201762575700 P                     | G09B 19/04                           |
| (32) 20.04.2016                          | (32) 22.10.2018                    | (11) EP2810268                       |
| (33) Germany                             | 23.10.2017                         | (21) EP13710537.5                    |
| (47) 06.02.2019                          | (33) United States of America      | (22) 30.01.2013                      |
| (51) A24F 40/46                          | United States of America           | (54) APPARATUS TO SIMULATE DRIVING A |
| A24F 40/10                               | (47) 15.09.2021                    | LAND VEHICLE                         |
| A24F 40/20                               | (51) C09D 4/00                     | (73) VI-grade GmbH                   |
| (11) EP2503912                           | (11) EP3655247                     | (72) MINEN, Diego                    |
| (21) EP10793150.3                        | (21) EP19709021.0                  | (74) ir. J.C. Volmer c.s.            |
| (22) 26.11.2010                          | (22) 04.03.2019                    | (31) UD20120011                      |
| (54) AN ELECTRICALLY HEATED SMOKING      | (54) COATING AND PRIMER            | (32) 30.01.2012                      |
| SYSTEM WITH INTERNAL OR                  | (73) Mercene Coatings AB           | (33) Italy                           |
| EXTERNAL HEATER                          | (72) ROSTAMI, Jowan                | (47) 01.03.2017                      |
| (73) Philip Morris Products S.A.         | CARLBORG, Carl Fredrik             |                                      |
| (72) GREIM, Olivier                      | MIKAELSSON, Henrik                 |                                      |
| ZUBER, Gerard                            | HARALDSSON, Tommy                  |                                      |
| PLOJOUX, Julien                          | (74) M.A.T. Beck MSc LL.B          |                                      |
| RUSCIO, Dani                             | (31) 1851613                       |                                      |
|                                          | 1850341                            |                                      |

# SPC

## Aangevraagde en verleende aanvullende beschermingscertificaten (of de verlengingen van de aanvullende beschermingscertificaten).

## Applications and granted Supplementary Protection Certificates (or the extensions of the Supplementary Protection Certificates).

|                                                                                                                                 |                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (21) 300737                                                                                                                     | (68) EP4176894                                                                                                                                             |
| (22) 08.05.2015                                                                                                                 | (54) FACTOR VIII CHIMERIC PROTEINS AND USES THEREOF                                                                                                        |
| (11) 300737                                                                                                                     | (94) 1621                                                                                                                                                  |
| (73) Nektar Therapeutics                                                                                                        | (95) Efanesoctocog alfa of een soortgelijk biologisch geneesmiddel volgens Artikel 10(4) van Richtlijn (EG) 2001/83, zoals beschermd door het basisoctrooi |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                |                                                                                                                                                            |
| (68) EP1694363                                                                                                                  |                                                                                                                                                            |
| (54) Monodisperse PEGylated naloxol compositions.                                                                               | (93) EU/1/24/1824 18.06.2024                                                                                                                               |
| (94) 09.12.2029                                                                                                                 | (21) 301304                                                                                                                                                |
| (95) Naloxegol, desgewenst in de vorm van een farmaceutisch aanvaardbaar zout, in het bijzonder naloxegoloxalaat                | (22) 11.12.2024                                                                                                                                            |
| (93) EU/1/14/962 10.12.2014                                                                                                     | (11) 301304                                                                                                                                                |
| (47) 31.01.2017                                                                                                                 | (74) ir. H.A. Witmans c.s.                                                                                                                                 |
| (21) 300759                                                                                                                     | (68) EP2190837                                                                                                                                             |
| (22) 01.09.2015                                                                                                                 | (54) 4-PYRIMIDINESULFAMIDE DERIVATIVE.                                                                                                                     |
| (11) 300759                                                                                                                     | (94) 1826                                                                                                                                                  |
| (73) Dong-A ST Co., Ltd.                                                                                                        | (95) apocitentan of een farmaceutisch aanvaardbaar zout daarvan                                                                                            |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                | (93) EU/1/24/1818 28.06.2024                                                                                                                               |
| (68) EP1699784                                                                                                                  | (21) 301305                                                                                                                                                |
| (54) NOVEL OXAZOLIDINONE DERIVATIVES.                                                                                           | (22) 11.12.2024                                                                                                                                            |
| (94) 16.12.2029                                                                                                                 | (11) 301305                                                                                                                                                |
| (95) Tedizolid, desgewenst in de vorm van een ester, in het bijzonder een fosfaat, of een farmaceutisch aanvaardbaar zout ervan | (74) ir. A. Blokland c.s.                                                                                                                                  |
| (93) EU/1/15/991 23.03.2015                                                                                                     | (68) EP2276756                                                                                                                                             |
| (47) 22.12.2015                                                                                                                 | (54) HYDROXYMETHYL PYRROLIDINES AS BETA 3 ADRENERGIC RECEPTOR AGONISTS.                                                                                    |
| (21) 301298                                                                                                                     | (94) 1826                                                                                                                                                  |
| (22) 07.11.2024                                                                                                                 | (95) Vibegron of een farmaceutisch aanvaardbaar zout daarvan                                                                                               |
| (11) 301298                                                                                                                     | (93) EU/1/24/1822 28.06.2024                                                                                                                               |
| (73) Ascendis Pharma Bone Diseases A/S                                                                                          | (21) 301306                                                                                                                                                |
| (74) dr. R.C. van Duijvenbode c.s.                                                                                              | (22) 13.12.2024                                                                                                                                            |
| (68) EP3423103                                                                                                                  | (11) 301306                                                                                                                                                |
| (54) PTH PRODRUGS                                                                                                               | (74) ir. F.A. Geurts c.s.                                                                                                                                  |
| (94) 19.11.2038                                                                                                                 | (68) EP3405197                                                                                                                                             |
| (95) Palopegteriparatide                                                                                                        | (54) USE OF DELGOCITINIB FOR THE TREATMENT OF CHRONIC HAND ECZEMA                                                                                          |
| (93) EU/1/23/1766 20.11.2023                                                                                                    |                                                                                                                                                            |
| (47) 11.12.2024                                                                                                                 | (94) 976                                                                                                                                                   |
| (21) 301299                                                                                                                     | (95) Delgocitinib of een farmaceutisch aanvaardbaar zout daarvan.                                                                                          |
| (22) 12.11.2024                                                                                                                 | (93) EU/1/24/1851 23.09.2024                                                                                                                               |
| (11) 301299                                                                                                                     |                                                                                                                                                            |
| (73) AstraZeneca AB                                                                                                             |                                                                                                                                                            |
| (74) ir. F.A. Geurts c.s.                                                                                                       |                                                                                                                                                            |
| (68) EP2201012                                                                                                                  |                                                                                                                                                            |
| (54) PYRROLO[2,3-D]PYRIMIDIN DERIVATIVES AS PROTEIN KINASE B INHIBITORS.                                                        |                                                                                                                                                            |
| (94) 08.10.2033                                                                                                                 |                                                                                                                                                            |
| (95) Capivasertib, eventueel in de vorm van een farmaceutisch aanvaardbaar zout                                                 |                                                                                                                                                            |
| (93) EU/1/24/1820 18.06.2024                                                                                                    |                                                                                                                                                            |
| (47) 11.12.2024                                                                                                                 |                                                                                                                                                            |
| (21) 301303                                                                                                                     |                                                                                                                                                            |
| (22) 11.12.2024                                                                                                                 |                                                                                                                                                            |
| (11) 301303                                                                                                                     |                                                                                                                                                            |
| (74) ir. F.A. Geurts c.s.                                                                                                       |                                                                                                                                                            |

**VB1**

**Herstelverzoeken, bezwaarschriften, beroepschriften of hoger beroepschriften ingediend ex Rijksoctrooiwet 1995. Oppositie(s) ingediend ex Europees Octrooiverdrag.**

**Requests for restoration and notices of objection, notices of objection to Court, notices of objection to appellate court ex NL Patent Law 1995. Opposition(s) filed ex European Patent Convention.**

|                            |                  |
|----------------------------|------------------|
| (11) EP2959894             | (00) Ofinno, LLC |
| (51) A61K 31/137           | (11) EP3785670   |
| A61P 37/06                 | (51) A61F 2/24   |
| A61K 31/397                | A61B 17/06       |
| (00) 41/22                 | (00) 07/24       |
| 12.10.2022                 | 14.02.2024       |
| (11) EP3275313             | (11) EP3897213   |
| (51) A22B 5/00             | (51) A23L 33/17  |
| A22C 17/00                 | A23L 33/185      |
| B26D 5/00                  | A23L 33/19       |
| B26F 3/00                  | A23L 33/00       |
| G01N 33/02                 | (00) 08/24       |
| (00) 07/24                 | 21.02.2024       |
| 14.02.2024                 | (11) EP3984386   |
| (11) EP3585402             | (51) A24F 40/40  |
| (51) A61K 39/00            | (00) 07/24       |
| A61P 35/00                 | 14.02.2024       |
| A61P 35/02                 | (11) EP4159204   |
| C07K 14/725                | (51) A61K 9/28   |
| C12N 5/0783                | A61K 9/20        |
| (00) 10/24                 | A61K 31/519      |
| 06.03.2024                 | A61P 35/00       |
| (11) EP3604532             | (00) 07/24       |
| (51) C12N 15/113           | 14.02.2024       |
| C12N 15/10                 | (11) EP4159205   |
| C12N 9/22                  | (51) A61K 9/28   |
| C12N 15/82                 | A61K 9/20        |
| (00) 18/24                 | (00) 07/24       |
| 01.05.2024                 | 14.02.2024       |
| (11) EP3628319             |                  |
| (51) A61K 31/437           |                  |
| A61K 45/06                 |                  |
| A61K 31/08                 |                  |
| A61K 31/352                |                  |
| A61K 31/4164               |                  |
| A61K 31/426                |                  |
| A61K 31/4439               |                  |
| A61K 31/606                |                  |
| A61K 31/7016               |                  |
| A61K 31/785                |                  |
| A61K 38/14                 |                  |
| A61K 38/31                 |                  |
| A61P 1/16                  |                  |
| A61K 31/395                |                  |
| (00) 07/24                 |                  |
| 14.02.2024                 |                  |
| (11) EP3744140             |                  |
| (51) H04W 76/19            |                  |
| H04W 72/0453               |                  |
| H04W 72/23                 |                  |
| H04W 74/08                 |                  |
| H04W 76/38                 |                  |
| (00) 09.12.2024            |                  |
| (00) 07/24                 |                  |
| 14.02.2024                 |                  |
| (00) Restoration of rights |                  |

## VB2

**Beslissingen genomen op herstelverzoeken, bezwaarschriften, beroepschriften of hoger beroepschriften ex Rijksoctrooiwet 1995. Oppositie(s) beslissingen ex Europees Octrooiverdrag.**

**Requests for restoration and notices of objection, notices of objection to Court, notices of objection to appellate court ex NL Patent Law 1995 in respect of which a decision has been taken. Opposition(s) decisions ex European Patent Convention.**

|                  |                  |                 |
|------------------|------------------|-----------------|
| (11) 1043842     | (00) 14/21       | 17.08.2022      |
| (51) B62J 7/06   | 07.04.2021       | (11) EP3755779  |
| B62J 7/08        | (11) EP3040485   | (51) C11D 3/04  |
| B62J 11/00       | (51) E02F 9/28   | C11D 3/20       |
| (00) 41/24       | (00) 32/24       | C11D 3/33       |
| 09.10.2024       | 07.08.2024       | C11D 3/37       |
| (00) 11.12.2024  | (00) 17.12.2024  | C11D 7/32       |
| (00) Positive    | (00) Positive    | C11D 11/00      |
| (11) EP1704948   | (11) EP3184731   | C11D 17/00      |
| (51) B22D 19/16  | (51) E21B 47/00  | C11D 17/04      |
| (00) 33/24       | (11) EP3215143   | (00) 03/23      |
| 14.08.2024       | (51) A61K 31/164 | 18.01.2023      |
| (00) 12.12.2024  | A61P 31/00       | (11) EP3755780  |
| (00) Positive    | A61K 35/748      | (51) C11D 3/04  |
| (11) EP2775857   | (00) 28/24       | C11D 3/37       |
| (51) C12N 9/24   | 10.07.2024       | C11D 11/00      |
| A23K 10/30       | (00) 12.12.2024  | C11D 3/33       |
| A23K 10/33       | (00) Negative    | C11D 3/20       |
| A23K 20/189      | (11) EP3523073   | C11D 17/00      |
| A23K 40/10       | (51) B23B 51/02  | C11D 17/04      |
| A23K 40/20       | (11) EP3563409   | (00) 46/22      |
| A23K 50/30       | (51) H01L 21/60  | 16.11.2022      |
| A23K 50/75       | H01L 21/67       | (11) EP3918119  |
| A23K 50/80       | (00) 51/21       | (51) D01H 13/22 |
| (00) 45/20       | 22.12.2021       | D01G 31/00      |
| 04.11.2020       | (11) EP3576571   |                 |
| (11) EP2879529   | (51) A46B 9/06   |                 |
| (51) A24D 1/00   | A46B 9/02        |                 |
| A24C 5/47        | A46D 1/00        |                 |
| A24D 3/02        | (11) EP3578175   |                 |
| A24D 3/04        | (51) A61K 31/135 |                 |
| A24D 3/06        | A61K 9/28        |                 |
| (00) 06/23       | A61K 9/20        |                 |
| 08.02.2023       | A61P 5/18        |                 |
| (11) EP2959894   | A61P 3/00        |                 |
| (51) A61K 31/137 | A61P 3/04        |                 |
| A61P 37/06       | A61P 5/00        |                 |
| A61K 31/397      | A61P 43/00       |                 |
| (00) 26/23       | A61P 3/14        |                 |
| 28.06.2023       | A61P 5/20        |                 |
| (11) EP3028842   | A61K 31/137      |                 |
| (51) B29B 13/10  | (11) EP3619585   |                 |
| B29K 23/00       | (51) E04H 4/16   |                 |
| B29K 67/00       | G05D 1/02        |                 |
| B29K 75/00       | (11) EP3755777   |                 |
| C08G 18/42       | (51) C11D 3/04   |                 |
| C08G 18/44       | C11D 3/20        |                 |
| C08G 18/48       | C11D 3/33        |                 |
| C08G 18/73       | C11D 3/37        |                 |
| C08G 18/75       | C11D 7/26        |                 |
| C08L 75/04       | C11D 7/32        |                 |
| C09D 123/06      | C11D 11/00       |                 |
| C09D 123/12      | C11D 17/04       |                 |
| B29C 64/153      | C11D 17/00       |                 |
| B33Y 70/00       | (00) 33/22       |                 |

**MED****Overige mededelingen.  
Other communications.**

|                                           |                              |
|-------------------------------------------|------------------------------|
| (11) 2002459                              | G03B 21/00                   |
| (00) 09.12.2024                           | G09F 19/18                   |
| (51) F24F 13/24                           | G09F 19/22                   |
| (00) Licence termination                  | (00) Based on request sender |
| (11) 2002459                              | (11) 2037739                 |
| (00) 09.12.2024                           | (00) 10.12.2024              |
| (51) F24F 13/24                           | (51) G06T 15/10              |
| (00) Licence termination                  | (00) Based on request sender |
| (11) 2027980                              | (11) EP2046132               |
| (00) 11.12.2024                           | (51) A22C 21/04              |
| (51) C01B 33/02                           | A22B 5/08                    |
| C01B 32/956                               | (11) EP2948891               |
| B22D 27/04                                | (51) G06F 21/32              |
| C01B 33/06                                | H04L 9/32                    |
| C30B 15/00                                | (11) EP2949523               |
| H01M 4/38                                 | (51) B60T 7/12               |
| H01M 4/583                                | B60T 8/17                    |
| (00) Established                          | B60T 13/66                   |
| (11) 2031763                              | (11) EP3313786               |
| (00) 14.11.2024                           | (51) B01D 61/00              |
| (51) G03B 21/00                           | C02F 1/44                    |
| G09F 19/18                                | C12G 3/08                    |
| E01F 9/576                                | B01D 3/00                    |
| G09F 19/22                                | B01D 61/02                   |
| (00) Based on clerical error              | (11) EP3358087               |
| (00) Deze akte vervangt RC202402099.      | (51) E02F 3/28               |
| Ronald Hans van der Voort was vanaf       | E02F 9/20                    |
| indiening de houder en het octrooi is met | (11) EP3669704               |
| ingang van 14/11/2024 overgedragen        | (51) A47C 23/00              |
| aan EPEON Holding B.V.                    | (11) EP3753825               |
| (11) 2031763                              | (51) B62J 11/00              |
| (00) 14.11.2024                           | B62J 45/20                   |
| (51) G03B 21/00                           | B62J 50/20                   |
| G09F 19/18                                | B62K 21/12                   |
| E01F 9/576                                | (11) EP4281695               |
| G09F 19/22                                | (51) F16L 23/12              |
| (00) Based on request sender              | B67D 7/32                    |
| (11) 2032228                              | F16L 29/04                   |
| (00) 10.12.2024                           | F16L 39/00                   |
| (51) A61F 2/72                            | F16L 59/18                   |
| A61F 2/70                                 |                              |
| A61B 5/389                                |                              |
| A61B 5/00                                 |                              |
| A61B 5/313                                |                              |
| (00) Based on request sender              |                              |
| (11) 2034575                              |                              |
| (00) 14.11.2024                           |                              |
| (51) E01F 9/576                           |                              |
| G03B 21/00                                |                              |
| G09F 19/18                                |                              |
| G09F 19/22                                |                              |
| (00) Based on clerical error              |                              |
| (00) Deze akte vervangt RC202402099.      |                              |
| Ronald Hans van der Voort was vanaf       |                              |
| indiening de houder en het octrooi is met |                              |
| ingang van 14/11/2024 overgedragen        |                              |
| aan EPEON Holding B.V.                    |                              |
| (11) 2034575                              |                              |
| (00) 14.11.2024                           |                              |
| (51) E01F 9/576                           |                              |

## VRV

**Verval of nietigverklaring.  
Lapse or annulment.**

|                                         |                     |                     |
|-----------------------------------------|---------------------|---------------------|
| (11) 1027799                            | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1694240      | (11) EP1699784      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 17.12.2024     |
| (11) 1027809                            | (00) Patent Expired | (00) Patent Expired |
| (00) 17.12.2024                         | (11) EP1694276      | (11) EP1699869      |
| (00) Patent Expired                     | (00) 16.12.2024     | (00) 13.12.2024     |
| (11) 300493                             | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1694319      | (11) EP1699872      |
| (00) SPC Expired                        | (00) 13.12.2024     | (00) 17.12.2024     |
| (11) 300662                             | (00) Patent Expired | (00) Patent Expired |
| (00) 12.12.2024                         | (11) EP1694363      | (11) EP1699886      |
| (00) SPC Extension Application Rejected | (00) 16.12.2024     | (00) 15.12.2024     |
| (11) 300666                             | (00) Patent Expired | (00) Patent Expired |
| (00) 17.12.2024                         | (11) EP1694370      | (11) EP1699991      |
| (00) SPC Expired                        | (00) 16.12.2024     | (00) 14.12.2024     |
| (11) EP1544139                          | (00) Patent Expired | (00) Patent Expired |
| (00) 17.12.2024                         | (11) EP1694781      | (11) EP1700419      |
| (00) Patent Expired                     | (00) 15.12.2024     | (00) 16.12.2024     |
| (11) EP1544255                          | (00) Patent Expired | (00) Patent Expired |
| (00) 15.12.2024                         | (11) EP1695220      | (11) EP1701358      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 14.12.2024     |
| (11) EP1548195                          | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1696443      | (11) EP1701950      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 13.12.2024     |
| (11) EP1548209                          | (00) Patent Expired | (00) Patent Expired |
| (00) 13.12.2024                         | (11) EP1696811      | (11) EP1704037      |
| (00) Patent Expired                     | (00) 14.12.2024     | (00) 13.12.2024     |
| (11) EP1548420                          | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1696913      | (11) EP1704118      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 15.12.2024     |
| (11) EP1548462                          | (00) Patent Expired | (00) Patent Expired |
| (00) 15.12.2024                         | (11) EP1696920      | (11) EP1704360      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 15.12.2024     |
| (11) EP1548487                          | (00) Patent Expired | (00) Patent Expired |
| (00) 13.12.2024                         | (11) EP1697326      | (11) EP1704555      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 13.12.2024     |
| (11) EP1548600                          | (00) Patent Expired | (00) Patent Expired |
| (00) 17.12.2024                         | (11) EP1697384      | (11) EP1704731      |
| (00) Patent Expired                     | (00) 15.12.2024     | (00) 15.12.2024     |
| (11) EP1564519                          | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1697398      | (11) EP1706414      |
| (00) Patent Expired                     | (00) 15.12.2024     | (00) 15.12.2024     |
| (11) EP1571058                          | (00) Patent Expired | (00) Patent Expired |
| (00) 15.12.2024                         | (11) EP1697493      | (11) EP1706477      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 17.12.2024     |
| (11) EP1580363                          | (00) Patent Expired | (00) Patent Expired |
| (00) 14.12.2024                         | (11) EP1697898      | (11) EP1707298      |
| (00) Patent Expired                     | (00) 17.12.2024     | (00) 13.12.2024     |
| (11) EP1613598                          | (00) Patent Expired | (00) Patent Expired |
| (00) 16.12.2024                         | (11) EP1698163      | (11) EP1708649      |
| (00) Patent Expired                     | (00) 13.12.2024     | (00) 17.12.2024     |
| (11) EP1620213                          | (00) Patent Expired | (00) Patent Expired |
| (00) 13.12.2024                         | (11) EP1698600      | (11) EP1709373      |
| (00) Patent Expired                     | (00) 14.12.2024     | (00) 13.12.2024     |
| (11) EP1671546                          | (00) Patent Expired | (00) Patent Expired |
| (00) 14.12.2024                         | (11) EP1699299      | (11) EP1711506      |
| (00) Patent Expired                     | (00) 14.12.2024     | (00) 16.12.2024     |
| (11) EP1694188                          | (00) Patent Expired | (00) Patent Expired |
| (00) 17.12.2024                         | (11) EP1699782      | (11) EP1713326      |
|                                         | (00) 18.12.2024     | (00) 17.12.2024     |

|                                  |                        |                        |
|----------------------------------|------------------------|------------------------|
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1715747                   | (11) EP2572665         | (11) EP3042983         |
| (00) 17.12.2024                  | (00) 14.12.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1716726                   | (11) EP2615570         | (11) EP3045777         |
| (00) 13.12.2024                  | (00) 16.12.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1718171                   | (11) EP2683671         | (11) EP3062697         |
| (00) 13.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1727555                   | (11) EP2700495         | (11) EP3079922         |
| (00) 15.12.2024                  | (00) 16.12.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1729175                   | (11) EP2704786         | (11) EP3093322         |
| (00) 15.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1733331                   | (11) EP2752908         | (11) EP3104597         |
| (00) 14.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1737907                   | (11) EP2761350         | (11) EP3104906         |
| (00) 15.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1763562                   | (11) EP2769205         | (11) EP3105576         |
| (00) 15.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1803871                   | (11) EP2795292         | (11) EP3117775         |
| (00) 14.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1825306                   | (11) EP2861950         | (11) EP3123194         |
| (00) 13.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1827804                   | (11) EP2876082         | (11) EP3132047         |
| (00) 16.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1829404                   | (11) EP2881768         | (11) EP3132257         |
| (00) 14.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP1933513                   | (11) EP2905033         | (11) EP3139248         |
| (00) 13.12.2024                  | (00) 16.12.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1962076                   | (11) EP2944957         | (11) EP3143581         |
| (00) 16.12.2024                  | (00) 15.12.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP1988602                   | (11) EP2961710         | (11) EP3149243         |
| (00) 09.09.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) European Patent got Revoked | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2163710                   | (11) EP2972200         | (11) EP3149696         |
| (00) 14.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2257008                   | (11) EP2985304         | (11) EP3150520         |
| (00) 13.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2298287                   | (11) EP2986359         | (11) EP3152670         |
| (00) 17.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2319858                   | (11) EP3008456         | (11) EP3152923         |
| (00) 15.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) Patent Expired              | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2399777                   | (11) EP3034882         | (11) EP3154618         |
| (00) 14.08.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect           | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP2502303                   | (11) EP3037065         | (11) EP3155361         |
| (00) 14.08.2024                  | (00) 17.12.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect           | (00) Patent Expired    | (00) EPV Ceased Effect |
| (11) EP2562216                   | (11) EP3038699         | (11) EP3160745         |
| (00) 17.12.2024                  | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                                  |                                  |
|------------------------|----------------------------------|----------------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3160814         | (11) EP3262410                   | (11) EP3313701                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3168781         | (11) EP3262821                   | (11) EP3314285                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3178329         | (11) EP3269953                   | (11) EP3318055                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3179381         | (11) EP3270716                   | (11) EP3321796                   |
| (00) 14.08.2024        | (00) 02.10.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) European Patent got Revoked | (00) EPV Ceased Effect           |
| (11) EP3181110         | (11) EP3271779                   | (11) EP3322182                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3192556         | (11) EP3272293                   | (11) EP3324330                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3193280         | (11) EP3273858                   | (11) EP3325258                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3196790         | (11) EP3278155                   | (11) EP3329909                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 01.10.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) European Patent got Revoked |
| (11) EP3201115         | (11) EP3278384                   | (11) EP3332744                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 17.12.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) Patent Expired              |
| (11) EP3202792         | (11) EP3280327                   | (11) EP3334159                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3204637         | (11) EP3281038                   | (11) EP3340881                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3211407         | (11) EP3281779                   | (11) EP3341097                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3215191         | (11) EP3285605                   | (11) EP3343959                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3224126         | (11) EP3287157                   | (11) EP3345998                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3229694         | (11) EP3291311                   | (11) EP3348064                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3239522         | (11) EP3296372                   | (11) EP3349223                   |
| (00) 14.08.2024        | (00) 01.10.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) European Patent got Revoked | (00) EPV Ceased Effect           |
| (11) EP3240685         | (11) EP3299738                   | (11) EP3352849                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3240898         | (11) EP3301469                   | (11) EP3355756                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3242815         | (11) EP3307342                   | (11) EP3361417                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3251787         | (11) EP3309135                   | (11) EP3362224                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3251915         | (11) EP3310531                   | (11) EP3362545                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect           | (00) EPV Ceased Effect           |
| (11) EP3253055         | (11) EP3310861                   | (11) EP3364035                   |
| (00) 14.08.2024        | (00) 14.08.2024                  | (00) 14.08.2024                  |



|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3367891         | (11) EP3407664         | (11) EP3447032         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3371583         | (11) EP3409646         | (11) EP3449754         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3372557         | (11) EP3411179         | (11) EP3451028         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3374151         | (11) EP3411675         | (11) EP3452325         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3374322         | (11) EP3414799         | (11) EP3452816         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3376006         | (11) EP3416610         | (11) EP3454151         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3380057         | (11) EP3416719         | (11) EP3459592         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3381155         | (11) EP3420495         | (11) EP3460497         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3381678         | (11) EP3426136         | (11) EP3465131         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3382388         | (11) EP3427286         | (11) EP3466370         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3384901         | (11) EP3428771         | (11) EP3471423         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3385568         | (11) EP3431003         | (11) EP3478120         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3387468         | (11) EP3434058         | (11) EP3482573         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3388818         | (11) EP3435578         | (11) EP3483219         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3397285         | (11) EP3436602         | (11) EP3484459         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3404332         | (11) EP3437782         | (11) EP3489789         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3404420         | (11) EP3438161         | (11) EP3492553         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3404759         | (11) EP3440411         | (11) EP3494552         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3406699         | (11) EP3441134         | (11) EP3499966         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3407379         | (11) EP3442395         | (11) EP3504663         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3407501         | (11) EP3443149         | (11) EP3505309         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3407512         | (11) EP3443940         | (11) EP3507600         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3507787         | (11) EP3530512         | (11) EP3560921         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3508113         | (11) EP3533768         | (11) EP3563132         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3508247         | (11) EP3536496         | (11) EP3566251         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3509209         | (11) EP3537732         | (11) EP3566761         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3510793         | (11) EP3538857         | (11) EP3568240         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3511085         | (11) EP3539344         | (11) EP3569196         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3511598         | (11) EP3539470         | (11) EP3569975         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3518332         | (11) EP3540201         | (11) EP3570649         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3519833         | (11) EP3543640         | (11) EP3572780         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3520208         | (11) EP3545648         | (11) EP3572838         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3520598         | (11) EP3546657         | (11) EP3573196         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3521042         | (11) EP3547105         | (11) EP3573527         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3521775         | (11) EP3547106         | (11) EP3574000         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3525541         | (11) EP3547559         | (11) EP3574427         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3526447         | (11) EP3547995         | (11) EP3578481         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3526721         | (11) EP3548956         | (11) EP3582094         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3527997         | (11) EP3551190         | (11) EP3584815         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3528062         | (11) EP3551233         | (11) EP3586556         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3528671         | (11) EP3552823         | (11) EP3587500         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3528814         | (11) EP3558936         | (11) EP3589782         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3529094         | (11) EP3559069         | (11) EP3592473         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3529395         | (11) EP3559278         | (11) EP3594165         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3595509         | (11) EP3616263         | (11) EP3636693         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3595520         | (11) EP3617297         | (11) EP3636896         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3596503         | (11) EP3618999         | (11) EP3637116         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3598142         | (11) EP3619704         | (11) EP3638166         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3598553         | (11) EP3621314         | (11) EP3638967         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3598649         | (11) EP3623867         | (11) EP3640617         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3599073         | (11) EP3623962         | (11) EP3640695         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3599839         | (11) EP3626979         | (11) EP3642454         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3601233         | (11) EP3628488         | (11) EP3642660         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3601965         | (11) EP3629111         | (11) EP3644003         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3603050         | (11) EP3629231         | (11) EP3644825         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3603450         | (11) EP3629359         | (11) EP3646034         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3605091         | (11) EP3631102         | (11) EP3646068         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3606693         | (11) EP3631423         | (11) EP3646707         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3606714         | (11) EP3631510         | (11) EP3648379         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3608677         | (11) EP3631851         | (11) EP3649477         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3610195         | (11) EP3632831         | (11) EP3650849         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3611702         | (11) EP3632978         | (11) EP3651382         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3614235         | (11) EP3633062         | (11) EP3652630         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3614449         | (11) EP3633418         | (11) EP3653051         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3614976         | (11) EP3633440         | (11) EP3653573         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3615107         | (11) EP3636462         | (11) EP3656573         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3656899         | (11) EP3682661         | (11) EP3697359         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3657041         | (11) EP3684138         | (11) EP3698211         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3659710         | (11) EP3684444         | (11) EP3698835         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3661380         | (11) EP3685249         | (11) EP3699746         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3662617         | (11) EP3686309         | (11) EP3700040         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3662816         | (11) EP3686719         | (11) EP3700877         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3663048         | (11) EP3688477         | (11) EP3701270         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3663980         | (11) EP3688975         | (11) EP3702280         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3664973         | (11) EP3689230         | (11) EP3703123         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3666580         | (11) EP3689943         | (11) EP3704710         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3666708         | (11) EP3690010         | (11) EP3707743         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3671279         | (11) EP3690863         | (11) EP3708593         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3671898         | (11) EP3690904         | (11) EP3708634         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3672076         | (11) EP3692477         | (11) EP3709998         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3674456         | (11) EP3693185         | (11) EP3710465         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3675390         | (11) EP3695093         | (11) EP3712027         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3676025         | (11) EP3695232         | (11) EP3712401         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3676412         | (11) EP3695271         | (11) EP3712536         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3676523         | (11) EP3695582         | (11) EP3714081         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3676764         | (11) EP3695873         | (11) EP3716782         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3678468         | (11) EP3696492         | (11) EP3719062         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3680980         | (11) EP3697318         | (11) EP3719183         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3719569         | (11) EP3734737         | (11) EP3748173         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3720092         | (11) EP3734964         | (11) EP3748591         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3720224         | (11) EP3735550         | (11) EP3748970         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3720936         | (11) EP3735869         | (11) EP3749010         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3721470         | (11) EP3737950         | (11) EP3749738         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3722279         | (11) EP3738854         | (11) EP3750247         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3723155         | (11) EP3738999         | (11) EP3750248         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3723172         | (11) EP3739630         | (11) EP3750740         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3723923         | (11) EP3740822         | (11) EP3750795         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3725485         | (11) EP3741166         | (11) EP3751063         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3726216         | (11) EP3741214         | (11) EP3751158         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3726762         | (11) EP3742011         | (11) EP3751666         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3726848         | (11) EP3742717         | (11) EP3752067         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3728046         | (11) EP3742870         | (11) EP3753717         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3728183         | (11) EP3743613         | (11) EP3753749         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3729534         | (11) EP3743815         | (11) EP3754632         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3729692         | (11) EP3744659         | (11) EP3755837         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3732313         | (11) EP3744879         | (11) EP3755942         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3732541         | (11) EP3745273         | (11) EP3756298         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3732854         | (11) EP3747136         | (11) EP3756408         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3733724         | (11) EP3747677         | (11) EP3757421         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3734573         | (11) EP3747777         | (11) EP3758151         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3759422         | (11) EP3768359         | (11) EP3784531         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3760548         | (11) EP3768490         | (11) EP3786123         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3760610         | (11) EP3772080         | (11) EP3786164         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3760993         | (11) EP3773191         | (11) EP3786454         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3761100         | (11) EP3773995         | (11) EP3787834         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3761270         | (11) EP3776114         | (11) EP3788534         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3761464         | (11) EP3777025         | (11) EP3789058         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3761911         | (11) EP3777050         | (11) EP3789105         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3761913         | (11) EP3777318         | (11) EP3790019         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3762311         | (11) EP3777335         | (11) EP3790571         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3762514         | (11) EP3777799         | (11) EP3792139         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3762630         | (11) EP3778326         | (11) EP3793822         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3763340         | (11) EP3778360         | (11) EP3794762         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3764552         | (11) EP3778818         | (11) EP3794763         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3765868         | (11) EP3780174         | (11) EP3795458         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3765950         | (11) EP3780417         | (11) EP3796291         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3766467         | (11) EP3780819         | (11) EP3796813         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3766911         | (11) EP3781790         | (11) EP3796815         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3767038         | (11) EP3782907         | (11) EP3798095         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3768043         | (11) EP3783325         | (11) EP3798101         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3768153         | (11) EP3783835         | (11) EP3798266         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3768228         | (11) EP3784226         | (11) EP3799158         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3799224         | (11) EP3814881         | (11) EP3828106         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3799946         | (11) EP3815101         | (11) EP3828414         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3800121         | (11) EP3815415         | (11) EP3828434         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3802343         | (11) EP3815472         | (11) EP3828518         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3803661         | (11) EP3815575         | (11) EP3828860         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3804247         | (11) EP3817200         | (11) EP3832884         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3804433         | (11) EP3817924         | (11) EP3833854         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3805346         | (11) EP3818345         | (11) EP3836364         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3805510         | (11) EP3819246         | (11) EP3836858         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3807491         | (11) EP3819986         | (11) EP3837830         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3809060         | (11) EP3820175         | (11) EP3837860         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3809329         | (11) EP3821788         | (11) EP3839144         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3809494         | (11) EP3821866         | (11) EP3840156         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3809656         | (11) EP3822463         | (11) EP3840226         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3809939         | (11) EP3822754         | (11) EP3840813         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3810200         | (11) EP3824601         | (11) EP3842187         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3810354         | (11) EP3825293         | (11) EP3842576         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3810492         | (11) EP3825472         | (11) EP3842763         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3810998         | (11) EP3825980         | (11) EP3843464         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3811129         | (11) EP3826238         | (11) EP3843713         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3812204         | (11) EP3826518         | (11) EP3844438         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3812212         | (11) EP3827258         | (11) EP3847415         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3847546         | (11) EP3862477         | (11) EP3872324         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3849105         | (11) EP3862645         | (11) EP3872662         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3849238         | (11) EP3864597         | (11) EP3872667         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3851653         | (11) EP3864873         | (11) EP3872986         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3852418         | (11) EP3864898         | (11) EP3873259         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3853693         | (11) EP3865302         | (11) EP3873382         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3854258         | (11) EP3865476         | (11) EP3875190         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3854671         | (11) EP3865829         | (11) EP3875541         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3855206         | (11) EP3867183         | (11) EP3875963         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3856550         | (11) EP3867620         | (11) EP3876765         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3856686         | (11) EP3868520         | (11) EP3877038         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3857277         | (11) EP3870181         | (11) EP3878170         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3857427         | (11) EP3870488         | (11) EP3878544         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3857825         | (11) EP3870490         | (11) EP3879026         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3858116         | (11) EP3870498         | (11) EP3879077         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3858200         | (11) EP3870532         | (11) EP3880057         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3859691         | (11) EP3870648         | (11) EP3880431         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3860501         | (11) EP3870663         | (11) EP3881345         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3860994         | (11) EP3871120         | (11) EP3882137         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3861351         | (11) EP3871202         | (11) EP3882484         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3862194         | (11) EP3871403         | (11) EP3883226         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3862275         | (11) EP3871425         | (11) EP3883283         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |



|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3883723         | (11) EP3895662         | (11) EP3905750         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3883997         | (11) EP3895775         | (11) EP3906394         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 04.09.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885031         | (11) EP3896964         | (11) EP3906694         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885168         | (11) EP3897473         | (11) EP3907253         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885226         | (11) EP3898203         | (11) EP3907503         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885249         | (11) EP3898436         | (11) EP3908340         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885468         | (11) EP3899890         | (11) EP3908461         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3885828         | (11) EP3900292         | (11) EP3908547         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3886468         | (11) EP3900504         | (11) EP3910139         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3887279         | (11) EP3900505         | (11) EP3910388         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3887331         | (11) EP3900668         | (11) EP3910855         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3888188         | (11) EP3902105         | (11) EP3911993         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3888307         | (11) EP3902311         | (11) EP3912614         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3888850         | (11) EP3902325         | (11) EP3913211         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3889254         | (11) EP3903112         | (11) EP3913296         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3892458         | (11) EP3903946         | (11) EP3913934         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3892799         | (11) EP3904189         | (11) EP3914219         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3892836         | (11) EP3904220         | (11) EP3914472         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3893166         | (11) EP3904667         | (11) EP3914805         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3893573         | (11) EP3904779         | (11) EP3914893         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3894226         | (11) EP3905024         | (11) EP3915001         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3894859         | (11) EP3905458         | (11) EP3915453         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3915960         | (11) EP3929521         | (11) EP3939185         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3916152         | (11) EP3929584         | (11) EP3939363         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3916541         | (11) EP3929607         | (11) EP3939625         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3917908         | (11) EP3929811         | (11) EP3939767         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3919498         | (11) EP3929905         | (11) EP3939921         |
| (00) 03.07.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3919736         | (11) EP3930103         | (11) EP3940135         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3920219         | (11) EP3930885         | (11) EP3940279         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3920515         | (11) EP3931602         | (11) EP3941083         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3920798         | (11) EP3932036         | (11) EP3942856         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3920887         | (11) EP3932045         | (11) EP3942990         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3922290         | (11) EP3933415         | (11) EP3943780         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3922546         | (11) EP3934052         | (11) EP3944605         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3923277         | (11) EP3934211         | (11) EP3944958         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3924807         | (11) EP3934715         | (11) EP3945429         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3925008         | (11) EP3934737         | (11) EP3948637         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3925377         | (11) EP3935437         | (11) EP3948843         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3925395         | (11) EP3935758         | (11) EP3949289         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3925612         | (11) EP3935809         | (11) EP3949665         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3925835         | (11) EP3935822         | (11) EP3950422         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3926455         | (11) EP3937489         | (11) EP3950443         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3926653         | (11) EP3937498         | (11) EP3951084         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3927275         | (11) EP3938752         | (11) EP3951141         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3951200         | (11) EP3963804         | (11) EP3976995         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3951371         | (11) EP3963935         | (11) EP3977792         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3951397         | (11) EP3964354         | (11) EP3978160         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3952217         | (11) EP3964545         | (11) EP3978405         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3952277         | (11) EP3964806         | (11) EP3978413         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3953130         | (11) EP3964814         | (11) EP3979025         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3953402         | (11) EP3964966         | (11) EP3979383         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3953677         | (11) EP3965291         | (11) EP3979747         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3955021         | (11) EP3966154         | (11) EP3980688         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3955273         | (11) EP3966842         | (11) EP3980727         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3955644         | (11) EP3966921         | (11) EP3980794         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3958631         | (11) EP3967383         | (11) EP3982683         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3958961         | (11) EP3969959         | (11) EP3982785         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960320         | (11) EP3970027         | (11) EP3983274         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960460         | (11) EP3970592         | (11) EP3983278         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960648         | (11) EP3970744         | (11) EP3984429         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960833         | (11) EP3970767         | (11) EP3984587         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960938         | (11) EP3971063         | (11) EP3984685         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3960956         | (11) EP3972344         | (11) EP3984801         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3961139         | (11) EP3974099         | (11) EP3984913         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3961492         | (11) EP3975598         | (11) EP3985050         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3963037         | (11) EP3975900         | (11) EP3985292         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3985343         | (11) EP3995817         | (11) EP4006524         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3985998         | (11) EP3995862         | (11) EP4006560         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3986733         | (11) EP3995906         | (11) EP4007157         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3986941         | (11) EP3995915         | (11) EP4007203         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3986972         | (11) EP3997723         | (11) EP4008364         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3987852         | (11) EP3997755         | (11) EP4008866         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988238         | (11) EP3998658         | (11) EP4009338         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988293         | (11) EP3998755         | (11) EP4009610         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988328         | (11) EP3998808         | (11) EP4009701         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988492         | (11) EP3998915         | (11) EP4011667         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988508         | (11) EP4000349         | (11) EP4011788         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3988983         | (11) EP4000435         | (11) EP4012183         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3989967         | (11) EP4000790         | (11) EP4012360         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3990683         | (11) EP4001182         | (11) EP4012440         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3990782         | (11) EP4001390         | (11) EP4012481         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3992004         | (11) EP4002002         | (11) EP4012975         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3992345         | (11) EP4002034         | (11) EP4013017         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3992552         | (11) EP4002401         | (11) EP4013266         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3993361         | (11) EP4002801         | (11) EP4014009         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3993362         | (11) EP4004625         | (11) EP4015332         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3994554         | (11) EP4005968         | (11) EP4015814         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP3994686         | (11) EP4006109         | (11) EP4016093         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4016173         | (11) EP4027201         | (11) EP4037045         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4017607         | (11) EP4027640         | (11) EP4037439         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4020013         | (11) EP4027663         | (11) EP4038637         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4020760         | (11) EP4028642         | (11) EP4039121         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4021766         | (11) EP4028729         | (11) EP4039947         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4021809         | (11) EP4029209         | (11) EP4040069         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4022383         | (11) EP4029372         | (11) EP4040642         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4023201         | (11) EP4029965         | (11) EP4040734         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4023269         | (11) EP4030064         | (11) EP4041994         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4023402         | (11) EP4030180         | (11) EP4042102         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4023799         | (11) EP4030837         | (11) EP4042731         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4024252         | (11) EP4031384         | (11) EP4042737         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4024357         | (11) EP4031842         | (11) EP4042814         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4025271         | (11) EP4031983         | (11) EP4043189         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4025359         | (11) EP4032568         | (11) EP4043729         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4025782         | (11) EP4032636         | (11) EP4043956         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4025799         | (11) EP4033735         | (11) EP4044572         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4026468         | (11) EP4035330         | (11) EP4045263         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4026476         | (11) EP4035745         | (11) EP4045264         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4026530         | (11) EP4035791         | (11) EP4045414         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4027089         | (11) EP4036260         | (11) EP4046764         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4027179         | (11) EP4036408         | (11) EP4046806         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4046884         | (11) EP4056759         | (11) EP4066728         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4047185         | (11) EP4056796         | (11) EP4066749         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4049871         | (11) EP4057132         | (11) EP4066947         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4050249         | (11) EP4057600         | (11) EP4067677         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4050770         | (11) EP4057858         | (11) EP4067846         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4051226         | (11) EP4058640         | (11) EP4068344         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4051879         | (11) EP4059013         | (11) EP4068619         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4052162         | (11) EP4059333         | (11) EP4069176         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4052449         | (11) EP4060006         | (11) EP4069493         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4052481         | (11) EP4060375         | (11) EP4069605         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4052483         | (11) EP4060651         | (11) EP4070961         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4052978         | (11) EP4060947         | (11) EP4071015         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4053520         | (11) EP4062418         | (11) EP4071075         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4053685         | (11) EP4062627         | (11) EP4071533         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4053871         | (11) EP4063312         | (11) EP4071773         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4054950         | (11) EP4063592         | (11) EP4071935         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4055216         | (11) EP4063670         | (11) EP4073392         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4055370         | (11) EP4064115         | (11) EP4073628         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4055401         | (11) EP4064684         | (11) EP4074265         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4055923         | (11) EP4064883         | (11) EP4074565         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4056005         | (11) EP4065384         | (11) EP4074888         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4056253         | (11) EP4066477         | (11) EP4075248         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4076831         | (11) EP4088449         | (11) EP4099652         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4076990         | (11) EP4088975         | (11) EP4100704         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4076998         | (11) EP4089007         | (11) EP4100762         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4077079         | (11) EP4089363         | (11) EP4101391         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4077610         | (11) EP4089994         | (11) EP4102767         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4077820         | (11) EP4091028         | (11) EP4104976         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4078320         | (11) EP4091914         | (11) EP4105192         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4078321         | (11) EP4092202         | (11) EP4105497         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4078722         | (11) EP4092549         | (11) EP4105558         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4079631         | (11) EP4093956         | (11) EP4105608         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4079639         | (11) EP4094105         | (11) EP4106149         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4080180         | (11) EP4095196         | (11) EP4106729         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4080880         | (11) EP4095352         | (11) EP4107094         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4080918         | (11) EP4095380         | (11) EP4108301         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4081428         | (11) EP4095557         | (11) EP4108388         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4082431         | (11) EP4095795         | (11) EP4108725         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4082892         | (11) EP4097021         | (11) EP4109813         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4083369         | (11) EP4097228         | (11) EP4111725         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4083454         | (11) EP4097476         | (11) EP4111826         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4083590         | (11) EP4097924         | (11) EP4112404         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4084215         | (11) EP4098982         | (11) EP4112684         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4084295         | (11) EP4099650         | (11) EP4112898         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4112962         | (11) EP4127756         | (11) EP4146447         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4113020         | (11) EP4130446         | (11) EP4146448         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4113142         | (11) EP4130720         | (11) EP4146576         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4113646         | (11) EP4131366         | (11) EP4148827         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4115033         | (11) EP4133277         | (11) EP4149691         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4115677         | (11) EP4133781         | (11) EP4151496         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4116027         | (11) EP4134474         | (11) EP4151515         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4116100         | (11) EP4134603         | (11) EP4151858         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4117854         | (11) EP4135259         | (11) EP4151889         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4118945         | (11) EP4136822         | (11) EP4152010         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4121381         | (11) EP4139077         | (11) EP4152123         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4121894         | (11) EP4140778         | (11) EP4153958         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4122543         | (11) EP4141288         | (11) EP4154081         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4123231         | (11) EP4141438         | (11) EP4154859         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4123640         | (11) EP4141643         | (11) EP4154917         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4123966         | (11) EP4142018         | (11) EP4155055         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4125026         | (11) EP4142972         | (11) EP4155427         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4126548         | (11) EP4143951         | (11) EP4155552         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4126556         | (11) EP4144423         | (11) EP4155571         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4126563         | (11) EP4144609         | (11) EP4157556         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4126602         | (11) EP4145001         | (11) EP4157746         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4127503         | (11) EP4145107         | (11) EP4157773         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |



|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4160392         | (11) EP4172967         | (11) EP4187059         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4161200         | (11) EP4173690         | (11) EP4188681         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4162151         | (11) EP4175795         | (11) EP4190654         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4163115         | (11) EP4175857         | (11) EP4192303         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4163116         | (11) EP4176563         | (11) EP4193506         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4163117         | (11) EP4176691         | (11) EP4194164         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4164847         | (11) EP4176866         | (11) EP4194193         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4164938         | (11) EP4179396         | (11) EP4194306         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4164951         | (11) EP4179642         | (11) EP4196708         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4166126         | (11) EP4179875         | (11) EP4197093         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4166338         | (11) EP4179954         | (11) EP4197216         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4166592         | (11) EP4181165         | (11) EP4197311         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4166700         | (11) EP4181477         | (11) EP4197531         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4168238         | (11) EP4183228         | (11) EP4197790         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4168242         | (11) EP4183346         | (11) EP4197844         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4168665         | (11) EP4183686         | (11) EP4198256         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4168759         | (11) EP4183689         | (11) EP4198751         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4168791         | (11) EP4183690         | (11) EP4199454         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4169785         | (11) EP4184108         | (11) EP4200092         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4169786         | (11) EP4184113         | (11) EP4200224         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4170682         | (11) EP4185499         | (11) EP4200876         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4171309         | (11) EP4186879         | (11) EP4200921         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |                        |
|------------------------|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4201701         | (11) EP4214390         | (11) EP4232332         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4202575         | (11) EP4214403         | (11) EP4233110         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4202669         | (11) EP4215097         | (11) EP4233299         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4203255         | (11) EP4215617         | (11) EP4235337         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4203296         | (11) EP4215777         | (11) EP4237208         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4203879         | (11) EP4217189         | (11) EP4240442         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4204897         | (11) EP4217990         | (11) EP4240683         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4206782         | (11) EP4218636         | (11) EP4241349         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4207587         | (11) EP4218788         | (11) EP4241530         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4208088         | (11) EP4218886         | (11) EP4241870         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4208356         | (11) EP4219174         | (11) EP4242570         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4208526         | (11) EP4220682         | (11) EP4244438         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4208997         | (11) EP4221091         | (11) EP4245622         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4209243         | (11) EP4221829         | (11) EP4245626         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4209566         | (11) EP4221865         | (11) EP4247019         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4209567         | (11) EP4222564         | (11) EP4248635         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4209568         | (11) EP4222997         | (11) EP4249928         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4210425         | (11) EP4228543         | (11) EP4251400         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4212685         | (11) EP4229516         | (11) EP4251903         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4212852         | (11) EP4230081         | (11) EP4252832         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4213319         | (11) EP4230419         | (11) EP4253903         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |
| (00) EPV Ceased Effect | (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4213447         | (11) EP4231421         | (11) EP4254196         |
| (00) 14.08.2024        | (00) 14.08.2024        | (00) 14.08.2024        |

|                        |                        |
|------------------------|------------------------|
| (00) EPV Ceased Effect | (00) EPV Ceased Effect |
| (11) EP4256199         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4257496         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4261864         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4264836         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4267372         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4274735         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4274746         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4274989         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4275456         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4277372         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4282284         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4286318         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4289601         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4290200         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4291069         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4300053         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4305326         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4311899         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4330006         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4332813         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4341610         |                        |
| (00) 14.08.2024        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP4364834         |                        |
| (00) 14.08.2024        |                        |

**VRB**

**Correcties op eerdere publicaties.  
Corrections on earlier publications.**

(11) 2038251  
(48) 18.12.2024  
(00) Correctie Uitvindergegevens  
(51) A23F 3/34

---

## CO

# Wijzigingen in het Nederlands Octrooiregister. Changes in the Netherlands Patent Register.

|                                  |                                                       |                                                 |
|----------------------------------|-------------------------------------------------------|-------------------------------------------------|
| (71) Kokoplant Beheer B.V.       | (00) Assignment                                       | C09D 183/04                                     |
| (73) Kokoplant Beheer B.V.       | (71) Xinmei Fontana Holding (Hong Kong) Limited       | C09D 183/08                                     |
| (11) 2013399                     | (73) Xinmei Fontana Holding (Hong Kong) Limited       | C09D 183/10                                     |
| (00) 11.12.2024                  | (11) EP2128664                                        | G02B 1/10                                       |
| (51) A01G 9/02                   | (00) 10.12.2024                                       | G02B 1/11                                       |
| B30B 13/00                       | (51) G02B 5/02                                        | (00) Assignment                                 |
| (00) Assignment                  | G02B 5/30                                             | (71) Adeia Guides Inc.                          |
| (71) Syngenta Crop Protection AG | G02F 1/13357                                          | (73) Adeia Guides Inc.                          |
| (73) Syngenta Crop Protection AG | (00) Assignment                                       | (11) EP2064887                                  |
| (11) 350063                      | (71) Adeia Guides Inc.                                | (00) 12.12.2024                                 |
| (00) 05.12.2024                  | (73) Adeia Guides Inc.                                | (51) H04N 21/422                                |
| (00) Merge                       | (11) EP1969844                                        | (00) Change of owner(s) name                    |
| (71) Syngenta Crop Protection AG | (00) 12.12.2024                                       | (71) Xinmei Fontana Holding (Hong Kong) Limited |
| (73) Syngenta Crop Protection AG | (51) H04N 5/445                                       | (73) Xinmei Fontana Holding (Hong Kong) Limited |
| (11) EP1778013                   | H04N 7/16                                             | (11) EP2099876                                  |
| (00) 05.12.2024                  | (00) Change of owner(s) name                          | (00) 10.12.2024                                 |
| (51) A01N 43/56                  | (71) OmniAb Operations, Inc.                          | (51) C09D 167/00                                |
| (00) Merge                       | (73) OmniAb Operations, Inc.                          | (00) Assignment                                 |
| (71) Syngenta Crop Protection AG | (11) EP2152880                                        | (71) Open Monoclonal Technology, Inc.           |
| (73) Syngenta Crop Protection AG | (00) 09.12.2024                                       | (73) OmniAb Operations, Inc.                    |
| (11) EP1940813                   | (51) A01K 67/027                                      | (11) EP2336329                                  |
| (00) 05.12.2024                  | C12N 15/13                                            | (00) 09.12.2024                                 |
| (51) A01N 43/36                  | (00) Change of owner(s) name                          | (51) A01K 67/027                                |
| A01N 43/40                       | (71) Open Monoclonal Technology, Inc.                 | C12N 15/13                                      |
| A01N 43/56                       | (73) OmniAb Operations, Inc.                          | (00) Assignment                                 |
| A01N 43/78                       | (11) EP2152880                                        | (71) Innovia Films America, Inc.                |
| C07C 205/06                      | (00) 09.12.2024                                       | (73) Innovia Films America, Inc.                |
| C07C 205/12                      | (51) A01K 67/027                                      | (11) EP2205435                                  |
| C07C 205/37                      | C12N 15/13                                            | (00) 09.12.2024                                 |
| C07C 205/45                      | (00) Assignment                                       | (51) B32B 5/18                                  |
| C07C 211/61                      | (71) OmniAb, Inc.                                     | B32B 27/08                                      |
| C07D 207/34                      | (73) OmniAb Operations, Inc.                          | B32B 27/20                                      |
| C07D 207/46                      | (11) EP2152880                                        | B32B 27/32                                      |
| C07D 213/89                      | (00) 09.12.2024                                       | G09F 3/10                                       |
| C07D 231/14                      | (51) A01K 67/027                                      | (00) Assignment                                 |
| C07D 277/56                      | C12N 15/13                                            | (71) OmniAb, Inc.                               |
| (00) Merge                       | (00) Change of owner(s) name                          | (73) OmniAb Operations, Inc.                    |
| (71) Syngenta Crop Protection AG | (71) Siemens Healthineers Endovascular Robotics, Inc. | (11) EP2336329                                  |
| (73) Syngenta Crop Protection AG | (73) Siemens Healthineers Endovascular Robotics, Inc. | (00) 09.12.2024                                 |
| (11) EP1802198                   | (11) EP2282803                                        | (51) A01K 67/027                                |
| (00) 05.12.2024                  | (00) 04.12.2024                                       | C12N 15/13                                      |
| (51) A01N 37/34                  | (51) A61M 25/01                                       | (00) Change of owner(s) name                    |
| A01N 37/38                       | (00) Change of owner(s) name                          | (71) Xinmei Fontana Holding (Hong Kong) Limited |
| A01N 43/36                       | (71) Xinmei Fontana Holding (Hong Kong) Limited       | (73) Xinmei Fontana Holding (Hong Kong) Limited |
| A01N 43/40                       | (73) Xinmei Fontana Holding (Hong Kong) Limited       | (11) EP2215171                                  |
| A01N 43/54                       | (11) EP2038355                                        | (00) 10.12.2024                                 |
| A01N 43/653                      | (00) 10.12.2024                                       | (51) C09D 127/12                                |
| A01N 43/84                       | (51) C08F 18/20                                       | (00) Assignment                                 |
| A01N 43/90                       | C08F 20/22                                            | (71) Innovia Films America, Inc.                |
| A01N 45/02                       | C08G 77/24                                            | (73) Innovia Films America, Inc.                |
| A01N 47/24                       | C08L 27/12                                            | (11) EP2502744                                  |
| A01P 3/00                        | C08L 83/04                                            | (00) 09.12.2024                                 |
| (00) Merge                       | C08L 83/08                                            | (51) B32B 27/08                                 |
| (71) iSi Automotive Holding GmbH | C08L 83/10                                            | B32B 27/16                                      |
| (73) iSi Automotive Holding GmbH | C09D 127/12                                           | B32B 27/20                                      |
| (11) EP1947966                   |                                                       | B32B 27/32                                      |
| (00) 05.12.2024                  |                                                       | G09F 3/10                                       |
| (51) A41D 13/018                 |                                                       |                                                 |
| A41D 13/05                       |                                                       |                                                 |
| A42B 3/04                        |                                                       |                                                 |

|                                                       |                                                       |                                                       |
|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| (00) Assignment                                       | (73) Sago Strategic Solutions LLC                     | (51) F41C 33/02                                       |
| (71) Siemens Healthineers Endovascular Robotics, Inc. | (11) EP2629442                                        | (00) Assignment                                       |
| (73) Siemens Healthineers Endovascular Robotics, Inc. | (00) 12.12.2024                                       | (71) Siemens Healthineers Endovascular Robotics, Inc. |
| (11) EP2688632                                        | (51) H04L 1/00                                        | (73) Siemens Healthineers Endovascular Robotics, Inc. |
| (00) 04.12.2024                                       | H04L 1/18                                             | (11) EP2821094                                        |
| (51) A61B 6/12                                        | (00) Assignment                                       | (00) 04.12.2024                                       |
| A61B 34/30                                            | (71) Siemens Healthineers Endovascular Robotics, Inc. | (51) A61B 17/00                                       |
| A61B 90/00                                            | (73) Siemens Healthineers Endovascular Robotics, Inc. | A61M 25/01                                            |
| (00) Change of owner(s) name                          | (11) EP1896114                                        | A61M 25/09                                            |
| (71) Syngenta Crop Protection AG                      | (00) 04.12.2024                                       | A61B 34/30                                            |
| (73) Syngenta Crop Protection AG                      | (51) A61M 37/00                                       | A61B 90/98                                            |
| (11) EP2193714                                        | A61B 34/37                                            | (00) Change of owner(s) name                          |
| (00) 05.12.2024                                       | (00) Change of owner(s) name                          | (71) Renson NV                                        |
| (51) A01N 43/56                                       | (71) Division M B.V.                                  | (73) Renson NV                                        |
| (00) Merge                                            | (73) Division M B.V.                                  | (11) EP3259432                                        |
| (71) Sago Strategic Solutions LLC                     | (11) 2017689                                          | (00) 12.12.2024                                       |
| (73) Sago Strategic Solutions LLC                     | (00) 09.12.2024                                       | (51) E06B 9/42                                        |
| (11) EP2586231                                        | (51) A01G 9/24                                        | (00) Assignment                                       |
| (00) 12.12.2024                                       | F24J 2/04                                             | (71) BIOHYST OVERSEAS SAGL                            |
| (51) H04W 24/00                                       | F24J 2/34                                             | (73) BIOHYST OVERSEAS SAGL                            |
| H04W 28/02                                            | F24J 2/42                                             | (11) EP2708643                                        |
| (00) Assignment                                       | F24J 2/52                                             | (00) 06.12.2024                                       |
| (71) Adeia Guides Inc.                                | F28D 20/00                                            | (51) B02C 23/14                                       |
| (73) Adeia Guides Inc.                                | (00) Assignment                                       | B07B 1/00                                             |
| (11) EP2632152                                        | (71) Tadano Demag GmbH                                | B07B 15/00                                            |
| (00) 12.12.2024                                       | (73) Tadano Demag GmbH                                | C12P 3/00                                             |
| (51) H04N 5/445                                       | (11) EP2762438                                        | C12P 7/10                                             |
| H04N 7/16                                             | (00) 10.12.2024                                       | C12P 7/16                                             |
| H04N 21/41                                            | (51) B66C 13/18                                       | D21B 1/06                                             |
| H04N 21/431                                           | B66D 1/50                                             | (00) Assignment                                       |
| H04N 21/472                                           | B66D 1/74                                             | (71) Adeia Guides Inc.                                |
| H04N 21/482                                           | B66D 1/76                                             | (73) Adeia Guides Inc.                                |
| H04N 21/488                                           | (00) Assignment                                       | (11) EP1992165                                        |
| G11B 27/10                                            | (71) Renson NV                                        | (00) 12.12.2024                                       |
| G11B 27/34                                            | (73) Renson NV                                        | (51) H04N 21/266                                      |
| (00) Change of owner(s) name                          | (11) EP3140488                                        | H04N 21/431                                           |
| (71) Adeia Guides Inc.                                | (00) 12.12.2024                                       | H04N 21/433                                           |
| (73) Adeia Guides Inc.                                | (51) E06B 9/13                                        | H04N 21/472                                           |
| (11) EP2824666                                        | E06B 9/17                                             | H04N 7/173                                            |
| (00) 12.12.2024                                       | E06B 9/42                                             | (00) Change of owner(s) name                          |
| (51) H04N 5/445                                       | E06B 9/58                                             | (71) Siemens Healthineers Endovascular Robotics, Inc. |
| H04N 21/231                                           | (00) Assignment                                       | (73) Siemens Healthineers Endovascular Robotics, Inc. |
| H04N 21/233                                           | (71) JB-HOLDING B.V.                                  | (11) EP2376175                                        |
| H04N 21/472                                           | (73) JB-HOLDING B.V.                                  | (00) 04.12.2024                                       |
| H04N 21/81                                            | (11) 2016077                                          | (51) A61M 25/01                                       |
| G06F 17/30                                            | (00) 10.12.2024                                       | A61M 25/10                                            |
| G11B 27/28                                            | (51) A47B 9/12                                        | A61B 34/00                                            |
| G11B 27/32                                            | (00) Assignment                                       | A61B 34/30                                            |
| (00) Change of owner(s) name                          | (71) Renson NV                                        | A61B 90/00                                            |
| (71) Innovia Films America, Inc.                      | (73) Renson NV                                        | (00) Change of owner(s) name                          |
| (73) Innovia Films America, Inc.                      | (11) EP3140489                                        | (71) OmniAb, Inc.                                     |
| (11) EP2421698                                        | (00) 12.12.2024                                       | (73) OmniAb Operations, Inc.                          |
| (00) 09.12.2024                                       | (51) E06B 9/42                                        | (11) EP2602323                                        |
| (51) B32B 5/18                                        | E06B 9/50                                             | (00) 09.12.2024                                       |
| B32B 27/08                                            | (00) Assignment                                       | (51) A01K 67/027                                      |
| B32B 27/32                                            | (71) Revelyst Operations LLC                          | C07K 16/00                                            |
| (00) Assignment                                       | (73) Revelyst Operations LLC                          | C12N 15/13                                            |
| (71) OmniAb Operations, Inc.                          | (11) EP2281170                                        | (00) Change of owner(s) name                          |
| (73) OmniAb Operations, Inc.                          | (00) 09.12.2024                                       | (71) Siemens Healthineers Endovascular Robotics, Inc. |
| (11) EP2336329                                        | (51) F41C 33/04                                       | (73) Siemens Healthineers Endovascular Robotics, Inc. |
| (00) 09.12.2024                                       | (00) Assignment                                       | (11) EP2488245                                        |
| (51) A01K 67/027                                      | (71) Revelyst Operations LLC                          |                                                       |
| C12N 15/13                                            | (73) Revelyst Operations LLC                          |                                                       |
| (00) Change of owner(s) name                          | (11) EP2307845                                        |                                                       |
| (71) Sago Strategic Solutions LLC                     | (00) 09.12.2024                                       |                                                       |

|                                                       |                                                       |                                          |
|-------------------------------------------------------|-------------------------------------------------------|------------------------------------------|
| (00) 04.12.2024                                       | (73) Siemens Healthineers Endovascular Robotics, Inc. | (00) Assignment                          |
| (51) A61M 25/01                                       | (11) EP2542290                                        | (71) JB-HOLDING B.V.                     |
| B25J 9/16                                             | (00) 04.12.2024                                       | (73) JB-HOLDING B.V.                     |
| A61B 34/37                                            | (51) A61B 17/00                                       | (11) 2027719                             |
| (00) Change of owner(s) name                          | A61M 25/00                                            | (00) 10.12.2024                          |
| (71) Siemens Healthineers Endovascular Robotics, Inc. | A61M 25/01                                            | (51) A47B 5/00                           |
| (73) Siemens Healthineers Endovascular Robotics, Inc. | A61B 34/30                                            | A47B 85/06                               |
| (11) EP2542295                                        | A61B 34/37                                            | (00) Assignment                          |
| (00) 04.12.2024                                       | A61B 90/00                                            | (71) Syngenta Crop Protection AG         |
| (51) A61B 17/00                                       | (00) Change of owner(s) name                          | (73) Syngenta Crop Protection AG         |
| A61M 31/00                                            | (71) Siemens Healthineers Endovascular Robotics, Inc. | (11) 350084                              |
| A61M 37/00                                            | (73) Siemens Healthineers Endovascular Robotics, Inc. | (00) 05.12.2024                          |
| A61B 34/30                                            | (11) EP3406291                                        | (00) Merge                               |
| A61B 90/00                                            | (00) 04.12.2024                                       | (71) Syngenta Crop Protection AG         |
| (00) Change of owner(s) name                          | (51) A61B 17/00                                       | (73) Syngenta Crop Protection AG         |
| (71) DEME Offshore Holding NV                         | A61M 25/01                                            | (11) 350085                              |
| (73) DEME Offshore Holding NV                         | A61M 25/09                                            | (00) 05.12.2024                          |
| (11) EP2890626                                        | A61B 34/30                                            | (00) Merge                               |
| (00) 05.12.2024                                       | A61B 90/98                                            | (71) DEME Offshore Holding NV            |
| (51) E02B 17/00                                       | (00) Change of owner(s) name                          | (73) DEME Offshore Holding NV            |
| F03D 13/10                                            | (71) Renson NV                                        | (11) EP2935080                           |
| F03D 13/25                                            | (73) Renson NV                                        | (00) 05.12.2024                          |
| (00) Assignment                                       | (11) EP3431678                                        | (51) B66C 13/06                          |
| (71) International Emergency Services SL              | (00) 12.12.2024                                       | B66C 23/18                               |
| (73) International Emergency Services SL              | (51) B60J 1/20                                        | B66C 23/52                               |
| (11) EP2136866                                        | E04F 10/06                                            | F03D 1/06                                |
| (00) 12.12.2024                                       | E06B 9/46                                             | F03D 13/10                               |
| (51) A61M 16/00                                       | (00) Assignment                                       | F03D 13/25                               |
| A61M 16/08                                            | (71) Renson NV                                        | F03D 13/40                               |
| A61M 16/12                                            | (73) Renson NV                                        | (00) Assignment                          |
| A61M 16/14                                            | (11) EP3372773                                        | (71) DEME Offshore Holding NV            |
| (00) Assignment                                       | (00) 12.12.2024                                       | (73) DEME Offshore Holding NV            |
| (71) thyssenkrupp AG                                  | (51) E06B 9/174                                       | (11) EP2956400                           |
| TK Home Solutions B.V.                                | E06B 9/50                                             | (00) 05.12.2024                          |
| (73) TK Home Solutions B.V.                           | (00) Assignment                                       | (51) B66C 13/06                          |
| (11) EP3176119                                        | (71) iSi Automotive Holding GmbH                      | B66C 23/18                               |
| (00) 06.12.2024                                       | (73) iSi Automotive Holding GmbH                      | B66C 23/52                               |
| (51) B66B 9/08                                        | (11) EP2621297                                        | F03D 13/10                               |
| (00) Change of owner(s) name                          | (00) 05.12.2024                                       | (00) Assignment                          |
| (71) TK Home Solutions B.V.                           | (51) A42B 3/04                                        | (71) OmniAb Operations, Inc.             |
| (73) TK Home Solutions B.V.                           | (00) Assignment                                       | (73) OmniAb Operations, Inc.             |
| (11) EP3176119                                        | (71) Yara Marine Technologies AB                      | (11) EP2602323                           |
| (00) 06.12.2024                                       | (73) Manta Marine Technologies AB                     | (00) 09.12.2024                          |
| (51) B66B 9/08                                        | (11) EP3652064                                        | (51) A01K 67/027                         |
| (00) Assignment                                       | (00) 03.12.2024                                       | C07K 16/00                               |
| (71) Syngenta Crop Protection AG                      | (51) B63H 3/10                                        | C12N 15/13                               |
| (73) Syngenta Crop Protection AG                      | B63H 21/21                                            | (00) Change of owner(s) name             |
| (11) 350096                                           | F02D 29/02                                            | (71) Syngenta Crop Protection AG         |
| (00) 05.12.2024                                       | F02D 31/00                                            | (73) Syngenta Crop Protection AG         |
| (00) Merge                                            | F02D 35/02                                            | (11) 350086                              |
| (71) Adeia Guides Inc.                                | F02D 41/14                                            | (00) 05.12.2024                          |
| (73) Adeia Guides Inc.                                | (00) Merge                                            | (00) Merge                               |
| (11) EP2522127                                        | (71) Revelyst Operations LLC                          | (71) Syngenta Crop Protection AG         |
| (00) 12.12.2024                                       | (73) Revelyst Operations LLC                          | (73) Syngenta Crop Protection AG         |
| (51) H04N 5/44                                        | (11) EP2499449                                        | (11) 350087                              |
| (00) Change of owner(s) name                          | (00) 09.12.2024                                       | (00) 05.12.2024                          |
| (71) TK Home Solutions B.V.                           | (51) F41A 23/42                                       | (00) Merge                               |
| (73) TK Home Solutions B.V.                           | F41C 33/02                                            | (71) International Emergency Services SL |
| (11) EP3286123                                        | (00) Assignment                                       | (73) International Emergency Services SL |
| (00) 06.12.2024                                       | (71) International Emergency Services SL              | (11) EP3573693                           |
| (51) B66B 9/08                                        | (73) International Emergency Services SL              | (00) 12.12.2024                          |
| (00) Change of owner(s) name                          | (11) EP3019228                                        | (51) A61M 16/00                          |
| (71) Siemens Healthineers Endovascular Robotics, Inc. | (00) 12.12.2024                                       | (00) Assignment                          |
|                                                       | (51) A61M 16/00                                       | (71) DELTA ELECTRONICS, INC.             |
|                                                       |                                                       | (73) DELTA ELECTRONICS, INC.             |
|                                                       |                                                       | (11) EP3245560                           |
|                                                       |                                                       | (00) 10.12.2024                          |

|                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) G03B 21/00<br>H04N 9/31<br>G02B 27/10<br>G02B 5/10                                                                                                                                                   | (11) EP2935074<br>(00) 06.12.2024<br>(51) B66B 9/08<br>(00) Change of owner(s) name                                                                                                                                                                                 | (71) ENEOS Materials Corporation<br>(73) ENEOS Materials Corporation<br>(11) EP3428332<br>(00) 10.12.2024                                                                                                                                                                                                           |
| (00) Assignment                                                                                                                                                                                           | (71) Grünbeck AG                                                                                                                                                                                                                                                    | (51) D04H 3/16<br>D06C 23/04<br>D04H 3/04                                                                                                                                                                                                                                                                           |
| (71) Kokoplant Beheer B.V.<br>(73) Kokoplant Beheer B.V.<br>(11) 2032707<br>(00) 11.12.2024<br>(51) A01G 9/02<br>(00) Assignment                                                                          | (73) Grünbeck AG<br>(11) EP3176484<br>(00) 05.12.2024<br>(51) E03B 7/07<br>E03B 7/09<br>F16L 23/028<br>F16L 23/032<br>F16L 39/00                                                                                                                                    | (00) Assignment<br>(71) Syngenta Crop Protection AG<br>(73) Syngenta Crop Protection AG<br>(11) 350099<br>(00) 05.12.2024<br>(00) Merge                                                                                                                                                                             |
| (71) International Emergency Services SL<br>(73) International Emergency Services SL<br>(11) EP2408504<br>(00) 12.12.2024<br>(51) A61M 16/00<br>A61M 16/04<br>A61M 16/08<br>A61M 16/20<br>(00) Assignment | (00) Change of Legal Entity<br>(71) RIVA GmbH Engineering<br>(73) RIVA GmbH Engineering<br>(11) EP4214098<br>(00) 06.12.2024<br>(51) B60T 7/10<br>B60T 11/16<br>B60T 11/30<br>B60T 17/22<br>B62K 23/06<br>B62L 3/02<br>F16D 48/02<br>F16D 125/16<br>(00) Assignment | (71) Siemens Healthineers Endovascular Robotics, Inc.<br>(73) Siemens Healthineers Endovascular Robotics, Inc.<br>(11) EP3389759<br>(00) 04.12.2024<br>(51) A61B 6/00<br>A61B 6/12<br>A61B 17/00<br>A61M 5/00<br>A61M 25/01<br>A61M 25/09<br>A61M 31/00<br>A61B 34/00<br>A61B 34/30<br>A61B 90/00                   |
| (71) DELTA ELECTRONICS, INC.<br>(73) DELTA ELECTRONICS, INC.<br>(11) EP3278017<br>(00) 10.12.2024<br>(51) F21V 8/00<br>G03B 21/20<br>H04N 9/31<br>(00) Assignment                                         | (71) TK Home Solutions B.V.<br>thyssenkrupp AG<br>(73) TK Home Solutions B.V.<br>(11) EP3406555<br>(00) 06.12.2024<br>(51) B66B 1/34<br>B66B 5/00<br>B66B 9/08<br>(00) Change of owner(s) name                                                                      | (00) Change of owner(s) name<br>(71) Renson NV<br>(73) Renson NV<br>(11) EP3201417<br>(00) 12.12.2024<br>(51) E04B 2/88<br>E04F 10/06<br>E06B 9/58<br>(00) Assignment                                                                                                                                               |
| (71) Revelyst Operations LLC<br>(73) Revelyst Operations LLC<br>(11) EP3433563<br>(00) 09.12.2024<br>(51) F41C 33/02<br>F41G 1/387<br>(00) Assignment                                                     | (71) TK Home Solutions B.V.<br>(73) TK Home Solutions B.V.<br>(11) EP3406555<br>(00) 06.12.2024<br>(51) B66B 1/34<br>B66B 5/00<br>B66B 9/08<br>(00) Assignment                                                                                                      | (71) Grünbeck AG<br>(73) Grünbeck AG<br>(11) EP3552691<br>(00) 05.12.2024<br>(51) B01D 61/42<br>C02F 1/469<br>C02F 5/10<br>(00) Change of Legal Entity                                                                                                                                                              |
| (71) COSETTE PHARMACEUTICALS, INC<br>(73) COSETTE PHARMACEUTICALS, INC<br>(11) EP2916856<br>(00) 05.12.2024<br>(51) A61K 9/08<br>A61K 38/12<br>A61P 15/00<br>C07K 7/64<br>(00) Assignment                 | (71) Grünbeck AG<br>(73) Grünbeck AG<br>(11) EP3118163<br>(00) 05.12.2024<br>(51) B01D 39/00<br>B01J 20/02<br>B01J 20/32<br>B01J 20/34<br>C02F 1/00<br>C02F 1/28<br>C02F 1/42<br>C02F 1/467<br>C02F 5/00<br>B01J 49/50<br>(00) Change of Legal Entity               | (71) Siemens Healthineers Endovascular Robotics, Inc.<br>(73) Siemens Healthineers Endovascular Robotics, Inc.<br>(11) EP3084951<br>(00) 04.12.2024<br>(51) A61B 17/00<br>A61M 25/01<br>H02P 3/06<br>H02P 8/00<br>H02P 8/20<br>A61B 34/30<br>A61B 90/00<br>H02P 21/18<br>H02P 21/20<br>(00) Change of owner(s) name |
| (71) TK Home Solutions B.V.<br>thyssenkrupp AG<br>(73) TK Home Solutions B.V.<br>(11) EP3208225<br>(00) 06.12.2024<br>(51) B66B 9/08<br>(00) Change of owner(s) name                                      | (71) Renson NV<br>(73) Renson NV<br>(11) EP3478922<br>(00) 12.12.2024<br>(51) E06B 9/174<br>E06B 9/42<br>E06B 9/58<br>(00) Assignment                                                                                                                               | (71) EQUANS Zuid-Nederland B.V.<br>(73) EQUANS Zuid-Nederland B.V.<br>(11) 2027621<br>(00) 10.12.2024<br>(51) F01P 3/12                                                                                                                                                                                             |
| (71) TK Home Solutions B.V.<br>(73) TK Home Solutions B.V.<br>(11) EP3208225<br>(00) 06.12.2024<br>(51) B66B 9/08<br>(00) Assignment                                                                      | (71) TK Home Solutions B.V.<br>(73) TK Home Solutions B.V.<br>(11) EP3208225<br>(00) 06.12.2024<br>(51) B66B 9/08<br>(00) Assignment                                                                                                                                |                                                                                                                                                                                                                                                                                                                     |



|                                          |                                  |                                |
|------------------------------------------|----------------------------------|--------------------------------|
| F25B 1/00                                | (00) 05.12.2024                  | C08K 3/36                      |
| F01P 7/16                                | (51) F17C 1/16                   | C08K 5/375                     |
| B01F 7/22                                | F17C 1/06                        | C08K 5/50                      |
| H01L 21/67                               | (00) Assignment                  | C08L 61/34                     |
| F28F 13/12                               | (71) Odor CleanTech B.V.         | H01L 23/29                     |
| B65D 88/06                               | (73) Odor CleanTech B.V.         | H01L 23/31                     |
| B01F 7/20                                | (11) 2030328                     | C08G 59/64                     |
| B01F 15/06                               | (00) 06.12.2024                  | C08G 59/50                     |
| (00) Assignment                          | (51) A61L 9/05                   | C08G 59/56                     |
| (71) Adeia Imaging LLC                   | (00) Assignment                  | C08G 59/62                     |
| (73) Adeia Imaging LLC                   | (71) DELTA ELECTRONICS, INC.     | C08G 59/68                     |
| (11) EP3876510                           | (73) DELTA ELECTRONICS, INC.     | C08L 61/00                     |
| (00) 05.12.2024                          | (11) EP3610644                   | (00) Assignment                |
| (51) H04N 13/243                         | (00) 10.12.2024                  | (71) Revelyst Operations LLC   |
| G06T 7/557                               | (51) H04N 9/31                   | (73) Revelyst Operations LLC   |
| G06T 7/50                                | G02B 27/09                       | (11) EP4011240                 |
| G06T 7/55                                | (00) Assignment                  | (00) 09.12.2024                |
| G06T 7/70                                | (71) Duarib Group                | (51) A45F 5/02                 |
| H01L 27/146                              | (73) Duarib Group                | F41C 33/04                     |
| H04N 1/195                               | (11) EP3933157                   | (00) Assignment                |
| H04N 25/13                               | (00) 09.12.2024                  | (71) Biocorp Production S.A.S. |
| (00) Assignment                          | (51) E05D 15/54                  | (73) Biocorp Production S.A.S. |
| (71) Eurotramp-Projects GmbH             | E06C 1/393                       | (11) EP4262934                 |
| (73) Eurotramp-Projects GmbH             | E05D 11/10                       | (00) 05.12.2024                |
| (11) EP3875158                           | E06C 1/397                       | (51) A61M 5/32                 |
| (00) 10.12.2024                          | E06C 7/14                        | A61M 5/50                      |
| (51) A63B 4/00                           | E06C 7/18                        | H04B 5/72                      |
| A63B 17/04                               | E06C 7/46                        | (00) Change of Legal Entity    |
| A63B 5/12                                | (00) Change of owner(s) name     |                                |
| (00) Assignment                          | (71) NationsBenefits, LLC        |                                |
| (71) Manta Marine Technologies AB        | (73) NationsBenefits, LLC        |                                |
| (73) Manta Marine Technologies AB        | (11) EP3497601                   |                                |
| (11) EP3652064                           | (00) 10.12.2024                  |                                |
| (00) 03.12.2024                          | (51) G16H 20/60                  |                                |
| (51) B63H 3/10                           | G16H 50/20                       |                                |
| B63H 21/21                               | G16H 50/70                       |                                |
| F02D 29/02                               | (00) Assignment                  |                                |
| F02D 31/00                               | (71) Duarib Group                |                                |
| F02D 35/02                               | (73) Duarib Group                |                                |
| F02D 41/14                               | (11) EP3940189                   |                                |
| (00) Change of owner(s) name             | (00) 09.12.2024                  |                                |
| (71) Renson NV                           | (51) E06C 1/393                  |                                |
| (73) Renson NV                           | E06C 1/397                       |                                |
| (11) 2028632                             | E06C 7/18                        |                                |
| (00) 12.12.2024                          | E06C 7/46                        |                                |
| (51) E06B 9/58                           | E06C 7/14                        |                                |
| E04B 2/96                                | E05D 11/10                       |                                |
| (00) Assignment                          | E05D 15/54                       |                                |
| (71) International Emergency Services SL | (00) Change of owner(s) name     |                                |
| (73) International Emergency Services SL | (71) ENEOS Materials Corporation |                                |
| (11) EP3423136                           | (73) ENEOS Materials Corporation |                                |
| (00) 12.12.2024                          | (11) EP3450499                   |                                |
| (51) A61M 16/00                          | (00) 10.12.2024                  |                                |
| (00) Assignment                          | (51) C08G 59/24                  |                                |
| (71) Renson NV                           | C08L 61/34                       |                                |
| (73) Renson NV                           | C08G 59/50                       |                                |
| (11) EP3656965                           | C08G 59/62                       |                                |
| (00) 12.12.2024                          | C08G 59/64                       |                                |
| (51) E06B 9/42                           | C08L 79/04                       |                                |
| E06B 9/50                                | C08G 14/06                       |                                |
| E06B 9/58                                | (00) Assignment                  |                                |
| E06B 9/174                               | (71) ENEOS Materials Corporation |                                |
| E04F 10/06                               | (73) ENEOS Materials Corporation |                                |
| (00) Assignment                          | (11) EP3553129                   |                                |
| (71) SKF Magnetic Mechatronics           | (00) 10.12.2024                  |                                |
| (73) SKF Magnetic Mechatronics           | (51) C08L 63/00                  |                                |
| (11) EP3784951                           | C08G 59/24                       |                                |

**TVH**

**Topografieën van halfgeleiderproducten.**

**Depots of topographies of semi-conductor products.**

# UP1

## Europese octrooien met geregistreerde eenheidswerking. European patents with registered Unitary Effect.

|                |                |                |
|----------------|----------------|----------------|
| (11) EP3654881 | (11) EP3818680 | (11) EP4263314 |
| (11) EP3624015 | (11) EP3936723 | (11) EP4178215 |
| (11) EP3894400 | (11) EP3941802 | (11) EP4027654 |
| (11) EP3919261 | (11) EP3761223 | (11) EP4086516 |
| (11) EP4042392 | (11) EP3771363 | (11) EP4253792 |
| (11) EP3925651 | (11) EP3983036 | (11) EP4237215 |
| (11) EP3881520 | (11) EP4007852 | (11) EP4032518 |
| (11) EP3307149 | (11) EP3994104 | (11) EP4063112 |
| (11) EP3449842 | (11) EP3891336 | (11) EP4184295 |
| (11) EP3545881 | (11) EP3837582 | (11) EP4180130 |
| (11) EP3578116 | (11) EP3838270 | (11) EP4193829 |
| (11) EP3756613 | (11) EP3895768 | (11) EP4186472 |
| (11) EP4011512 | (11) EP3900977 | (11) EP4190957 |
| (11) EP3857133 | (11) EP3848486 | (11) EP4089603 |
| (11) EP3989108 | (11) EP3764354 | (11) EP4274753 |
| (11) EP3945938 | (11) EP3955942 | (11) EP4259727 |
| (11) EP3089727 | (11) EP3986680 | (11) EP4130382 |
| (11) EP3137400 | (11) EP3976323 | (11) EP4380748 |
| (11) EP3060180 | (11) EP3989904 | (11) EP4276423 |
| (11) EP3373918 | (11) EP3999726 | (11) EP4137374 |
| (11) EP3377306 | (11) EP4025096 | (11) EP4313470 |
| (11) EP3502243 | (11) EP4021792 | (11) EP3108962 |
| (11) EP3538757 | (11) EP3907790 | (11) EP3210541 |
| (11) EP3561059 | (11) EP3925461 | (11) EP3538287 |
| (11) EP3806784 | (11) EP4062124 | (11) EP3541173 |
| (11) EP3833254 | (11) EP4090863 | (11) EP3587803 |
| (11) EP3913293 | (11) EP4031079 | (11) EP3641894 |
| (11) EP3498320 | (11) EP3961604 | (11) EP3773467 |
| (11) EP3635394 | (11) EP4010123 | (11) EP2685927 |
| (11) EP3634900 | (11) EP4029070 | (11) EP2704766 |
| (11) EP3864388 | (11) EP4045260 | (11) EP2956465 |
| (11) EP4166083 | (11) EP4055701 | (11) EP3478363 |
| (11) EP2773183 | (11) EP4021933 | (11) EP3700614 |
| (11) EP2967095 | (11) EP4024309 | (11) EP3845320 |
| (11) EP3325932 | (11) EP4005183 | (11) EP3637206 |
| (11) EP3361982 | (11) EP4071289 | (11) EP3724152 |
| (11) EP3407730 | (11) EP4083299 | (11) EP3717143 |
| (11) EP3519163 | (11) EP4071290 | (11) EP3682069 |
| (11) EP3506953 | (11) EP4068313 | (11) EP3681877 |
| (11) EP3507659 | (11) EP4113140 | (11) EP3775625 |
| (11) EP3556010 | (11) EP4124221 | (11) EP3934422 |
| (11) EP3704111 | (11) EP3848691 | (11) EP3824182 |
| (11) EP3712632 | (11) EP3854962 | (11) EP3769044 |
| (11) EP3749211 | (11) EP3858638 | (11) EP3906123 |
| (11) EP3753030 | (11) EP3858954 | (11) EP4003816 |
| (11) EP3811250 | (11) EP4036752 | (11) EP3986364 |
| (11) EP3802193 | (11) EP4119892 | (11) EP3543666 |
| (11) EP3529746 | (11) EP4125903 | (11) EP3757521 |
| (11) EP3665257 | (11) EP4157960 | (11) EP3781043 |
| (11) EP3870027 | (11) EP4233163 | (11) EP3987380 |
| (11) EP3620102 | (11) EP3992413 | (11) EP3877092 |
| (11) EP3859488 | (11) EP4177110 | (11) EP3899150 |
| (11) EP3621390 | (11) EP4087394 | (11) EP3753993 |
| (11) EP3790649 | (11) EP4107804 | (11) EP4011149 |
| (11) EP3817830 | (11) EP4211025 | (11) EP3760969 |
|                | (11) EP4241275 | (11) EP4014913 |

|                |                |                |
|----------------|----------------|----------------|
| (11) EP4005645 | (11) EP4071100 | (11) EP4127563 |
| (11) EP3986852 | (11) EP3916234 | (11) EP4121719 |
| (11) EP4196403 | (11) EP4103567 | (11) EP4131789 |
| (11) EP4054669 | (11) EP4102974 | (11) EP4222504 |
| (11) EP4071748 | (11) EP4068213 | (11) EP3252450 |
| (11) EP4076230 | (11) EP4176480 | (11) EP3402204 |
| (11) EP4086382 | (11) EP4232430 | (11) EP3538612 |
| (11) EP4015689 | (11) EP4050168 | (11) EP3672527 |
| (11) EP3875880 | (11) EP4241629 | (11) EP4271639 |
| (11) EP4134139 | (11) EP4041177 | (11) EP4280881 |
| (11) EP4118244 | (11) EP3964334 | (11) EP4134486 |
| (11) EP4058503 | (11) EP4002951 | (11) EP4109795 |
| (11) EP4211704 | (11) EP4118782 | (11) EP4246114 |
| (11) EP4140984 | (11) EP4121466 | (11) EP4067270 |
| (11) EP4226169 | (11) EP4128587 | (11) EP4147938 |
| (11) EP4210984 | (11) EP4140157 | (11) EP4332195 |
| (11) EP4256276 | (11) EP4208007 | (11) EP4245683 |
| (11) EP4255323 | (11) EP4221550 | (11) EP4249701 |
| (11) EP4016893 | (11) EP3994559 | (11) EP4279450 |
| (11) EP4039133 | (11) EP4271651 | (11) EP3809475 |
| (11) EP4075714 | (11) EP4151328 | (11) EP3842680 |
| (11) EP3869141 | (11) EP4147592 | (11) EP3860440 |
| (11) EP4056160 | (11) EP4299204 | (11) EP3934463 |
| (11) EP4179610 | (11) EP4299402 | (11) EP3924332 |
| (11) EP4171510 | (11) EP2941192 | (11) EP3983215 |
| (11) EP4151794 | (11) EP3278173 | (11) EP4038855 |
| (11) EP4294240 | (11) EP3634720 | (11) EP4026951 |
| (11) EP4295005 | (11) EP3628223 | (11) EP4047282 |
| (11) EP4288700 | (11) EP3818372 | (11) EP3882125 |
| (11) EP4248804 | (11) EP3818617 | (11) EP4121856 |
| (11) EP4253926 | (11) EP3822521 | (11) EP4229243 |
| (11) EP4284691 | (11) EP3872273 | (11) EP4217165 |
| (11) EP4355470 | (11) EP3694227 | (11) EP4216784 |
| (11) EP3171871 | (11) EP3945504 | (11) EP4214817 |
| (11) EP3177275 | (11) EP4241767 | (11) EP4033120 |
| (11) EP3500208 | (11) EP4234389 | (11) EP4283140 |
| (11) EP3570996 | (11) EP3088888 | (11) EP4327705 |
| (11) EP3447711 | (11) EP3177914 | (11) EP3129308 |
| (11) EP3566011 | (11) EP3354683 | (11) EP3351662 |
| (11) EP3648689 | (11) EP3488973 | (11) EP3519792 |
| (11) EP4105424 | (11) EP3682195 | (11) EP3577326 |
| (11) EP4145290 | (11) EP3849777 | (11) EP3473216 |
| (11) EP4202166 | (11) EP3810842 | (11) EP3622187 |
| (11) EP4278557 | (11) EP3739235 | (11) EP3698129 |
| (11) EP4282635 | (11) EP3954257 | (11) EP3389444 |
| (11) EP4287670 | (11) EP3971110 | (11) EP3687200 |
| (11) EP3329629 | (11) EP3956471 | (11) EP3747277 |
| (11) EP3281137 | (11) EP3790715 | (11) EP3808305 |
| (11) EP3563133 | (11) EP4006501 | (11) EP3877190 |
| (11) EP3634920 | (11) EP4100162 | (11) EP3855626 |
| (11) EP3894235 | (11) EP4211700 | (11) EP3969764 |
| (11) EP4027074 | (11) EP4284587 | (11) EP3878342 |
| (11) EP4051451 | (11) EP3947561 | (11) EP3750782 |
| (11) EP4106901 | (11) EP3941499 | (11) EP3751321 |
| (11) EP3969432 | (11) EP4025879 | (11) EP3975595 |
| (11) EP3757640 | (11) EP3974186 | (11) EP4021096 |
| (11) EP3914442 | (11) EP4078073 | (11) EP4031552 |
| (11) EP3857538 | (11) EP3951434 | (11) EP4057603 |
| (11) EP3987846 | (11) EP3978709 | (11) EP4027094 |
| (11) EP3993883 | (11) EP4191543 | (11) EP4016092 |
| (11) EP3919964 | (11) EP4063140 | (11) EP4039896 |
| (11) EP4023801 | (11) EP3195197 | (11) EP4313930 |

|                |                |                |
|----------------|----------------|----------------|
| (11) EP4162332 | (11) EP2714276 | (11) EP3741500 |
| (11) EP4214678 | (11) EP3184035 | (11) EP3747642 |
| (11) EP4222386 | (11) EP3393272 | (11) EP3766585 |
| (11) EP4263101 | (11) EP3254113 | (11) EP3948033 |
| (11) EP4262504 | (11) EP3273921 | (11) EP3945935 |
| (11) EP4005479 | (11) EP3354388 | (11) EP3947052 |
| (11) EP4273568 | (11) EP3260409 | (11) EP3863925 |
| (11) EP4290209 | (11) EP3463699 | (11) EP3935218 |
| (11) EP4301488 | (11) EP3463364 | (11) EP3990759 |
| (11) EP4348321 | (11) EP3490632 | (11) EP3921444 |
| (11) EP4327209 | (11) EP3512937 | (11) EP4022426 |
| (11) EP4243388 | (11) EP3656455 | (11) EP3938662 |
| (11) EP4306385 | (11) EP3498864 | (11) EP4021526 |
| (11) EP4233643 | (11) EP3496424 | (11) EP3948401 |
| (11) EP3516396 | (11) EP3493662 | (11) EP3957270 |
| (11) EP3912449 | (11) EP3471094 | (11) EP3967063 |
| (11) EP4064046 | (11) EP3596810 | (11) EP4055400 |
| (11) EP4117828 | (11) EP3619379 | (11) EP3956995 |
| (11) EP4146335 | (11) EP3658146 | (11) EP3936195 |
| (11) EP4125028 | (11) EP3661449 | (11) EP4050319 |
| (11) EP4294218 | (11) EP3597006 | (11) EP3875047 |
| (11) EP4260760 | (11) EP3681345 | (11) EP3876209 |
| (11) EP4243371 | (11) EP3678556 | (11) EP3971021 |
| (11) EP4310618 | (11) EP3615899 | (11) EP4123851 |
| (11) EP3595563 | (11) EP3612505 | (11) EP3954196 |
| (11) EP3942323 | (11) EP3714276 | (11) EP3957518 |
| (11) EP3776031 | (11) EP3673245 | (11) EP3932466 |
| (11) EP3856311 | (11) EP3875964 | (11) EP4141127 |
| (11) EP3930488 | (11) EP3892358 | (11) EP4001381 |
| (11) EP4010060 | (11) EP3895561 | (11) EP4187331 |
| (11) EP3931086 | (11) EP3683131 | (11) EP4006960 |
| (11) EP4025541 | (11) EP3556329 | (11) EP4049567 |
| (11) EP3970971 | (11) EP3540831 | (11) EP4090872 |
| (11) EP4071620 | (11) EP3591736 | (11) EP4110583 |
| (11) EP4175262 | (11) EP3571930 | (11) EP4111022 |
| (11) EP4334888 | (11) EP3752113 | (11) EP4045029 |
| (11) EP4320491 | (11) EP3758474 | (11) EP4139581 |
| (11) EP4234256 | (11) EP3752451 | (11) EP4176106 |
| (11) EP3664090 | (11) EP3766151 | (11) EP4173002 |
| (11) EP3947291 | (11) EP3765389 | (11) EP4178481 |
| (11) EP3983143 | (11) EP3997504 | (11) EP4208598 |
| (11) EP4214704 | (11) EP3814032 | (11) EP4192638 |
| (11) EP4226115 | (11) EP3811506 | (11) EP4205259 |
| (11) EP3687690 | (11) EP3752883 | (11) EP4193091 |
| (11) EP3771622 | (11) EP3807131 | (11) EP4070510 |
| (11) EP3755300 | (11) EP3760738 | (11) EP4237684 |
| (11) EP3983321 | (11) EP3814790 | (11) EP4144727 |
| (11) EP4009935 | (11) EP3788363 | (11) EP4259584 |
| (11) EP4088657 | (11) EP3775133 | (11) EP4263009 |
| (11) EP3425598 | (11) EP3775985 | (11) EP4258863 |
| (11) EP3593715 | (11) EP3866648 | (11) EP4085285 |
| (11) EP3791808 | (11) EP3874158 | (11) EP4249747 |
| (11) EP3917356 | (11) EP3866770 | (11) EP4057172 |
| (11) EP3959335 | (11) EP3787991 | (11) EP4216180 |
| (11) EP4038595 | (11) EP3811466 | (11) EP4013109 |
| (11) EP4054372 | (11) EP3779516 | (11) EP4040810 |
| (11) EP3357048 | (11) EP3804033 | (11) EP4049737 |
| (11) EP3506836 | (11) EP3894103 | (11) EP4086156 |
| (11) EP3673866 | (11) EP3833805 | (11) EP4141092 |
| (11) EP3952641 | (11) EP3878868 | (11) EP4132178 |
| (11) EP3944829 | (11) EP3680132 | (11) EP4372202 |
| (11) EP4140819 | (11) EP3733566 | (11) EP4209242 |

|                |                |                |
|----------------|----------------|----------------|
| (11) EP4197832 | (11) EP3969766 | (11) EP3907417 |
| (11) EP4162342 | (11) EP3976892 | (11) EP3789802 |
| (11) EP4298178 | (11) EP4001165 | (11) EP3931458 |
| (11) EP4312851 | (11) EP4062114 | (11) EP4000018 |
| (11) EP4209494 | (11) EP4077896 | (11) EP4037824 |
| (11) EP4179967 | (11) EP4016793 | (11) EP4021548 |
| (11) EP4230162 | (11) EP3872716 | (11) EP4014611 |
| (11) EP2902230 | (11) EP4071430 | (11) EP4032217 |
| (11) EP3275506 | (11) EP4079954 | (11) EP4038990 |
| (11) EP3299250 | (11) EP4104420 | (11) EP3969879 |
| (11) EP3437982 | (11) EP4164423 | (11) EP4058146 |
| (11) EP3621496 | (11) EP4146599 | (11) EP4077792 |
| (11) EP3692250 | (11) EP4196772 | (11) EP4076086 |
| (11) EP3551044 | (11) EP4082177 | (11) EP4012239 |
| (11) EP3379337 | (11) EP4216898 | (11) EP4163569 |
| (11) EP3584221 | (11) EP4208371 | (11) EP3882565 |
| (11) EP3467454 | (11) EP4116062 | (11) EP3889449 |
| (11) EP3647104 | (11) EP4130172 | (11) EP3958277 |
| (11) EP3621446 | (11) EP4236689 | (11) EP4105001 |
| (11) EP3630007 | (11) EP4232708 | (11) EP4112035 |
| (11) EP3577728 | (11) EP4243792 | (11) EP4100676 |
| (11) EP3590111 | (11) EP4205186 | (11) EP4101091 |
| (11) EP3723500 | (11) EP4092402 | (11) EP4126613 |
| (11) EP3613058 | (11) EP4235928 | (11) EP4173353 |
| (11) EP3623304 | (11) EP4253458 | (11) EP4252408 |
| (11) EP3732219 | (11) EP4289631 | (11) EP4259532 |
| (11) EP3732315 | (11) EP4108059 | (11) EP4247282 |
| (11) EP3877117 | (11) EP4177193 | (11) EP4039083 |
| (11) EP3661466 | (11) EP4324564 | (11) EP4242149 |
| (11) EP3668249 | (11) EP4177032 | (11) EP4273339 |
| (11) EP3701066 | (11) EP4287277 | (11) EP4272769 |
| (11) EP3729965 | (11) EP4281618 | (11) EP4101361 |
| (11) EP3746848 | (11) EP4281280 | (11) EP4119031 |
| (11) EP3627507 | (11) EP4278086 | (11) EP4202293 |
| (11) EP3674396 | (11) EP4106115 | (11) EP4198100 |
| (11) EP3669772 | (11) EP4210043 | (11) EP4312986 |
| (11) EP3758812 | (11) EP4239558 | (11) EP4288637 |
| (11) EP3987362 | (11) EP4321836 | (11) EP4338204 |
| (11) EP3783099 | (11) EP4252581 | (11) EP4204719 |
| (11) EP3870847 | (11) EP4257784 | (11) EP4227598 |
| (11) EP3805231 | (11) EP4275879 | (11) EP4324984 |
| (11) EP3887228 | (11) EP2586014 | (11) EP3445561 |
| (11) EP3854552 | (11) EP3086924 | (11) EP3542350 |
| (11) EP3701898 | (11) EP3308961 | (11) EP3475457 |
| (11) EP3741965 | (11) EP3395381 | (11) EP3382674 |
| (11) EP3722072 | (11) EP3458591 | (11) EP3562089 |
| (11) EP3741747 | (11) EP3717975 | (11) EP3636069 |
| (11) EP3829006 | (11) EP3615120 | (11) EP3684544 |
| (11) EP4001608 | (11) EP3747111 | (11) EP3770318 |
| (11) EP3827749 | (11) EP3583397 | (11) EP3594239 |
| (11) EP3918470 | (11) EP3664591 | (11) EP3686445 |
| (11) EP3918412 | (11) EP3649768 | (11) EP3842183 |
| (11) EP3969518 | (11) EP3604567 | (11) EP3749719 |
| (11) EP3924680 | (11) EP3607981 | (11) EP3752440 |
| (11) EP4003815 | (11) EP3702660 | (11) EP3857613 |
| (11) EP3990861 | (11) EP3854247 | (11) EP3852930 |
| (11) EP3997174 | (11) EP3617592 | (11) EP3915630 |
| (11) EP3989705 | (11) EP3759872 | (11) EP3935355 |
| (11) EP3914800 | (11) EP3821479 | (11) EP3911243 |
| (11) EP4003183 | (11) EP3847830 | (11) EP3887905 |
| (11) EP4017826 | (11) EP3713254 | (11) EP3976884 |
| (11) EP4009995 | (11) EP3901924 | (11) EP4051483 |

|                |                |
|----------------|----------------|
| (11) EP4240795 | (11) EP4208237 |
| (11) EP4076412 | (11) EP4216743 |
| (11) EP3988821 | (11) EP4226474 |
| (11) EP4014074 | (11) EP4208292 |
| (11) EP4031027 | (11) EP4219882 |
| (11) EP4130470 | (11) EP4123315 |
| (11) EP3907159 | (11) EP4042997 |
| (11) EP3995747 | (11) EP4149207 |
| (11) EP4155141 | (11) EP4155042 |
| (11) EP4155142 | (11) EP4175225 |
| (11) EP4000748 | (11) EP4324326 |
| (11) EP4126711 | (11) EP4294853 |
| (11) EP4337830 | (11) EP4285191 |
| (11) EP4240580 | (11) EP4363844 |
| (11) EP4153583 | (11) EP4360259 |
| (11) EP4214347 | (11) EP4380414 |
| (11) EP4222481 | (11) EP4268790 |
| (11) EP4296174 | (11) EP4335297 |
| (11) EP4303728 | (11) EP3324346 |
| (11) EP4156195 | (11) EP3462459 |
| (11) EP4304877 | (11) EP3457905 |
| (11) EP4320108 | (11) EP3592990 |
| (11) EP4267347 | (11) EP3723567 |
| (11) EP4262148 | (11) EP3839045 |
| (11) EP4246055 | (11) EP3832299 |
| (11) EP4230782 | (11) EP3765827 |
| (11) EP4236593 | (11) EP4084700 |
| (11) EP4349333 | (11) EP3783531 |
| (11) EP4246064 | (11) EP3790085 |
| (11) EP4349576 | (11) EP4000571 |
| (11) EP3265411 | (11) EP4132398 |
| (11) EP3457159 | (11) EP4045949 |
| (11) EP3582169 | (11) EP4014082 |
| (11) EP3508501 | (11) EP4032565 |
| (11) EP3736312 | (11) EP3862132 |
| (11) EP3797698 | (11) EP3862133 |
| (11) EP3850070 | (11) EP3862134 |
| (11) EP3821062 | (11) EP4033743 |
| (11) EP4000248 | (11) EP3910357 |
| (11) EP3902128 | (11) EP4194611 |
| (11) EP3742213 | (11) EP4135619 |
| (11) EP3964744 | (11) EP4150241 |
| (11) EP3846362 | (11) EP4247800 |
| (11) EP3962689 | (11) EP4224992 |
| (11) EP3983210 | (11) EP4268963 |
| (11) EP4010678 | (11) EP4124536 |
| (11) EP4025353 | (11) EP4186404 |
| (11) EP4042561 | (11) EP4322214 |
| (11) EP4021700 | (11) EP4245787 |
| (11) EP4078262 | (11) EP4274488 |
| (11) EP4008059 | (11) EP4320877 |
| (11) EP4123284 | (11) EP4320774 |
| (11) EP4057023 | (11) EP4313837 |
| (11) EP3901964 | (11) EP4328961 |
| (11) EP4083722 |                |
| (11) EP3922683 |                |
| (11) EP3960057 |                |
| (11) EP3964646 |                |
| (11) EP4008990 |                |
| (11) EP4029735 |                |
| (11) EP4198547 |                |
| (11) EP4019366 |                |

## **UP2**

**Europese octrooien met geregistreerd verzoek ex. artikel 52a Rijksoctrooiwet 1995 (herstel recht op validatie).**

**European patents with registered request ex Article 52a NL Patent Law 1995 (restoration of validation right).**



### **UP3**

**Europese octrooien met een geaccepteerd verzoek ex. artikel 52a Rijsoctrooiwet 1995 (herstel recht op validatie) en complete validatie.**

**European patents with accepted ex Article 52a NL Patent Law 1995 (restoration of validation right) and validation completed.**

**UP4**

**Europese octrooien met een geaccepteerd verzoek ex. artikel 52a Rijsoctrooiwet 1995 (herstel recht op validatie) en geen complete validatie.**

**European patents with accepted request ex Article 52a NL Patent Law 1995 (restoration of validation right) and incomplete validation.**

## **UP5**

**Europese octrooien met een afgewezen verzoek ex. artikel 52a Rijsoctrooiwet 1995 (herstel recht op validatie).**

**European patents with rejected request ex Article 52a NL Patent Law 1995 (restoration of validation right).**

## **UP6**

**Europese octrooien met een ingetrokken verzoek ex. artikel 52a Rijksoctrooiwet 1995 (herstel recht op validatie).**

**European patents with withdrawn request ex Article 52a NL Patent Law 1995 (restoration of validation right).**

**Orde van Octrooigemachtigden / Netherlands Institute of Patent Attorneys**

**Inschrijvingen en uitschrijvingen ex art. 27 lid 5 Uitvoeringsbesluit van de Rijksoctrooiwet 1995.  
Registrations and deregistrations ex Article 27 par. 5 Patent Rules of the NL Patent Law 1995.**