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.

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Introduction

Patent Bulletin

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

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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 voorrangsaanvra(a)g(en)
(32) Datum (datums) van indiening van de voorrangsaanvra(a)g(en)
(33) WIPO Standard ST.3 code die het land van herkomst identificeert dat het nummer van de voorrangsaanvraag toekent; voor internationale octrooiaanvragen die onder de PCT worden ingediend, wordt de code "WO" gebruikt.
(34) Voor indieningen van voorrangsaanvragen 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.

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“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 fillings under the regional or international arrangements, the WIPO Standard ST.3 Code indentifying at least one country party to the Paris Union for which the regional or international application was made.

(40) 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.

(43) Datum waarop de octrooiaanvraag is gepubliceerd.

(44) Datum van publicatie van een onderzochte octrooiaanvraag die nog niet verleend is.

(45) Datum waarop het octrooigeschrift is uitgegeven.

(47) Datum van verlening van het octrooi.

(48) Datum waarop een correctie van een octrooi is uitgegeven.

(51) Internationale Octrooiclassificatie

(54) Korte aanduiding

(62) Nummer en indien mogelijk, de indieningsdatum van de eerdere (octrooi) aanvraag waarvan de voorliggende (octrooi) aanvraag is afgesplitst.

(68) Nummer van het basisoctrooi behorende bij het ABC.

(71) Na(a)m(en) van de aanvrager(s)

(72) Na(a)m(en) van de uitvinder(s) indien ze als zodanig bekend zijn

(73) Na(a)m(en) van de octrooihouder(s)

(74) Na(a)m(en) van de gemachtigde(n)

(75) Na(a)m(en) van uitvinder(s) die tevens aanvrager(s) zijn

(81) Aangewezen landen volgens de PCT

(83) Informatie over depots van micro-organismen

(84) Aangewezen landen bij regionale octrooien

(92) Nummer en datum van de eerste nationale vergunning voor een ABC voor een geneesmiddel of gewasbeschermingsmiddel.

(93) Nummer en datum (en indien van toepassing land van oorsprong) van de eerste EU vergunning voor een ABC voor een geneesmiddel of gewasbeschermingsmiddel.

(94) Berekende expiratiedatum van het ABC.

(95) Het product beschermd door het basisoctrooi en waarvoor (de verlenging van) het ABC is aangevraagd of verleend.

(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.

(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.

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(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.

(48) Date of issuance of a corrected patent document.

(51) International Patent Classification

(54) Title of the invention

(62) Number and, if possible, filling date of the earlier application from which the present document has been divided out.

(68) For an SPC, number of the basic patent and/or, where appropriate, the publication number of the patent document.

(71) Name(s) of the applicant(s)

(72) Name(s) of the inventor(s) if know to be such

(73) Name(s) of grantee(s), holder(s), assignee(s) or owner(s)

(74) Name(s) of the attorney(s) or agent(s)

(75) Name(s) of inventor(s) who is (are) also applicant(s)

(81) Designated States(s) according to the PCT

(83) Information concerning the deposit of microorganisms

(84) Designated Contracting States under regional patent conventions

(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.

(93) For an SPC, number and date and where applicable, country of origin, of the first authorzation to place the product on the market as a medicinal product or plant protection product within a regional economic community.

(94) Calculated date of expiry of the SPC or the duration of the SPC.

(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.

Rubrieken/Headings

NP1

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

(51) A01G 9/04
A01G 22/60
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(21) 2036199
(22) 07.11.2023
(54) Method of growing cut flowers
(71) Belua Beheer B.V.
(74) dr. R.C. van Duijvenbode c.s.
(72) Johannes Adrianus Hendricus Maria van der Sande
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Jacobus Andreas Weerheim
(41) 19.05.2025

(51) A01H 5/12
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(21) 2036191
(22) 06.11.2023
(54) REVERSIBLE MALE STERILITY IN ROCKET PLANTS
(71) Rijk Zwaan Zaadteelt en Zaadhandel B.V.
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Cornelius Maria Petrus van Dun

(51) A01K 79/00
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(21) 2036214
(22) 08.11.2023
(54) Sample device for capturing aquatic animals with a submersible craft
(71) Sub Station Curaçao N.V.
(74) ir. A. Blokland c.s.
(72) Bruce Brandt
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(41) 19.05.2025

(51) A21D 2/32
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(21) 2036181
(22) 03.11.2023
(54) WATER BASED LIQUID BREAD IMPROVER AND METHOD FOR PROVIDING THEREOF
(71) Sonneveld Group B.V.
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Alexander Oostendorp
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Peter Louis Weegels
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(41) 14.05.2025

(51) A23C 9/12
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(21) 2036180
(22) 03.11.2023
(54) METHOD, DEVICE, AND SYSTEM FOR MANUFACTURING MILK POWDER, AND MILK POWDER OBTAINABLE BY SAID METHOD
(71) Vreugdenhil Groep B.V.
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Douwe van der Zee
(41) 14.05.2025

(51) A23L 33/135
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(21) 2038663
(22) 19.09.2024
(54) USAGE OF PROBIOTIC COMPOSITION OF DRAGON FRUIT IN RAPIDLY PROMOTING DEFECATION AND MAINTAINING INTESTINAL MICROBIOTA STABILITY
(71) Sunbird Company Limited
(74) dr. T. Wittop Koning PhD
(72) Olga Stepanko
(41) 14.05.2025

(51) A44B 11/16
(21) 2036492
(22) 12.12.2023
(54) PRESS BUCKLE
(71) Ningbo Yinzhou Mairuo IMP.& EXP. Co., Ltd.
(74) ir. A. Blokland c.s.
(72) Yuan Yan
(31) 2023230145517
(32) 08.11.2023
(33) China

(51) A61B 6/04
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(21) 2036201
(22) 07.11.2023
(54) A GAMMA RADIATION IMAGING SYSTEM, COLLIMATOR ASSEMBLY, AND METHOD
(71) Stichting The Molecular Imaging
(74) ir. J.C. Volmer c.s.
(72) Frederik Johannes Beekman
(41) 19.05.2025

(51) A61F 2/34
(21) 2036182
(22) 03.11.2023
(54) Generic acetabular implant
(71) Universiteit Utrecht Holding B.V.
UMC Utrecht Holding B.V.
(74) dr. ir. G.J.C. Verdijck c.s.
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(41) 14.05.2025

(51) A61F 13/533
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A61F 13/15
(21) 2036184
(22) 03.11.2023
(54) ABSORBENT ARTICLE WITH IMPROVED ATTACHMENT ZONE
(71) Drylock Technologies N.V.
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Steven Smet
Werner van Ingelgem
Tom Derycke
(41) 14.05.2025

(51) A61M 21/00
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(21) 2036223
(22) 09.11.2023
(54) MULTI-SENSORY CABIN
(71) SENSIKS B.V.
(74) drs. P.A. van Essen c.s.
(72) Freddy Eugene Abraham Galstaun
(41) 20.05.2025

(51) A61P 1/16
A61K 36/28
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(21) 2038963
(22) 31.10.2024
(54) A COMPOSITION THAT CAN QUICKLY SOBER UP AND RELIEVE MODERATE TO MILD FATTY LIVER, AS WELL AS ITS USE
(71) Sunbird Company Limited
(74) dr. T. Wittop Koning PhD
(72) Olga Stepanko
(41) 14.05.2025

(51) B01F 23/231
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(21) 1044728
(22) 08.11.2023
(54) Inrichting om te worden bevestigd aan de wateruitstroomopening van een

waterkraan en om de uitstromende waterstroom te voorzien van finebubbels
(71) MI Holding B.V.
(72) Ivo Biemond
(41) 19.05.2025

(51) B01F 33/82
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(21) 2037670
(22) 13.05.2024
(54) MICROBIAL DELIVERY DEVICE FOR WATER ECOLOGICAL MANAGEMENT
(71) Institute of Fisheries Sciences, Academy of Agricultural and Animal Husbandry Sciences of Tibet Autonomous Region
(72) Fei Liu
(31) 2023114631554
(32) 06.11.2023
(33) China

(51) B29D 30/00
(21) 2036207
(22) 08.11.2023
(54) Slab clamp and method for operating a slab clamp
(71) VMI Holland B.V.
(74) ir. F.A. Geurts c.s.
(72) Willem Marinus van Beek
(41) 19.05.2025

(51) B32B 3/06
B32B 27/36
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B32B 27/20
C08G 63/181
(21) 2036226
(22) 09.11.2023
(54) Decorative panel and core layer for use in said decorative panel
(71) I4F LICENSING NV
(74) ir. H.Th. van den Heuvel c.s.
(72) Srikanth Acharya
(41) 20.05.2025

(51) B60C 23/00
F16K 11/10
F16K 15/20
(21) 2036236
(22) 10.11.2023
(54) Wheel valve for a tyre pressure control system
(71) QTIS B.V.
(74) ir. J.C. Volmer c.s.
(72) Jeroen Hinkenkemper

(51) B62K 7/02
B62K 15/00
B62K 5/05
(21) 2036196
(22) 07.11.2023
(54) Inschuifbare bakfiets
(71) Daniel van de Giessen
(74) ir. G.J.M. Verhees
(72) Daniel van de Giessen
(41) 19.05.2025

(51) B63B 21/50
B63B 21/34
B63B 21/32
(21) 2036193
(22) 06.11.2023
(54) Anchor with reinforcement provision
(71) Stevlos B.V.
(74) ir. F.A. Geurts c.s.
(72) Victor Maria Wilhelm Gerard Remmers
(41) 14.05.2025

(51) B63C 11/20
(21) 2036202
(22) 07.11.2023
(54) Diving device, actuatable gas storage unit and kit of parts
(71) INTERNATIONAL WATERSPORTS PRODUCTS N.V.
(74) ir. H.Th. van den Heuvel c.s.
(72) Petrus Wilhelmus Sopar
Sander Schmidt
(41) 19.05.2025

(51) B64F 1/32
B65G 65/23
(21) 2036217
(22) 08.11.2023
(54) An apparatus for unloading a baggage container and a method of unloading a baggage container
(71) Ingenieursbureau Moderniek B.V.
(74) ir. A.R. Aalbers
(72) Jan-Simon Nijmeijer
Reijer van Ommeren
(41) 19.05.2025

(51) C02F 1/00
B01D 35/02
(21) 2037669
(22) 13.05.2024
(54) AQUATIC ECOLOGICAL CIRCULATING WATER PURIFICATION EQUIPMENT
(71) Institute of Fisheries Sciences, Academy of Agricultural and Animal Husbandry Sciences of Tibet Autonomous Region
(72) Fei Liu
Lin Wang
(31) 2023114923764
(32) 06.11.2023
(33) China

(51) C02F 3/10
(21) 2036216
(22) 08.11.2023
(54) WATER DRAINAGE SYSTEM FOR DRAINING WATER INTO AN AQUIFER
(71) Jove Beheer B.V.
(74) ir. F.A. Geurts c.s.
(72) Jouke Velstra
(41) 19.05.2025

(51) C09C 1/48
(21) 2038981
(22) 01.11.2024
(54) METHODS OF PRODUCING CARBON BLACKS USING SUSTAINABLE BURNER FUEL AND PRODUCTS MADE FROM SAME
(71) Cabot Corporation
(74) ir. B.Ch. Ledeboer c.s
(72) David S. Crocker
(31) 63/595,802
(32) 03.11.2023
(33) United States of America

(51) C09J 197/00
C09J 199/00
B27N 3/00
C08H 7/00
(21) 2036979
(22) 07.02.2024
(54) ENVIRONMENT-FRIENDLY HIGH-PERFORMANCE TANNIN-BASED WOOD ADHESIVE AND PREPARATION METHOD THEREFOR
(71) Jiangxi Academy Of Forestry
Southwest Forestry University
(74) ir. F.A. Geurts c.s.
(72) Lei He
Mingzhi Zhu
Guanben Du
Xinyi Chen
Haizhu Wu
Xiaojian Zhou
Hui Huang
Zhengyong Yang
(41) 14.05.2025
(31) 202311460679.8
(32) 06.11.2023
(33) China

(51) C09K 8/035
(21) 2036186
(22) 03.11.2023
(54) HIGH-EFFICIENCY LUBRICANT AND ITS PREPARATION METHOD FOR DRILLING FLUID IN LARGE DISPLACEMENT HORIZONTAL WELL
(71) Sinopec Southwest Petroleum Engineering Co., Ltd
Drilling Engineering Research Institute of Sinopec Southwest Petroleum Engineering Co., Ltd
(74) ir. A. van der Maarl
(72) Wang Quanyang
Zhang Xue
Fu Songbai
Zhang Yuping
Chen Hongni
Wu Shuangxiong
Wang Hanqing
Zhou Chenghua
Zhang Honghu
Feng Qingying
(41) 14.05.2025

(51) C09K 8/508
C09K 8/035
(21) 2036187
(22) 03.11.2023
(54) HIGH-EFFICIENCY TEMPERATURE RESISTANT AND VISCOSITY REDUCING ADHESIVE FOR DRILLING FLUID AND ITS PREPARATION METHOD AND APPLICATION
(71) Sinopec Southwest Petroleum Engineering Co., Ltd
Drilling Engineering Research Institute of Sinopec Southwest Petroleum Engineering Co., Ltd
(74) ir. A. van der Maarl
(72) Tie Zhongyin
Wang Fangbo
Zhou Chenghua
Zeng Cheng
Zhang Zhen
Cai Jing
Zhu Guangqin
Wang Jiannan
Wen Ke

Tian Yan
(41) 14.05.2025

(51) C12N 1/20
B09C 1/10
(21) 2036921
(22) 30.01.2024
(54) Highly efficient degrading bacteria suitable for remediation of polycyclic aromatic hydrocarbon pollution and their appplications thereof
(71) Environmental Horticulture Research Institute, Guangdong Academy of Agricultural Sciences
(74) ir. C.G.C. Veldman-Dijkers
(72) Jianying Li
Chunping Zou
Xixi Cai
Hongjie Qin
Yi You
Haoping Wu
(41) 19.05.2025
(31) 202311478826.4
(32) 07.11.2023
(33) China

(51) C12Q 1/6883
C12Q 1/6806
(21) 1044729
(22) 09.11.2023
(54) FIRST TRIMESTER HCMV SCREENING USING NGS DATA
(71) Frank Patrick Hector Achilleus Vandenbussche
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Frank Patrick Hector Achilleus Vandenbussche

(51) C25D 1/08
B01D 29/01
C13B 30/04
(21) 2036237
(22) 10.11.2023
(54) ELECTROFORMING PROCESS
(71) Veco B.V.
(74) ir. A.R. Aalbers
(72) Johannes Hendrikus Maria Berenschot
Pouwel Evert Luning
Nicolaas Maria Josef Oude Luttikhuis
(41) 20.05.2025

(51) E02D 7/24
E02D 7/26
(21) 2036221
(22) 09.11.2023
(54) A MONOPILE FOR A WIND TURBINE
(71) GBM WORKS IP B.V.
(74) ir. M. Cramwinckel
(72) Henricus Francisca Christianus van Opstal
Robbert Jan Adrianus Sprij
(41) 20.05.2025

(51) E02D 27/42
F03D 13/25
(21) 2038970
(22) 31.10.2024
(54) Foundation assembly for supporting an offshore wind turbine
(71) Itrec B.V.
(74) ir. J.C. Volmer c.s.
(72) Korneel Franciscus van der Meer
(31) 2036225
(32) 09.11.2023
(33) Netherlands

(51) E03B 1/04
E03C 1/12
(21) 1044727
(22) 07.11.2023
(54) Uitvinding waterbesparende sifon met recycle systeem
(71) Moustafa Elsayed Tarek Abdelrahman Amin Osman
(72) Moustafa Elsayed Tarek Abdelrahman Amin Osman
(41) 14.05.2025

(51) E03F 7/00
E03F 5/046
E03F 5/04
(21) 2036238
(22) 10.11.2023
(54) ULTRASONIC MONITORING OF FILLING LEVELS IN DRAINAGE ELEMENTS
(71) Ireckon Water B.V.
(74) dr. ir. G.J.C. Verdijck c.s.
(72) Bob Kempes Niekerk
Hendricus Franciscus Marinus van Gorkom
Jack Elisabeth Marie Theunissen
Jan Jaap van Roon
(41) 20.05.2025

(51) E04B 1/86
B32B 5/02
E04B 9/04
E04C 2/16
D04H 1/58
D04H 1/4274
(21) 2036157
(22) 31.10.2023
(54) NOISE-ABSORBING CEILING ELEMENT FOR SECONDARY CEILINGS AND METHOD OF FORMING A NOISE-ABSORING CEILING ELEMENTS FOR SECONDARY CEILINGS
(71) K.B.B. B.V.
(74) drs. W.H.P. Derks
(72) Kevin Bond

(51) E04F 11/06
E04F 11/18
E04F 19/08
(21) 2039008
(22) 06.11.2024
(54) Dakluik
(71) Eyecatcher Solar Support B.V.
(74) drs. A.A. Jilderda
(72) Adrianus Franciscus Gerardus Schuurman
Jacobus Jan Schuurman
(41) 19.05.2025
(31) 2036206
(32) 07.11.2023
(33) Netherlands

(51) E04F 19/08
E04F 11/18
E04F 11/06
(21) 2036206
(22) 07.11.2023
(54) Dakluik
(71) Eyecatcher Solar Support B.V.
(74) drs. A.A. Jilderda
(72) Adrianus Franciscus Schuurman
Jacobus Jan Schuurman

(51) E06B 9/72
(21) 2039014
(22) 07.11.2024
(54) Motorised Roller Blind and Wand Assembly
(71) Rollease Acmeda, Inc.
(74) ir. B.Ch. Ledeboer c.s
(72) Jonny Emilio Matuichuk
(31) 2023903582
(32) 08.11.2023
(33) Australia

(51) E21B 33/12
F16J 15/10
(21) 2038600
(22) 09.09.2024
(54) Chemical Resistant Elastomeric Seal having Two Elastomers
(71) Halliburton Energy Services, Inc.
(74) dr. ir. F.M. van Bouwelen
(72) Sandeep Thatathil
Chad W. Glaesman
Somen Kumar Bhudolia
Arpana Singh
(31) 18/501,400
(32) 03.11.2023
(33) United States of America

(51) F16L 55/027
F16K 17/28
(21) 2036795
(22) 12.01.2024
(54) DIFFERENTIAL PRESSURE TYPE FLOW LIMITER
(71) HuBei ChuangSiNuo Electrical Technology Corp.
(74) ir. F.A. Geurts c.s.
(72) Xiaoqing Deng
Yihu Ren
(31) 2023230118755
(32) 07.11.2023
(33) China

(51) G01C 9/00
G01B 11/02
E21D 9/00
G01C 15/00
E21D 11/00
G01B 11/16
(21) 2036245
(22) 10.11.2023
(54) APPARATUS FOR RAPID MEASURING RELATIVE DISPLACEMENT OF SHIELD TUNNEL SEGMENT AND METHOD
(71) Jiangsu Nanjing Geology Engineering Investigation Institute
The First Geological Brigade of Jiangsu Provincial Bureau of Geology and Mineral Resources
Nanjing Kuntuo Civil Engineering Technology Co., Ltd
China Railway 17th Bureau Group
Shanghai Rail Transit Engineering Co., Ltd.
Huaqiao University
(74) ir. W.J.J.M. Kempes

(72) Yehui Shi
Yahu Tian
Tong Li
Jingchuan Ren
Chenghua Xu
Guoqing Cai
Yingjie Wang
Yinjuan Sun
Guichao Liu
Xingxin Chen
Guoyi Tang
Jiatong Han
Dumin Yan
Helan Cheng
Lei Gong
(41) 20.05.2025

(51) G01F 15/00
(21) 2036241
(22) 10.11.2023
(54) DUAL-MODULE-BASED INTELLIGENT IOT GAS METER
(71) Liaoning SC Technology Co., Ltd.
(74) ir. M.B. Plaggenborg
(72) Yunliang Li
Yuming Lan
Wanpeng Ma
Fei Chi
Yunqi Zhu
Jianjun Shi
Yong Chu
Zhipeng Zheng
Tianji Wang
Zhiwei Guo

(51) G01F 15/12
G01F 1/72
G01F 1/66
F16L 55/027
(21) 2036242
(22) 10.11.2023
(54) FLOW STABILIZING APPARATUS FOR ULTRASONIC FLOWMETER AND FLOW STABILIZING ULTRASONIC FLOWMETER APPARATUS
(71) Liaoning SC Technology Co., Ltd.
(74) ir. M.B. Plaggenborg
(72) Yong Chu
Guiqiu Jia
Tengfei Diao
Yilong Zhu
Chuanbao Sun
Minghui Xu
Limei Sun
(41) 20.05.2025

(51) G01N 3/56
G01N 17/00
G01N 33/24
(21) 2036220
(22) 09.11.2023
(54) A METHOD AND SYSTEM FOR TESTING THE ERODIBILITY OF A SOIL SAMPLE
(71) FNV IP B.V.
(74) R.J. Burnaby Lautier
(72) Daan Strik
Piet van Leeuwen
Martijn Louws
(41) 20.05.2025

(51) G02B 26/08
A01J 5/017
G01S 17/06
G02B 26/10
(21) 2036192
(22) 06.11.2023
(54) Robotmelksysteem
(71) Lely Patent N.V.
(74) ir. M.J.F.M. Corten
(72) Daniël Gerardus Bakker

(51) G05D 1/00
B61D 15/00
(21) 2036185
(22) 03.11.2023
(54) Op een GEO systeem/scansysteem (bijv. ArcGIS gebruikend) baserend autonoom op het spoor voortbewegend spoorvoertuig met geattendeerde operator supervisie.
(71) Strukton Rail Nederland B.V.
(74) ir. J.H.W. Assendelft
(72) Thomas Fonville
(41) 19.05.2025

(51) G06F 7/58
(21) 2036178
(22) 03.11.2023
(54) True Quantum Random Number Generator
(71) CublQ B.V.
(74) ir. A.R. Aalbers
(72) Aaron Albores-Mejia
Chigo Okonkwo
(41) 14.05.2025

(51) G06F 9/50
G06N 3/006
(21) 2036698
(22) 28.12.2023
(54) QoS-AWARE SERVICE MIGRATION METHOD FOR IoV SYSTEM BASED ON CVX DEEP REINFORCEMENT LEARNING
(71) Fuzhou University
(74) dr. J. van Straaten
(72) Sijin Huang
Qingnan Jiang
Zheyi Chen
Jia Wen
(41) 20.05.2025
(31) PCT/CN2023/132767
(32) 21.11.2023
(33) China

(51) G06F 16/22
G06F 16/29
G06F 16/51
G06F 16/583
G06F 16/587
(21) 2036715
(22) 29.12.2023
(54) ADAPTIVE CUBE INDEXING METHOD AND SYSTEM
(71) Fuzhou University
(74) dr. J. van Straaten
(72) Jinsongdi Yu
(41) 20.05.2025
(31) 202311665864.0
(32) 06.12.2023
(33) China

(51) G06F 16/51
G06F 16/53
(21) 2036195
(22) 07.11.2023
(54) A METHOD OF AND DEVICE FOR SELECTING A SUBSET OF PHOTOGRAPHIC DATA ITEMS FROM A SET OF PHOTOGRAPHIC DATA ITEMS
(71) FNV IP B.V.
(74) R.J. Burnaby Lautier
(72) Andrew Eugene Walsh
Peter Paul Chafe

(51) G06N 10/40
(21) 2036190
(22) 06.11.2023
(54) Qubit device
(71) TECHNISCHE UNIVERSITEIT DELFT
(74) ir. H.Th. van den Heuvel c.s.
(72) Lieven Mark Koenraad Vandersypen
(41) 14.05.2025

(51) G08B 25/12
H04R 1/10
H04M 11/04
H04M 1/72424
(21) 2036230
(22) 10.11.2023
(54) Personal alarm device comprising a sound alarm and an activating element
(71) Madoc Marein van Zalk
(74) ir. G.J.M. Verhees
(72) Madoc Marein van Zalk
(41) 20.05.2025

(51) H01C 1/024
H01C 11/00
(21) 2036244
(22) 10.11.2023
(54) PULSE HIGH-POWER INDUCTIVE RESISTOR
(71) Yuanling County XiangHua Electronic Technology Co.Ltd
(74) ir. W.J.J.M. Kempes
(72) Jie Xiao
Haixia Song
Haijian Li
(41) 20.05.2025

(51) H02P 7/00
B60K 11/08
E05F 15/603
H02P 3/02
(21) 2036218
(22) 08.11.2023
(54) Method of controlling operation of an actuatable object
(71) MCi (Mirror Controls International) Netherlands B.V.
(74) ir. B.Ch. Ledeboer c.s
(72) Bastiaan Huijzers

(51) H03F 3/189
H03F 3/21
H03F 1/56
H03F 3/24
H03F 1/02
(21) 2036239
(22) 10.11.2023
(54) PSEUDO-DOHERTY LOAD MODULATED BALANCED AMPLIFIER
(71) Ampleon Netherlands B.V.
(74) dr. ir. G.J.C. Verdijck c.s.

(72) Zhi Geng
Radjindrepersad Gajadharsing
(41) 20.05.2025

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(51) H04B 10/112
(21) 2036204
(22) 07.11.2023
(54) A free space optical communications terminal device as well as a free space optical communications network.
(71) VDL Enabling Technologies Group B.V.
(74) ir. A. Blokland c.s.
(72) Martijn Stopel
William Edward Crowcombe

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(51) H04L 9/08
(21) 2036232
(22) 10.11.2023
(54) Cryptographic method
(71) Arjen Klaas Lenstra
Jacobus Johannes Wansbeek
(74) dr. R.C. van Duijvenbode c.s.
(72) Jacobus Johannes Wansbeek
Arjen Klaas Lenstra
(41) 20.05.2025

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) A01G 9/04
A01G 22/60
A01G 7/04
A01G 31/04
A01G 9/14
(11) 2036199
(47) 19.05.2025
(22) 07.11.2023
(54) Method of growing cut flowers
(73) Belua Beheer B.V.
(72) Johannes Adrianus Hendricus Maria van der Sande
Leonardus Adrianus Maria Dukker
Jacobus Andreas Weerheim
(74) dr. R.C. van Duijvenbode c.s.

(51) A01K 79/00
B63G 8/00
A01K 63/02
(11) 2036214
(47) 19.05.2025
(22) 08.11.2023
(54) Sample device for capturing aquatic animals with a submersible craft
(73) Sub Station Curaçao N.V.
(72) Bruce Brandt
Adriaan Schrier
(74) ir. A. Blokland c.s.

(51) A21D 2/32
A21D 2/26
A21D 10/00
A21D 2/02
A21D 2/18
A21D 2/16
A21D 8/04
(11) 2036181
(47) 14.05.2025
(22) 03.11.2023
(54) WATER BASED LIQUID BREAD IMPROVER AND METHOD FOR PROVIDING THEREOF
(73) Sonneveld Group B.V.
(72) Alexander Oostendorp
Danny Broeders
Peter Louis Weegels
Pedro Branco
Herald H.C.F. Vugs
(74) dr. ir. G.J.C. Verdijck c.s.

(51) A23C 9/12
A23C 9/16
A23C 9/18
C12N 9/38
(11) 2036180
(47) 14.05.2025
(22) 03.11.2023
(54) METHOD, DEVICE, AND SYSTEM FOR MANUFACTURING MILK POWDER, AND MILK POWDER OBTAINABLE BY SAID METHOD
(73) Vreugdenhil Groep B.V.
(72) Douwe van der Zee
(74) dr. ir. G.J.C. Verdijck c.s.

(51) A23L 33/135
A23L 33/105
A61K 35/747
(11) 2038663
(47) 14.05.2025
(22) 19.09.2024
(54) USAGE OF PROBIOTIC COMPOSITION OF DRAGON FRUIT IN RAPIDLY PROMOTING DEFECATION AND MAINTAINING INTESTINAL MICROBIOTA STABILITY
(73) Sunbird Company Limited
(72) Olga Stepanko
(74) dr. T. Wittop Koning PhD

(51) A61B 6/04
A61B 6/42
A61B 6/02
A61B 6/50
(11) 2036201
(47) 19.05.2025
(22) 07.11.2023
(54) A GAMMA RADIATION IMAGING SYSTEM, COLLIMATOR ASSEMBLY, AND METHOD
(73) Stichting The Molecular Imaging
(72) Frederik Johannes Beekman
(74) ir. J.C. Volmer c.s.

(51) A61F 2/34
(11) 2036182
(47) 14.05.2025
(22) 03.11.2023
(54) Generic acetabular implant
(73) Universiteit Utrecht Holding B.V.
UMC Utrecht Holding B.V.
(72) Saber Amin Yavari
Meropi Adriana Tryfonidou
Koen Willemsen
Bart Cornelis Hendrikus van der Wal
Björn Petrus Meij
Ralph Johan Bernard Sakkers
Hermannus Hendricus Weinans
Joëll Magré
(74) dr. ir. G.J.C. Verdijck c.s.

(51) A61F 13/533
A61F 13/49
A61L 15/00
A61F 13/15
(11) 2036184
(47) 14.05.2025
(22) 03.11.2023
(54) ABSORBENT ARTICLE WITH IMPROVED ATTACHMENT ZONE
(73) Drylock Technologies N.V.
(72) Steven Smet
Werner van Ingelgem
Tom Derycke
(74) dr. ir. G.J.C. Verdijck c.s.

(51) A61L 27/46
B33Y 10/00
B33Y 70/10
(11) 2038403
(47) 19.05.2025
(22) 07.08.2024
(54) METHOD FOR PREPARING SKULL FLAP BY PHOTO-CURING 3D PRINTING
(73) Beijing Chengnuo Zhilu Technology Co., Ltd.
(72) Lida Wu
Lingling Jiang
Weiqi Chen
Bowen Chi
Yilong Wang
Yuchun Gu
Yongjun Wang
(74) drs. C.M.A. Quintelier
(31) 202410267661.4
(32) 08.03.2024
(33) China

(51) A61L 27/54
A61L 27/44
A61L 27/46
(11) 2038588
(47) 19.05.2025
(22) 05.09.2024
(54) 3D PRINTING PHOTO-CURING COMPOSITION SUITABLE FOR SKULL REPAIR
(73) Beijing Chengnuo Zhilu Technology Co., Ltd.
(72) Bowen Chi
Yongjun Wang
Lingling Jiang
Yuchun Gu
Weiqi Chen
Yilong Wang
Lida Wu
(74) drs. C.M.A. Quintelier
(31) 202410267789.0
(32) 08.03.2024
(33) China

(51) A61M 21/00
G16H 20/00
(11) 2036223
(47) 20.05.2025
(22) 09.11.2023
(54) MULTI-SENSORY CABIN
(73) SENSIKS B.V.
(72) Freddy Eugene Abraham Galstaun
(74) drs. P.A. van Essen c.s.

(51) A61P 1/16
A61K 36/28
A61K 36/79
A23L 33/105
(11) 2038963
(47) 14.05.2025
(22) 31.10.2024
(54) A COMPOSITION THAT CAN QUICKLY SOBER UP AND RELIEVE MODERATE TO MILD FATTY LIVER, AS WELL AS ITS USE
(73) Sunbird Company Limited

(72) Olga Stepanko
(74) dr. T. Wittop Koning PhD

(51) B01D 47/06
B05B 7/00
(11) 2038350
(47) 14.05.2025
(22) 28.07.2024
(54) An Open-air Dust Control Device
(73) China Railway No.10 Engineering Group Co., Ltd.
(72) Pengju Xu
Furong Zhang
Guohua Jiao
Liang Chang
Lin Liu
Xiaohao Yin
Lisong Chen
Dayuan Li
Mengqiang Zhang
(74) ir. F.A. Geurts c.s.

(51) B01F 23/231
B01F 25/20
(11) 1044728
(47) 19.05.2025
(22) 08.11.2023
(54) Inrichting om te worden bevestigd aan de wateruitstroomopening van een waterkraan en om de uitstromende waterstroom te voorzien van finebubbels
(73) MI Holding B.V.
(72) Ivo Biemond

(51) B29C 65/08
B29C 65/00
B29L 31/30
(11) 2037747
(47) 14.05.2025
(22) 22.05.2024
(54) Consolidation device and apparatus for continuous ultrasonic welding
(73) Deutsches Zentrum für Luft- und Raumfahrt e. V.
(72) Dominik Görick
Lars-Christian Larsen
Demas Schmorell
Manuel Engelschall
Philipp Gänswürger
(74) ir. B.J. 't Jong
(31) 102023113508.2
(32) 23.05.2023
(33) Germany

(51) B29C 65/08
B29C 70/38
B23K 20/10
(11) 2037743
(47) 14.05.2025
(22) 22.05.2024
(54) Consolidation device and apparatus for continuous ultrasonic welding
(73) Deutsches Zentrum für Luft- und Raumfahrt e. V.
(72) Dominik Görick
Manuel Engelschall
Lars-Christian Larsen
Demas Schmorell
(74) ir. B.J. 't Jong
(31) 102023113507.4
(32) 23.05.2023
(33) Germany

(51) B29C 65/08
B29C 70/38
B29L 31/30
B23K 20/10
(11) 2037746
(47) 14.05.2025
(22) 22.05.2024
(54) Consolidation Device and Apparatus for Continuous Ultrasonic Welding
(73) Deutsches Zentrum für Luft- und Raumfahrt e. V.
(72) Demas Schmorell
Dominik Görick
Lars-Christian Larsen
Manuel Engelschall
Sebastian Stammel
Clemens Schmidt-Eisenlohr
(74) ir. B.J. 't Jong
(31) 102023113509.0
(32) 23.05.2023
(33) Germany

(51) B29D 30/00
(11) 2036207
(47) 19.05.2025
(22) 08.11.2023
(54) Slab clamp and method for operating a slab clamp
(73) VMI Holland B.V.
(72) Willem Marinus van Beek
(74) ir. F.A. Geurts c.s.

(51) B32B 1/00
B32B 17/10
B32B 33/00
C03C 17/34
H10F 19/80
(11) 2034500
(47) 14.05.2025
(22) 04.04.2023
(54) GLASS AND PHOTOVOLTAIC MODULE
(73) JINKO SOLAR (HAINING) CO., LTD.
(72) Pengjun Xiao
Zhigang Dai
Biao Cui
(74) ir. A. Blokland c.s.
(31) 202310004070.3
(32) 03.01.2023
(33) China

(51) B32B 3/06
B32B 27/36
E04F 15/10
B32B 27/20
C08G 63/181
(11) 2036226
(47) 20.05.2025
(22) 09.11.2023
(54) Decorative panel and core layer for use in said decorative panel
(73) I4F LICENSING NV
(72) Srikanth Acharya
(74) ir. H.Th. van den Heuvel c.s.

(51) B60C 23/00
F16K 11/10
F16K 15/20
(11) 2036236
(47) 20.05.2025
(22) 10.11.2023
(54) Wheel valve for a tyre pressure control system
(73) QTIS B.V.
(72) Jeroen Hinkenkemper
(74) ir. J.C. Volmer c.s.

(51) B61L 5/04
(11) 2037308
(47) 14.05.2025
(22) 20.03.2024
(54) ELECTRO-HYDRAULIC SWITCH MACHINE FOR RAILWAY TURNOUT
(73) Taiyuan Jingfeng Railway Electrical Equipment Manufacturing Co., Ltd
(72) Yan Li
Chengxing Su
Junming Shi
Peng Yan
Junnuo Tang
Wei Zhang
Congyin Guo
Shengkun Wang
Heng Bian
Yongjun Zhao
Jianping Zhao
Tianyi Tang
(74) ir. M.B. Plaggenborg
(31) 202310282059.3
(32) 22.03.2023
(33) China

(51) B62K 7/02
B62K 15/00
B62K 5/05
(11) 2036196
(47) 19.05.2025
(22) 07.11.2023
(54) Inschuifbare bakfiets
(73) Daniel van de Giessen
(72) Daniel van de Giessen
(74) ir. G.J.M. Verhees

(51) B63B 21/50
B63B 21/34
B63B 21/32
(11) 2036193
(47) 14.05.2025
(22) 06.11.2023
(54) Anchor with reinforcement provision
(73) Stevlos B.V.
(72) Victor Maria Wilhelm Gerard Remmers
(74) ir. F.A. Geurts c.s.

(51) B63C 11/20
(11) 2036202
(47) 19.05.2025
(22) 07.11.2023
(54) Diving device, actuatable gas storage unit and kit of parts
(73) INTERNATIONAL WATERSPORTS PRODUCTS N.V.
(72) Petrus Wilhelmus Sopar
Sander Schmidt
(74) ir. H.Th. van den Heuvel c.s.

(51) B64F 1/32
B65G 65/23
(11) 2036217
(47) 19.05.2025
(22) 08.11.2023

(54) An apparatus for unloading a baggage container and a method of unloading a baggage container
(73) Ingenieursbureau Moderniek B.V.
(72) Jan-Simon Nijmeijer
Reijer van Ommeren
(74) ir. A.R. Aalbers

(51) C01B 19/00
H01M 4/52
C01B 25/14
C01B 32/15
C01G 51/82
(11) 2036604
(47) 19.05.2025
(22) 20.12.2023
(54) CoPSe@Carbon Hollow Nanocube Composite Material: Preparation and Applications
(73) Hangzhou Vocational & Technical College
(72) Yongfeng Yuan
Qiuhe Yang
(74) ir. W.J.J.M. Kempes
(31) 202211676966.8
(32) 26.12.2022
(33) China

(51) C02F 3/10
(11) 2036216
(47) 19.05.2025
(22) 08.11.2023
(54) WATER DRAINAGE SYSTEM FOR DRAINING WATER INTO AN AQUIFER
(73) Jove Beheer B.V.
(72) Jouke Velstra
(74) ir. F.A. Geurts c.s.

(51) C04B 28/02
C04B 40/00
G01N 33/38
(11) 2035995
(47) 19.05.2025
(22) 10.10.2023
(54) Quantitative determination method for ratio of transparent cemented soil material for visualization model test
(73) Sichuan Engineering Research Center for Mechanical Properties and Engineering Technology of Unsaturated Soils
Hainan University
(72) Zhijia Wang
Jingjing Fu
Jing Xie
Peng Xie
Haijia Wen
Huchen Duan
Zurun Yue
Zhanfeng Fan
Congcong Li
(74) dr. G. Visser-Luirink
(31) 2022112307369
(32) 10.10.2022
(33) China

(51) C09J 197/00
C09J 199/00
B27N 3/00
C08H 7/00
(11) 2036979
(47) 14.05.2025
(22) 07.02.2024
(54) ENVIRONMENT-FRIENDLY HIGH-PERFORMANCE TANNIN-BASED WOOD ADHESIVE AND PREPARATION METHOD THEREFOR
(73) Jiangxi Academy Of Forestry
Southwest Forestry University
(72) Lei He
Mingzhi Zhu
Guanben Du
Xinyi Chen
Haizhu Wu
Xiaojian Zhou
Hui Huang
Zhengyong Yang
(74) ir. F.A. Geurts c.s.
(31) 202311460679.8
(32) 06.11.2023
(33) China

(51) C09K 8/035
(11) 2036186
(47) 14.05.2025
(22) 03.11.2023
(54) HIGH-EFFICIENCY LUBRICANT AND ITS PREPARATION METHOD FOR DRILLING FLUID IN LARGE DISPLACEMENT HORIZONTAL WELL
(73) Sinopec Southwest Petroleum Engineering Co., Ltd
Drilling Engineering Research Institute of Sinopec Southwest Petroleum Engineering Co., Ltd
(72) Wang Quanyang
Zhang Xue
Fu Songbai
Zhang Yuping
Chen Hongni
Wu Shuangxiong
Wang Hanqing
Zhou Chenghua
Zhang Honghu
Feng Qingying
(74) ir. A. van der Maarl

(51) C09K 8/508
C09K 8/035
(11) 2036187
(47) 14.05.2025
(22) 03.11.2023
(54) HIGH-EFFICIENCY TEMPERATURE RESISTANT AND VISCOSITY REDUCING ADHESIVE FOR DRILLING FLUID AND ITS PREPARATION METHOD AND APPLICATION
(73) Sinopec Southwest Petroleum Engineering Co., Ltd
Drilling Engineering Research Institute of Sinopec Southwest Petroleum Engineering Co., Ltd
(72) Tie Zhongyin
Wang Fangbo
Zhou Chenghua
Zeng Cheng
Zhang Zhen
Cai Jing
Zhu Guangqin
Wang Jiannan
Wen Ke
Tian Yan
(74) ir. A. van der Maarl

(51) C12M 1/00
C12M 1/12
C12M 1/42
(11) 2038637
(47) 14.05.2025
(22) 16.09.2024
(54) A biological reaction system based on electromagnetic principles and an in vitro cell dynamic culture method
(73) Shanghai Sixth People's Hospital
(72) Yun Qian
Cunyi Fan
Xu Wang
Chen Huang
Yuanming Ouyang
Lei Zhan
Jixia Deng
(74) ir. W.J.J.M. Kempes
(31) 2023114940558
(32) 09.11.2023
(33) China

(51) C12N 1/20
B09C 1/10
(11) 2036921
(47) 19.05.2025
(22) 30.01.2024
(54) Highly efficient degrading bacteria suitable for remediation of polycyclic aromatic hydrocarbon pollution and their appplications thereof
(73) Environmental Horticulture Research Institute, Guangdong Academy of Agricultural Sciences
(72) Jianying Li
Chunping Zou
Xixi Cai
Hongjie Qin
Yi You
Haoping Wu
(74) ir. C.G.C. Veldman-Dijkers
(83) 63809
14.09.2023
Guangdong Microbial Culture Collection Center (GDMCC)
Institute of Microbiology, Guangdong Acadamy of Sciences, No. 59 Building, No. 100 Xianlie Zhong Road, Yuexiu District, Guangzhou 510070, China
(31) 202311478826.4
(32) 07.11.2023
(33) China

(51) C12N 5/071
G01N 15/1434
C12M 3/00
G02B 21/32
C12N 5/076
(11) 2038334
(47) 20.05.2025
(22) 25.07.2024
(54) A method for controlling sperm morphology and motion
(73) Institute of Genetics and Developmental Biology, Chinese Academy of Sciences
(72) QiHang Liu
Lu Huang
Hao Shi
Yuqiang Jiang

Yaqiang Qin
Chao Li
(74) ir. W.J.J.M. Kempes
(31) 2023113753253
(32) 23.10.2023
(33) China

(51) C25D 1/08
B01D 29/01
C13B 30/04
(11) 2036237
(47) 20.05.2025
(22) 10.11.2023
(54) ELECTROFORMING PROCESS
(73) Veco B.V.
(72) Johannes Hendrikus Maria Berenschot
Pouwel Evert Luning
Nicolaas Maria Josef Oude Luttikhuis
(74) ir. A.R. Aalbers

(51) E02D 7/24
E02D 7/26
(11) 2036221
(47) 20.05.2025
(22) 09.11.2023
(54) A MONOPILE FOR A WIND TURBINE
(73) GBM WORKS IP B.V.
(72) Henricus Francisca Christianus van Opstal
Robbert Jan Adrianus Sprij
(74) ir. M. Cramwinckel

(51) E03B 1/04
E03C 1/12
(11) 1044727
(47) 14.05.2025
(22) 07.11.2023
(54) Uitvinding waterbesparende sifon met recycle systeem
(73) Moustafa Elsayed Tarek Abdelrahman Amin Osman
(72) Moustafa Elsayed Tarek Abdelrahman Amin Osman

(51) E03F 7/00
E03F 5/046
E03F 5/04
(11) 2036238
(47) 20.05.2025
(22) 10.11.2023
(54) ULTRASONIC MONITORING OF FILLING LEVELS IN DRAINAGE ELEMENTS
(73) Ireckon Water B.V.
(72) Bob Kempes Niekerk
Hendricus Franciscus Marinus van Gorkom
Jack Elisabeth Marie Theunissen
Jan Jaap van Roon
(74) dr. ir. G.J.C. Verdijck c.s.

(51) E04B 1/00
(11) 2038523
(47) 20.05.2025
(22) 29.08.2024
(54) Building comprising a supporting building part and at least one protruding structural member fixed to the building part
(73) Leviat AG
(72) Tina Keller
Thorsten Heidolf
(74) ir. A. Blokland c.s.

(31) 102023127232.2
(32) 06.10.2023
(33) Germany

(51) E04F 11/06
E04F 11/18
E04F 19/08
(11) 2039008
(47) 19.05.2025
(22) 06.11.2024
(54) Dakluik
(73) Eyecatcher Solar Support B.V.
(72) Adrianus Franciscus Gerardus Schuurman
Jacobus Jan Schuurman
(74) drs. A.A. Jilderda
(31) 2036206
(32) 07.11.2023
(33) Netherlands

(51) E04F 19/08
E04F 11/18
E04F 11/06
(11) 2036206
(47) 19.05.2025
(22) 07.11.2023
(54) Dakluik
(73) Eyecatcher Solar Support B.V.
(72) Adrianus Franciscus Schuurman
Jacobus Jan Schuurman
(74) drs. A.A. Jilderda

(51) E06B 9/304
E06B 9/307
E06B 9/322
(11) 2038204
(47) 20.05.2025
(22) 11.07.2024
(54) MOTORIZED VENETIAN BLIND
(73) Nien Made Enterprise Co., Ltd.
(72) Lin Chen
Jian Zeng
(74) dr. R.C. van Duijvenbode c.s.
(31) 112207573
(32) 20.07.2023
(33) Taiwan, Chinese Taipei

(51) E21B 34/06
E21B 34/10
E21B 34/16
(11) 2038541
(47) 14.05.2025
(22) 30.08.2024
(54) FIRE ON DEMAND ATMOSPHERIC BARRIER VALVE USING TEC LINE AND HYDRAULIC BOOST ASSEMBLY
(73) Halliburton Energy Services, Inc.
(72) Peter D.W. Inglis
(74) dr. ir. F.M. van Bouwelen
(31) 63/537,127
18/812,727
(32) 07.09.2023
22.08.2024
(33) United States of America
United States of America

(51) F03D 13/40
(11) 2037602
(47) 14.05.2025
(22) 02.05.2024
(54) A support frame for transporting wind power blades
(73) Huaneng Fuxin Windy Power Generator Co., Ltd.
(72) Xiaodong Li
Shilin Cheng
Chenxi Dong
(74) ir. W.J.J.M. Kempes
(31) 2023106257333
(32) 30.05.2023
(33) China

(51) F03D 17/00
(11) 2036572
(47) 14.05.2025
(22) 18.12.2023
(54) NACELLE WIND SPEED CORRECTION METHOD AND SYSTEM BASED ON MECHANISM MODEL AND NEURAL NETWORK
(73) Hunan University of Science & Technology
(72) Zhao Xiao
Jiewen Deng
Qiancheng Zhao
Xiangfeng Yin
(74) P.J. Pollard B.Eng
(31) 202311047504.4
(32) 21.08.2023
(33) China

(51) G01C 9/00
G01B 11/02
E21D 9/00
G01C 15/00
E21D 11/00
G01B 11/16
(11) 2036245
(47) 20.05.2025
(22) 10.11.2023
(54) APPARATUS FOR RAPID MEASURING RELATIVE DISPLACEMENT OF SHIELD TUNNEL SEGMENT AND METHOD
(73) Jiangsu Nanjing Geology Engineering Investigation Institute
The First Geological Brigade of Jiangsu Provincial Bureau of Geology and Mineral Resources
Nanjing Kuntuo Civil Engineering Technology Co., Ltd
China Railway 17th Bureau Group
Shanghai Rail Transit Engineering Co., Ltd.
Huaqiao University
(72) Yehui Shi
Yahu Tian
Tong Li
Jingchuan Ren
Chenghua Xu
Guoqing Cai
Yingjie Wang
Yinjuan Sun
Guichao Liu
Xingxin Chen
Guoyi Tang
Jiatong Han
Dumin Yan
Helan Cheng
Lei Gong
(74) ir. W.J.J.M. Kempes

(51) G01F 15/12
G01F 1/72

G01F 1/66
F16L 55/027
(11) 2036242
(47) 20.05.2025
(22) 10.11.2023
(54) FLOW STABILIZING APPARATUS FOR ULTRASONIC FLOWMETER AND FLOW STABILIZING ULTRASONIC FLOWMETER APPARATUS
(73) Liaoning SC Technology Co., Ltd.
(72) Yong Chu
Guiqiu Jia
Tengfei Diao
Yilong Zhu
Chuanbao Sun
Minghui Xu
Limei Sun
(74) ir. M.B. Plaggenborg

(51) G01N 3/56
G01N 17/00
G01N 33/24
(11) 2036220
(47) 20.05.2025
(22) 09.11.2023
(54) A METHOD AND SYSTEM FOR TESTING THE ERODIBILITY OF A SOIL SAMPLE
(73) FNV IP B.V.
(72) Daan Strik
Piet van Leeuwen
Martijn Louws
(74) R.J. Burnaby Lautier

(51) G01R 31/62
H01F 27/40
G01H 11/08
G01H 1/12
G01H 1/00
(11) 2038276
(47) 20.05.2025
(22) 19.07.2024
(54) MULTI-VIBRATION SOURCE SEPARATING AND ONLINE IDENTIFYING METHOD FOR POWER TRANSFORMER
(73) Electric Power Research Institute of State Grid Jilin Electric Power Co., Ltd?
Jilin Electric Power Research Institute Co., Ltd
Shenyang University of Technology
(72) Kai Wang
Huafei Zhang
Jieyuan Chen
Jiachang Guo
Changjian Si
Yan Ke
Qunying Yu
Hua Yu
Haidan Lin
Daiyong Yang
Chen Cao
Xiao Jin
Chunming Zhao
Qiuyue He
Dan Liu
Liang Zhang
Fangsen Chai
Changlong Gao
Ming Yang
Sen Liu
Hong Liu
Junbo Liu
Shouxue Li
Dunlin Lu
(74) drs. C.M.A. Quintelier
(31) 2023114815897
(32) 08.11.2023
(33) China

(51) G02B 6/30
G02B 6/42
G02B 6/43
H01L 23/498
H01L 25/065
H01L 25/16
H05K 1/14
(11) 2036272
(47) 20.05.2025
(22) 15.11.2023
(54) PHOTONIC INTEGRATED CIRCUIT WITHIN A CAVITY OF INTERPOSER
(73) Intel Corporation
(72) Vidya Jayaram
Xiaoqian Li
Ravindranath V. Mahajan
Saikumar Jayaraman
(74) dr. A. Krebs
(31) 18/346,116
(32) 30.06.2023
(33) United States of America

(51) G02B 26/08
A01J 5/017
G01S 17/06
G02B 26/10
(11) 2036192
(47) 14.05.2025
(22) 06.11.2023
(54) Robotmelksysteem
(73) Lely Patent N.V.
(72) Daniël Gerardus Bakker
(74) ir. M.J.F.M. Corten

(51) G02B 27/01
A61F 4/00
(11) 2035744
(47) 14.05.2025
(22) 05.09.2023
(54) A specialized voice-controlled augmented reality glasses for Parkinson's patients
(73) Zhu Yan
(72) Chen Zhuhan
Zhu Yan
(74) ir. W.J.J.M. Kempes
(31) 2023105400442
(32) 12.05.2023
(33) China

(51) G05D 1/00
B61D 15/00
(11) 2036185
(47) 19.05.2025
(22) 03.11.2023
(54) Op een GEO systeem/scansysteem (bijv. ArcGIS gebruikend) baserend autonoom op het spoor voortbewegend spoorvoertuig met geattendeerde operator supervisie.
(73) Strukton Rail Nederland B.V.
(72) Thomas Fonville
(74) ir. J.H.W. Assendelft

(51) G06F 7/58
(11) 2036178
(47) 14.05.2025
(22) 03.11.2023
(54) True Quantum Random Number Generator
(73) CublQ B.V.
(72) Aaron Albores-Mejia
Chigo Okonkwo
(74) ir. A.R. Aalbers

(51) G06F 9/50
G06N 3/006
(11) 2036698
(47) 20.05.2025
(22) 28.12.2023
(54) QoS-AWARE SERVICE MIGRATION METHOD FOR IoV SYSTEM BASED ON CVX DEEP REINFORCEMENT LEARNING
(73) Fuzhou University
(72) Sijin Huang
Qingnan Jiang
Zheyi Chen
Jia Wen
(74) dr. J. van Straaten
(31) PCT/CN2023/132767
(32) 21.11.2023
(33) China

(51) G06F 16/22
G06F 16/29
G06F 16/51
G06F 16/583
G06F 16/587
(11) 2036715
(47) 20.05.2025
(22) 29.12.2023
(54) ADAPTIVE CUBE INDEXING METHOD AND SYSTEM
(73) Fuzhou University
(72) Jinsongdi Yu
(74) dr. J. van Straaten
(31) 202311665864.0
(32) 06.12.2023
(33) China

(51) G06F 16/51
G06F 16/53
(11) 2036195
(47) 19.05.2025
(22) 07.11.2023
(54) A METHOD OF AND DEVICE FOR SELECTING A SUBSET OF PHOTOGRAPHIC DATA ITEMS FROM A SET OF PHOTOGRAPHIC DATA ITEMS
(73) FNV IP B.V.
(72) Andrew Eugene Walsh
Peter Paul Chafe
(74) R.J. Burnaby Lautier

(51) G06N 3/006
G01W 1/10
(11) 2038172
(47) 19.05.2025
(22) 09.07.2024
(54) DYNAMIC OPTIMIZATION TYPE AUTOMATIC MONITORING DEVICE COUPLING METEOROLOGICAL AND

ATMOSPHERIC ENVIRONMENTAL FACTORS
(73) Chongqing Research Academy of Eco-environmental Sciences
(72) Lingtao Wang
Yang Chen
Sheng Zhang
Min Du
Chao Peng
Chongzhi Zhai
Zhenliang Li
Xiaochen Wang
(74) ir. W.J.J.M. Kempes
(31) 202311237482.8
(32) 22.09.2023
(33) China

(51) G06N 3/006
G06N 20/00
(11) 2036804
(47) 20.05.2025
(22) 15.01.2024
(54) A HIERARCHICAL HYPERGRAPH COLLABORATION METHOD OF HETEROGENEOUS MULTI-AGENTS
(73) Shanxi University
(72) Guoqing Liu
Shuai Jin
Yuhua Qian
Feijiang Li
(74) dr. J. van Straaten
(31) 2023117730903
(32) 21.12.2023
(33) China

(51) G06N 10/40
(11) 2036190
(47) 14.05.2025
(22) 06.11.2023
(54) Qubit device
(73) TECHNISCHE UNIVERSITEIT DELFT
(72) Lieven Mark Koenraad Vandersypen
(74) ir. H.Th. van den Heuvel c.s.

(51) G06N 10/40
(11) 2035966
(47) 20.05.2025
(22) 06.10.2023
(54) METHOD AND APPARATUS FOR ADJUSTING QUBIT FREQUENCY, ELECTRONIC DEVICE AND READABLE STORAGE MEDIUM
(73) Beijing Baidu Netcom Science Technology Co., Ltd.
(72) Xueyi Guo
Li Li
(74) dr. R.C. van Duijvenbode c.s.
(31) 202310341847.5
(32) 31.03.2023
(33) China

(51) G06Q 10/06
G06Q 50/00
(11) 2035200
(47) 14.05.2025
(22) 28.06.2023
(54) A DECISION-MAKING METHOD AND A SYSTEM FOR THE SPACE ORGANIZATION AND CONSTRUCTION OF PUBLIC SERVICES IN THE GRASSLAND AND PASTORAL AREAS
(73) Inner Mongolia University of Technology
(72) Jie Bai
Mengyuan Zhang
Liheng Zhang
Yitong Li
Xinhao Song
Ran Feng
Hui Dang
Lihua Rong
Xiaohai Hu
Lixia Guo
(74) dr. R.C. van Duijvenbode c.s.
(31) 2022114728447
(32) 16.11.2022
(33) China

(51) G06Q 50/06
H02J 3/14
G06N 3/006
(11) 2035362
(47) 20.05.2025
(22) 13.07.2023
(54) Low-frequency and low-voltage load shedding method considering the active regulation characteristics of new energy sources
(73) State Grid Henan Electric Power Research Institute
State Grid Henan Electric Power Company
(72) Chao Liu
Yiqi Dang
Weidong Ma
Wei Han
Wenyan Duan
Yang Wang
Lei Liu
(74) dr. T. Wittop Koning PhD
(31) 202211528935.8
(32) 30.11.2022
(33) China

(51) G06T 7/00
G06T 7/11
G06V 10/764
G06V 10/82
(11) 2037075
(47) 20.05.2025
(22) 21.02.2024
(54) A predictive System for Chronic Obstructive Pulmonary Disease Based on CT Imaging and Deep Learning
(73) Shanghai Changzheng Hospital
(72) Di Zhang
Li Fan
Xiuxiu Zhou
Shiyuan Liu
Taohu Zhou
(74) ir. W.J.J.M. Kempes
(31) 202310442914.2
(32) 23.04.2023
(33) China

(51) G06T 17/05
G06T 19/00
G01V 20/00
G01C 15/00
G09B 5/12
G09B 23/40
G06T 19/20
(11) 2036666
(47) 14.05.2025
(22) 24.12.2023
(54) Cloud Geological Practice System and Method Based on Smart3D and VR Technology
(73) Chengdu University of Technology
(72) Shenghua Cui
Xiangjun Pei
Tao Jiang
Qingwen Yang
Mengjie Yang
Yixuan Jia
Yufeng Wei
(74) ir. F.A. Geurts c.s.
(31) 202310896553.9
(32) 20.07.2023
(33) China

(51) G06V 10/82
A61B 5/00
G06V 40/20
G06F 3/01
G06N 20/00
(11) 2037051
(47) 14.05.2025
(22) 19.02.2024
(54) HUMAN BODY BALANCE POSTURE CORRECTION TRAINING SYSTEM AND METHOD
(73) University of Shanghai for Science and Technology
(72) Zhuo Wang
Yiliang Zhou
Xiaoru Li
(74) ir. M.B. Plaggenborg
(31) 202311547162.2
(32) 20.11.2023
(33) China

(51) G06V 20/68
G06V 10/764
G06V 10/82
G06V 10/762
G06V 10/26
G06V 20/70
(11) 2038113
(47) 14.05.2025
(22) 02.07.2024
(54) MODELING METHOD FOR PICKING TARGET OF FRUIT BUNCH PICKING ROBOT
(73) Research Center of Intelligent Equipment, Beijing Academy of Agriculture and Forestry Sciences
(72) Chuanlang Peng
Yajun Li
Yifan Zhang
Qingchun Feng
(74) ir. F.A. Geurts c.s.
(31) 202311205328.2
(32) 19.09.2023
(33) China

(51) G08B 25/12
H04R 1/10
H04M 11/04
H04M 1/72424
(11) 2036230
(47) 20.05.2025
(22) 10.11.2023
(54) Personal alarm device comprising a sound alarm and an activating element

(73) Madoc Marein van Zalk
(72) Madoc Marein van Zalk
(74) ir. G.J.M. Verhees

(51) H01C 1/024
H01C 11/00
(11) 2036244
(47) 20.05.2025
(22) 10.11.2023
(54) PULSE HIGH-POWER INDUCTIVE RESISTOR
(73) Yuanling County XiangHua Electronic Technology Co.Ltd
(72) Jie Xiao
Haixia Song
Haijian Li
(74) ir. W.J.J.M. Kempes

(51) H01J 37/26
H01J 37/153
(11) 2035277
(47) 14.05.2025
(22) 06.07.2023
(54) Multi-beam charged particle microscope design with mirror for field curvature correction
(73) Carl Zeiss MultiSEM GmbH
(72) Dirk Zeidler
Thomas Schmid
Wolfgang Singer
(74) ir. B.Ch. Ledeboer c.s
(31) 10 2022 206 937.4
(32) 07.07.2022
(33) Germany

(51) H02J 13/00
G06Q 10/04
G06Q 10/06
G06Q 50/06
H02J 3/00
(11) 2036521
(47) 20.05.2025
(22) 14.12.2023
(54) Method of Toughness Enhancement for Power System in Combination with Pre-disaster Early-warning Mechanism
(73) NANJING TECH UNIVERSITY
(72) Li Zhang
Limin Song
Jingjing Li
Xiaogang Cheng
Yi Chen
Manjuan Xia
(74) dr. G. Visser-Luirink
(31) CN2023100124639
(32) 05.01.2023
(33) China

(51) H02P 7/00
B60K 11/08
E05F 15/603
H02P 3/02
(11) 2036218
(47) 19.05.2025
(22) 08.11.2023
(54) Method of controlling operation of an actuatable object
(73) MCi (Mirror Controls International) Netherlands B.V.
(72) Bastiaan Huijzers
(74) ir. B.Ch. Ledeboer c.s

(51) H03F 3/189
H03F 3/21
H03F 1/56
H03F 3/24
H03F 1/02
(11) 2036239
(47) 20.05.2025
(22) 10.11.2023
(54) PSEUDO-DOHERTY LOAD MODULATED BALANCED AMPLIFIER
(73) Ampleon Netherlands B.V.
(72) Zhi Geng
Radjindrepersad Gajadharsing
(74) dr. ir. G.J.C. Verdijck c.s.

(51) H04B 10/112
(11) 2036204
(47) 19.05.2025
(22) 07.11.2023
(54) A free space optical communications terminal device as well as a free space optical communications network.
(73) VDL Enabling Technologies Group B.V.
(72) Martijn Stopel
William Edward Crowcombe
(74) ir. A. Blokland c.s.

(51) H04L 9/08
(11) 2036232
(47) 20.05.2025
(22) 10.11.2023
(54) Cryptographic method
(73) Arjen Klaas Lenstra
Jacobus Johannes Wansbeek
(72) Jacobus Johannes Wansbeek
Arjen Klaas Lenstra
(74) dr. R.C. van Duijvenbode c.s.

NP3

Nederlandse octrooien na gedeeltelijke afstand ex artikel 63 van de Rijksoctrooiwet 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 69/04
H04W 84/18
G05D 1/00
(11) EP4258850
(21) EP21791467.0
(47) 21.05.2025
(87) IB2021058882
16.06.2022
(22) 29.09.2021
(54) DATA EXCHANGE WITHIN A ROBOTIC SYSTEM USING MOBILE ROBOTS
(73) AGCO International GmbH
(72) BOCK-KRAUSEN, Leopold
FERNANDEZ GUZMANN, Benjamin Fernando
(31) 202019413
(32) 09.12.2020
(33) United Kingdom

(51) A01B 73/04
A01B 21/04
A01B 21/08
(11) EP3863393
(21) EP19871596.3
(47) 21.05.2025
(87) DK2019050315
16.04.2020
(22) 11.10.2019
(54) ROTARY HOE ARRANGEMENT AND THE USE OF A ROTARY HOE ARRANGEMENT FOR HOEING
(73) GST Denmark ApS
(72) GUBI, Jacob Lindholm
HOLM, Jan
JENSEN, Bent
(31) PA201800716
(32) 11.10.2018
(33) Denmark

(51) A01C 7/10
A01C 7/04
A01C 7/20
A01C 21/00
A01M 9/00
A01C 19/02
(11) EP3967121
(21) EP21205778.0
(47) 21.05.2025
(22) 25.07.2013
(54) SYSTEM FOR MULTI-ROW AGRICULTURAL IMPLEMENT CONTROL AND MONITORING
(73) Precision Planting LLC
(72) BAURER, Phil
SAUDER, Tim
STOLLER, Jason
SAUDER, Derek
HODEL, Jeremy
(31) 201261675714 P
(32) 25.07.2012
(33) United States of America

(51) A01C 9/02
(11) EP4062735
(21) EP22163622.8
(47) 21.05.2025
(22) 22.03.2022
(54) LAYING DEVICE AND LAYING MACHINE
(73) Grimme Landmaschinenfabrik GmbH & Co. KG
(72) Rechtien, Jochen
Rechtien, Andreas
Böging, Michael
(31) 202021101467 U
(32) 22.03.2021
(33) Germany

(51) A01C 15/04
A01C 21/00
(11) EP3881659
(21) EP20401020.1
(47) 21.05.2025
(22) 20.03.2020
(54) METHOD FOR APPLYING GRANULAR MATERIAL
(73) Amazonen-Werke H. Dreyer SE & Co. KG
(72) Kiefer, Stefan
Klemann, Timo

(51) A01C 21/00
G05D 1/00
A01M 99/00
B05B 1/14
B05B 1/20
B05B 9/00
B05B 7/00
B05B 9/04
B05B 12/04
B05B 12/12
G06V 20/56
(11) EP4075940
(21) EP20904193.8
(47) 21.05.2025
(87) US2020061681
24.06.2021
(22) 20.11.2020
(54) AGRICULTURAL PROJECTILE DELIVERY SYSTEM
(73) Verdant Robotics, Inc.
(72) SIBLEY, Gabriel Thurston
GARNER, Curtis Dale
MICHELIN, Andre Robert Daniel
IBARRIA, Lorenzo
LEGER, Patrick Christopher
REWIS, Benjamin
YAN, Shi
(31) 201916724262
(32) 21.12.2019
(33) United States of America

(51) A01D 33/06
A01D 34/835
(11) EP3923695
(21) EP20703383.8
(47) 21.05.2025
(87) DK2020050023
20.08.2020
(22) 22.01.2020
(54) A HAULM CUTTING APPARATUS
(73) MSR Technology ApS
(72) STOLBERG-ROHR, Michael
(31) PA201970102
(32) 15.02.2019
(33) Denmark

(51) A01D 34/74
(11) EP4000372
(21) EP21202371.7
(47) 21.05.2025
(22) 13.10.2021
(54) WORK VEHICLE
(73) Iseki & Co., Ltd.
(72) BABA, Yusuke
BABA, Hirotaka
(31) 2020188098
(32) 11.11.2020
(33) Japan

(51) A01D 41/12
A01D 41/127
A01D 43/08
(11) EP4169368
(21) EP22183092.0
(47) 21.05.2025
(22) 05.07.2022
(54) SYSTEM FOR DYNAMICALLY DETECTING ALERT CONDITIONS AND OPTIMIZATION CRITERIA
(73) Deere & Company
(72) Faust, Jeremy J.
O'Connor, Kellen
(31) 202117386975
(32) 28.07.2021
(33) United States of America

(51) A01D 41/14
(11) EP4171192
(21) EP21745657.3
(47) 21.05.2025
(87) US2021039906
06.01.2022
(22) 30.06.2021
(54) GAUGE WHEEL CONTROL SYSTEM FOR AN AGRICULTURAL SYSTEM
(73) CNH Industrial Belgium NV
(72) TROWBRIDGE, Jeffrey, C.
(31) 202063046198 P
(32) 30.06.2020
(33) United States of America

(51) A01D 41/14
A01D 75/28
(11) EP4039078
(21) EP22154763.1
(47) 21.05.2025
(22) 02.02.2022
(54) HEADER FORE/AFT TILT CONTROL FOR COMBINE HARVESTER
(73) CNH Industrial Belgium NV
(72) Martin, Jethro
(31) 202117166514

(32) 03.02.2021
(33) United States of America

(51) A01F 15/10
(11) EP3932179
(21) EP21179210.6
(47) 21.05.2025
(22) 14.06.2021
(54) LARGE SQUARE BALER WITH PRE-COMPRESSION CHAMBER HAVING REMOVEABLE ACCESS PANEL
(73) Deere & Company
(72) KRAUS, Timothy J
(31) 202016917017
(32) 30.06.2020
(33) United States of America

(51) A01F 15/10
(11) EP4111848
(21) EP21183002.1
(47) 21.05.2025
(22) 30.06.2021
(54) STUFFER ASSEMBLY FOR AN AGRICULTURAL BALER
(73) CNH Industrial Belgium N.V.
(72) Devroe, Jeroen
Liefooghe, Dries
Bonte, Xavier G.J.M.
Claeys, Danny N.O.
Lippens, Christiaan A.C.
Naeyaert, Karel
Rosseel, Bram

(51) A01F 25/13
A01F 25/16
(11) EP4213613
(21) EP22777716.6
(47) 21.05.2025
(87) IB2022058555
23.03.2023
(22) 12.09.2022
(54) COVERING DEVICE FOR SILAGE IN A SILO AND METHOD FOR COVERING A SILO FILLED WITH SILAGE
(73) Cobefa BV
(72) DECOCK, Jeroen
(31) 202105706
(32) 14.09.2021
(33) Belgium

(51) A01G 23/00
(11) EP4181661
(21) EP21739997.1
(47) 21.05.2025
(87) EP2021068176
20.01.2022
(22) 01.07.2021
(54) MOBILE WORK MACHINE, IN PARTICULAR A FORESTRY MACHINE
(73) Suffel Fördertechnik GmbH & Co. KG
(72) WILLENBÜCHER, Michael
HOFMANN, Claus
WELSCHOF, Bernward
(31) 102020118838
(32) 16.07.2020
(33) Germany

(51) A01G 24/44
(11) EP3383164
(21) EP16831484.7
(47) 21.05.2025
(87) EP2016025127
04.05.2017
(22) 26.10.2016
(54) SELF-SUPPORTING PLUGS AND OTHER STRUCTURES FOR USE IN PLANT PRODUCTION
(73) Oxydator ApS
(72) JENSEN, Martin
PEDERSEN, Thomas, Brorsen
(31) 15020206
(32) 27.10.2015
(33) European Patent Office (EPO)

(51) A01G 25/16
A01G 25/02
(11) EP3769612
(21) EP19772372.9
(47) 21.05.2025
(87) JP2019010973
26.09.2019
(22) 15.03.2019
(54) IRRIGATION WATER AMOUNT MEASUREMENT DEVICE AND IRRIGATION WATER AMOUNT MEASUREMENT METHOD
(73) NEC Corporation
(72) ISHIDA, Kousuke
(31) 2018054495
(32) 22.03.2018
(33) Japan

(51) A01G 25/16
G06Q 50/02
B64U 101/30
(11) EP3648574
(21) EP18828139.8
(47) 21.05.2025
(87) IL2018050710
10.01.2019
(22) 01.07.2018
(54) METHODS AND SYSTEMS FOR IRRIGATION GUIDANCE
(73) Manna Irrigation Ltd.
(72) BEERI, Ofer
MEY-TAL, Shay
(31) 25326017
(32) 02.07.2017
(33) Israel

(51) A01H 5/00
A01H 6/08
(11) EP3363283
(21) EP16812662.1
(47) 21.05.2025
(87) JP2016080617
20.04.2017
(22) 14.10.2016
(54) NOVEL MANDEVILLA PLANT AND METHOD FOR BREEDING SAME
(73) Suntory Flowers Limited
Suntory Holdings Limited
(72) YAMADA, Masahiro
MISATO, Tomoya
WATANABE, Takehiro
AZUMA, Toshiaki
HORIKAWA, Manabu
(31) 201562242025 P
(32) 15.10.2015
(33) United States of America

(51) A01K 5/01
(11) EP3079462
(21) EP14821495.0
(47) 21.05.2025
(87) DK2014050425
18.06.2015
(22) 11.12.2014
(54) LONG TROUGH
(73) Polysan A/S
(72) SØRENSEN, Villy Juhl
(31) 201370763
(32) 11.12.2013
(33) Denmark

(51) A01K 29/00
(11) EP4241560
(21) EP23157512.7
(47) 21.05.2025
(22) 20.02.2023
(54) SYSTEMS AND METHODS FOR DETERMINING FEED INTAKE OF CATTLE
(73) Afimilk Agricultural Cooperative Ltd.
(72) KATZ, Gil
YAIR, Roni Shlomo
(31) 202263317631 P
(32) 08.03.2022
(33) United States of America

(51) A01K 55/00
(11) EP4159032
(21) EP21199776.2
(47) 21.05.2025
(22) 29.09.2021
(54) DEVICE FOR LIFTING FRAMES OF A MAGAZINE BAG FOR BEEKEEPING
(73) Senft, Thomas
(72) Senft, Thomas

(51) A01K 61/60
(11) EP3849303
(21) EP19860135.3
(47) 21.05.2025
(87) NO2019050185
19.03.2020
(22) 12.09.2019
(54) A RAISEABLE FLOATING STRUCTURE AND A METHOD FOR RAISING THE SAME IN A WATER COLUMN
(73) SFS Group AS
(72) SANDSTAD, Alf Reidar
(31) 20181197
(32) 13.09.2018
(33) Norway

(51) A01K 67/0278
C07K 16/00
C07K 16/46
C12N 9/12
(11) EP4140297
(21) EP22188627.8
(47) 21.05.2025
(22) 04.12.2018
(54) MICE HAVING AN ENGINEERED IMMUNOGLOBULIN LAMBDA LIGHT CHAIN AND USES THEREOF
(73) Regeneron Pharmaceuticals, Inc.
(72) MURPHY, Andrew J.
MACDONALD, Lynn
GUO, Chunguang
MCWHIRTER, John
(31) 201762609251 P
201762609241 P
201762594944 P
201762594946 P

(32) 21.12.2017
21.12.2017
05.12.2017
05.12.2017
(33) United States of America
United States of America
United States of America
United States of America

(51) A01K 75/00
D07B 5/00
D07B 1/18
D07B 1/16
(11) EP3878275
(21) EP21170923.3
(47) 21.05.2025
(22) 22.07.2010
(54) PELAGIC TRAWL WITH HELIX ROPE AND METHODS OF MANUFACTURING THE SAME
(73) Hampiðjan HF.
(72) Erlendsson, Hjortur
(31) 27370309 P
27150509 P
(32) 07.08.2009
22.07.2009
(33) United States of America
United States of America

(51) A01M 29/12
(11) EP4344541
(21) EP23167879.8
(47) 21.05.2025
(22) 14.04.2023
(54) PCB WIRING HEATING TYPE MOSQUITO REPELLENT DEVICE
(73) Li, Wenjie
(72) Li, Wenjie
(31) 202222515806 U
(32) 22.09.2022
(33) China

(51) A01N 1/02
A61M 1/02
(11) EP3967143
(21) EP21190624.3
(47) 21.05.2025
(22) 28.02.2014
(54) GAS ADDITION DEVICE FOR BLOOD TREATMENT AND CORRESPONDING METHOD
(73) Hemanext Inc.
(72) LEVESQUE, Steven F.
RUTH, Thomas R.
(31) 201361770516 P
(32) 28.02.2013
(33) United States of America

(51) A01N 35/02
A61K 8/35
A01P 1/00
(11) EP3897146
(21) EP19832335.4
(47) 21.05.2025
(87) EP2019085797
25.06.2020
(22) 17.12.2019
(54) ANTIMICROBIAL MIXTURE CONTAINING 4-(3-ETHOXY-4-HYDROXYPHENYL) BUTAN-2-ONE, AND 4-HYDROXYACETOPHENONE, AND COMPOSITION CONTAINING SAME
(73) L'OREAL
(72) EYRAUD, Sonia
GALVAN, Julien
BOSSANT, Isabelle
(31) 1913639
1873695
(32) 03.12.2019
20.12.2018
(33) France
France

(51) A01N 47/46
A01N 25/08
A01P 1/00
A61K 31/26
A61P 31/04
A61P 31/12
(11) EP3616518
(21) EP19194118.6
(47) 21.05.2025
(22) 28.08.2019
(54) ANTIMICROBIAL AGENT CONTAINING ISOTHIOCYANATES
(73) Shenstone Consultants Ltd.
(72) Lee, Chris
(31) 102018121251
(32) 30.08.2018
(33) Germany

(51) A01P 21/00
A01N 47/44
A01G 7/06
A01N 37/04
A01N 37/10
(11) EP3749081
(21) EP19747440.6
(47) 21.05.2025
(87) US2019016021
08.08.2019
(22) 31.01.2019
(54) METHODS AND COMPOSITIONS FOR INCREASING TOLERANCE TO ABIOTIC STRESS IN PLANTS
(73) Crop Microclimate Management, Inc.
(72) KUPATT, Charles Christian
(31) 201862626350 P
(32) 05.02.2018
(33) United States of America

(51) A21D 13/066
A21D 13/064
A23L 7/10
A23L 7/109
A01H 5/10
A01H 1/02
A01H 6/46
(11) EP3414997
(21) EP17813635.4
(47) 21.05.2025
(87) KR2017006335
21.12.2017
(22) 16.06.2017
(54) WHEAT FLOUR AND PRODUCTS PREPARED THEREFROM FOR PREVENTING GLUTEN INTOLERANCE AND WHEAT-DEPENDENT EXERCISE-INDUCED ANAPHYLAXIS
(73) Republic of Korea Management: Rural Development Administration
Industrial Cooperation Foundation Of Chonbuk National University
(72) KANG, Chon Sik
LEE, Jong -Yeol
PARK, Chul Soo
CHEONG, Young Keun
KIM, Kyeong Hoon
SON, Jae Han
PARK, Jong Chul
PARK, Kwang Geun
PARK, Ki Hun
KIM, Young-Mi
LIM, Sun-Hyung
KIM, Bo Kyeong
(31) 20170076010
20160075793
(32) 15.06.2017
17.06.2016
(33) Korea (Republic)
Korea (Republic)

(51) A22C 21/02
(11) EP4101299
(21) EP22178048.9
(47) 21.05.2025
(22) 09.06.2022
(54) PLUCKING FINGERS FOR A POULTRY PLUCKING MACHINE
(73) Plumatech
(72) LE MEAUX, Franck
(31) 2106112
(32) 10.06.2021
(33) France

(51) A23B 7/154
A01G 17/00
A23B 7/16
C09D 101/02
(11) EP3576544
(21) EP18748824.2
(47) 21.05.2025
(87) US2018016021
09.08.2018
(22) 30.01.2018
(54) FOOD PRODUCT COATINGS
(73) Oregon State University
(72) JUNG, Jooyeoun
SIMONSEN, John
ZHAO, Yanyun
(31) 201762452897 P
(32) 31.01.2017
(33) United States of America

(51) A23C 9/142
A23C 9/15
(11) EP3091840
(21) EP15879114.5
(47) 21.05.2025
(87) NZ2015000004
28.07.2016
(22) 23.01.2015
(54) MILK BASED COMPOSITIONS COMPRISING MILK DERIVED, FULLY DENATURED RETENTATE, USES OF SAID RETENTATE AND METHODS OF MANUFACTURING OF THE MILK BASED COMPOSITIONS
(73) Goodman Fielder PTE. LTD
(72) DAS, Shantanu
TANEJA, Namrata
OLNEY, Sonya Dianne

ELLIS, Ashling
HALL, Christopher Edward
SINGH, Harjinder
YE, Aiqian

(51) A23C 13/12
A23C 15/06
A23C 15/12
A23C 9/142
(11) EP4312572
(21) EP22718874.5
(47) 21.05.2025
(87) EP2022058017
29.09.2022
(22) 25.03.2022
(54) NOVEL MILK FAT GLOBULE CONCENTRATE, METHOD OF PRODUCTION THEREOF, AND FOOD PRODUCTS CONTAINING IT
(73) Arla Foods amba
(72) SUWAL, Shyam, Krishna
ANDERSEN, Ulf
(31) 21165328
(32) 26.03.2021
(33) European Patent Office (EPO)

(51) A23C 19/068
A23C 20/02
A23L 29/206
A23L 29/269
A23L 33/135
A23L 33/21
A23L 33/00
(11) EP4456729
(21) EP23764701.1
(47) 21.05.2025
(87) IB2023057898
08.02.2024
(22) 04.08.2023
(54) VEGETABLE STRETCHED-CURD CHEESE AND METHOD OF PRODUCTION
(73) DREAMFARM S.R.L. SB
(72) SANDEI, Mattia
(31) 22188778
(32) 04.08.2022
(33) European Patent Office (EPO)

(51) A23G 1/56
A23G 1/36
A23G 1/04
A23D 7/015
A23D 7/02
A23D 7/01
A23D 7/04
A23G 1/32
B01F 23/41
(11) EP2978322
(21) EP14748319.2
(47) 21.05.2025
(87) US2014032140
02.10.2014
(22) 28.03.2014
(54) PROCESS FOR THE PRODUCTION OF STABLE EMULSIONS
(73) Cargill, Incorporated
(72) DI BARI, Vincenzo
NORTON, Ian Timothy
NORTON, Jennifer Elizabeth
SMITH, Paul Raymond
(31) 13001653
(32) 29.03.2013
(33) European Patent Office (EPO)

(51) A23G 9/04
A23G 9/12
A23G 9/28
A23G 9/30
(11) EP3360422
(21) EP18155301.7
(47) 21.05.2025
(22) 06.02.2018
(54) MACHINE FOR MAKING AND DISPENSING A LIQUID OR SEMI-LIQUID PRODUCT
(73) Ali Group S.r.l.
(72) LAZZARINI, Roberto
COCCHI, Andrea
(31) 201700016373 U
(32) 14.02.2017
(33) Italy

(51) A23K 10/00
A23K 10/16
A23K 10/18
A23K 10/20
A23K 10/22
(11) EP3478080
(21) EP17740185.8
(47) 21.05.2025
(87) US2017040087
04.01.2018
(22) 29.06.2017
(54) FEED INGREDIENTS COMPRISING LYSED MICROBIAL CELLS
(73) Corbion Biotech, Inc.
(72) RAKITSKY, Walter
PIECHOCKI, John
LU, Wenhua
GALAZZO, Jorge
WEE, Janice
(31) 201715636506
201662408630 P
201662357829 P
(32) 28.06.2017
14.10.2016
01.07.2016
(33) United States of America
United States of America
United States of America

(51) A23K 10/14
A23K 20/189
C12N 9/64
C12N 9/52
C12N 9/00
(11) EP3215615
(21) EP15790110.9
(47) 21.05.2025
(87) EP2015075512
12.05.2016
(22) 03.11.2015
(54) POLYPEPTIDES HAVING SERINE PROTEASE ACTIVITY AND POLYNUCLEOTIDES ENCODING SAME AND THEIR APPLICATION IN ANIMAL FEED
(73) Novozymes A/S
(72) HOFF, Tine
OESTERGAARD, Peter Rahbek
PONTOPPIDAN, Katrine Fruergaard
(31) 14191691
(32) 04.11.2014
(33) European Patent Office (EPO)

(51) A23L 5/43
C09B 61/00
(11) EP4301160
(21) EP22710031.0
(47) 21.05.2025
(87) EP2022055163
09.09.2022
(22) 01.03.2022
(54) BEETROOT COMPOSITION
(73) GNT Group B.V.
(72) ZILLEKENS, Annja Maria
VOLKERT, Marcus
(31) 21160279
(32) 02.03.2021
(33) European Patent Office (EPO)

(51) A23L 13/20
A23L 13/40
A23L 13/60
A23B 4/00
(11) EP4437857
(21) EP23165966.5
(47) 21.05.2025
(22) 31.03.2023
(54) METHOD FOR PREPARING A SUBSTITUTE PRODUCT FOR A BLOC FOIE GRAS SUITABLE FOR FRYING
(73) EthicLine GmbH
(72) SUDHOFF, Tobias

(51) A23L 17/10
A23L 17/00
A23L 19/00
A23L 25/00
A23P 30/10
(11) EP4061151
(21) EP19829677.4
(47) 21.05.2025
(87) IB2019059926
27.05.2021
(22) 19.11.2019
(54) AN EDIBLE FOOD PRODUCT OF INCREASED BIOLOGICAL VALUE PREPARED FROM LYOPHILISED POWDER
(73) Uab Geld Baltic
(72) KAZIUKONIENE , Laura

(51) A23L 19/12
A23D 7/005
A23D 7/04
A23L 23/00
A23L 29/212
A23L 33/105
A23L 19/00
(11) EP3965591
(21) EP20822358.6
(47) 21.05.2025
(87) IB2020055391
17.12.2020
(22) 09.06.2020
(54) LIQUIFIED POTATO PRODUCT AND PROCESS
(73) McCain Foods Limited
(72) KIRTLEY, Nigel
LAUDANO, Raymond J.
SPORS, Derek E.
(31) 202016894095
201962859542 P

(32) 05.06.2020
10.06.2019
(33) United States of America
United States of America
(51) A23L 33/19
A23L 33/00
(11) EP3917338
(21) EP20703846.4
(47) 21.05.2025
(87) NL2020050059
06.08.2020
(22) 03.02.2020
(54) NATIVE WHEY PROTEIN FOR IMPROVING INTESTINAL MATURATION
(73) N.V. Nutricia
(72) RENES, Ingrid Brunhilde
VERDURMEN, Rudolph Eduardus Maria
HOLS, Gerrit
ABRAHAMSE, Evan
(31) PCT/NL2019/050067
(32) 01.02.2019
(33) World Intellectual Property Office (WIPO)
(51) A23L 33/195
A23C 9/12
C12N 9/38
(11) EP3911180
(21) EP20700507.5
(47) 21.05.2025
(87) EP2020050966
23.07.2020
(22) 16.01.2020
(54) PAENIBACILLUS WYNNII BETA-GALACTOSIDASE FOR THE PRODUCTION OF LACTOSE-DEPLETED AND GOS-ENRICHTED DAIRY PRODUCTS
(73) Universität Hohenheim
(72) FISCHER, Lutz
LUTZ-WAHL, Sabine
(31) 19152027
(32) 16.01.2019
(33) European Patent Office (EPO)
(51) A23P 20/10
A23L 19/18
A23L 29/219
A23L 29/212
A23L 5/10
A23N 12/06
A23P 20/12
A47J 37/06
(11) EP3273805
(21) EP16720931.1
(47) 21.05.2025
(87) NL2016050201
29.09.2016
(22) 23.03.2016
(54) METHOD FOR PREPARING A POTATO PRODUCT FOR FINISH-FRYING AND SUCH A POTATO PRODUCT FOR FINISH-FRYING
(73) Lamb Weston B.V.
(72) DE WINTER, Leon
EIJSMAN, Leon
VAN DOORN, Johannes Elisabert
(31) 2016397
2014505
(32) 08.03.2016
23.03.2015
(33) Netherlands
Netherlands
(51) A23P 20/10
A23L 19/18
A23L 29/219
A23L 29/212
A23L 5/10
A23P 20/12
A23P 20/15
(11) EP3273806
(21) EP16722420.3
(47) 21.05.2025
(87) NL2016050202
29.09.2016
(22) 23.03.2016
(54) COATING FOR A POTATO PRODUCT FOR FINISH-FRYING, A POTATO PRODUCT PROVIDED THEREWITH AND METHOD THEREFOR
(73) Lamb Weston B.V.
(72) VOS, Paulus Bartholomeus Jacobus
DOKTER, Jannes
(31) 2016396
2014504
201562164138 P
(32) 08.03.2016
23.03.2015
20.05.2015
(33) Netherlands
Netherlands
United States of America
(51) A24B 15/16
A24B 15/42
(11) EP4366562
(21) EP22740899.4
(47) 21.05.2025
(87) EP2022068991
12.01.2023
(22) 07.07.2022
(54) ARTICLE WITH TUBULAR AEROSOL-FORMING SUBSTRATE
(73) Philip Morris Products S.A.
(72) CAMPITELLI, Gennaro
FEDELI, Francesco
FARINE, Marie
(31) 22178772
22178770
22178767
21184365
(32) 13.06.2022
13.06.2022
13.06.2022
07.07.2021
(33) European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
(51) A24B 15/28
A24B 15/30
(11) EP4190176
(21) EP22208373.5
(47) 21.05.2025
(22) 25.10.2019
(54) SMOKING SUBSTITUTE CONSUMABLE
(73) Imperial Tobacco Limited
(72) FERRIE, Kate
JONES, Jill
WILLIAMS, John
SHENTON, Edward Ross
(31) 201817557
(32) 29.10.2018
(33) United Kingdom
(51) A24D 1/20
(11) EP4272583
(21) EP22862400.3
(47) 21.05.2025
(87) CN2022098568
21.09.2023
(22) 14.06.2022
(54) SNAP-SEAL PARTICULATE AEROSOL-GENERATING ARTICLE
(73) CHINA TOBACCO YUNNAN INDUSTRIAL CO., LTD
(72) ZHAO, Yang
GONG, Xiaowei
HAN, Yi
GUO, Dingrong
LI, Zhiqiang
ZHU, Ruizhi
ZHANG, Zilong
CHEN, Jinxiong
DUAN, Yuanxing
SHEN, Qinpeng
LI, Xuemei
ZHAO, Wei
XIANG, Nengjun
LIU, Lingxuan
(31) 202210253922
(32) 15.03.2022
(33) China
(51) A24F 40/40
A24F 40/48
A24F 40/05
A24F 40/42
(11) EP4017299
(21) EP20765423.7
(47) 21.05.2025
(87) US2020047336
25.02.2021
(22) 21.08.2020
(54) BATTERY FOR VAPORIZER DEVICE
(73) Juul Labs, Inc.
(72) GUAN, Jie
VALENTINE, Val
ZENG, Qingcheng
(31) 201962890446 P
(32) 22.08.2019
(33) United States of America
(51) A24F 40/46
A24F 40/20
A24F 40/85
(11) EP4280903
(21) EP22700649.1
(47) 21.05.2025
(87) EP2022050788
28.07.2022
(22) 14.01.2022
(54) HEATER ASSEMBLY
(73) Philip Morris Products S.A.
(72) BATISTA, Rui Nuno Rodrigues Alves
KIERNAN, Edward
PRESTIA, Ivan
(31) 21152506
(32) 20.01.2021

(33) European Patent Office (EPO)

(51) A24F 40/465
A24F 40/53
A24F 40/50
A24F 40/40
H05B 6/10
H05B 6/36
H05B 6/06
(11) EP3836808
(21) EP20811225.0
(47) 21.05.2025
(87) KR2020012839
06.05.2021
(22) 23.09.2020
(54) AEROSOL GENERATING SYSTEM
(73) KT&G Corporation
(72) LEE, Seung Won
YOON, Sung Wook
HAN, Dae Nam
(31) 20190138772
(32) 01.11.2019
(33) Korea (Republic)

(51) A24F 40/465
A24F 40/85
A24F 40/20
(11) EP3664635
(21) EP18746726.1
(47) 21.05.2025
(87) EP2018071262
14.02.2019
(22) 06.08.2018
(54) AEROSOL-GENERATING DEVICE WITH AN INDUCTION HEATER WITH A CONICAL INDUCTION COIL
(73) Philip Morris Products S.A.
(72) BATISTA, Rui Nuno
REEVELL, Tony
(31) 17185560
(32) 09.08.2017
(33) European Patent Office (EPO)

(51) A24F 40/485
A24F 40/44
A24F 40/46
A24F 40/10
(11) EP3563700
(21) EP19168005.7
(47) 21.05.2025
(22) 09.04.2019
(54) ATOMIZER AND ELECTRONIC CIGARETTE
(73) Shenzhen Smoore Technology Limited
(72) HAN, Jiyun
(31) 201820666215 U
(32) 04.05.2018
(33) China

(51) A24F 40/50
A24F 40/30
(11) EP4064914
(21) EP20819837.4
(47) 21.05.2025
(87) GB2020053003
03.06.2021
(22) 26.11.2020
(54) AEROSOL DELIVERY SYSTEM
(73) Nicoventures Trading Limited
(72) KUENZEL, Johanna
MOLONEY, Patrick
KABIRAT, Junior
(31) 201917438
(32) 29.11.2019
(33) United Kingdom

(51) A24F 40/50
A24F 40/465
H05B 6/36
H05B 6/10
H02J 7/00
A24F 40/51
A24F 40/57
A24F 40/60
A24F 40/65
(11) EP4225089
(21) EP21915576.9
(47) 21.05.2025
(87) KR2021018324
07.07.2022
(22) 06.12.2021
(54) AEROSOL GENERATING DEVICE AND OPERATING METHOD THEREOF
(73) KT&G Corporation
(72) KIM, Yong Hwan
YOON, Sung Wook
LEE, Seung Won
JANG, Seok Su
HAN, Dae Nam
(31) 20200189477
(32) 31.12.2020
(33) Korea (Republic)

(51) A41D 13/00
B62J 17/10
(11) EP4169405
(21) EP22202513.2
(47) 21.05.2025
(22) 19.10.2022
(54) AERODYNAMIC CLOTHING AND ACCESSORY FOR BICYCLE RIDER
(73) Ara, Ohanian
(72) Ara, Ohanian
(31) 202163270076 P
(32) 21.10.2021
(33) United States of America

(51) A41D 27/18
A41B 3/00
(11) EP4385349
(21) EP23216380.8
(47) 21.05.2025
(22) 13.12.2023
(54) COLLAR FOR KNIT GARMENT COMPRISING A FIRST CURVED FLEXIBLE PORTION AND A SECOND CURVED STRUCTURED MESH RIGID PORTION, METHOD FOR MANUFACTURING SUCH A COLLAR AND GARMENT COMPRISING SUCH A COLLAR
(73) Lacoste Operations
(72) VIGNAL, Patrick
RATIER, David
DISLE, Marie Christine
(31) 2213382
(32) 14.12.2022
(33) France

(51) A42B 1/012
(11) EP3836814
(21) EP18782788.6
(47) 21.05.2025
(87) IB2018056246
20.02.2020
(22) 17.08.2018
(54) A HEAD COVER
(73) O&M Halyard, Inc.
(72) HOWELL, Margaret A.

(51) A43B 1/00
A43B 13/18
A43B 13/20
A43B 13/22
A43B 13/26
(11) EP3689170
(21) EP20164319.4
(47) 21.05.2025
(22) 18.11.2016
(54) GROUND-ENGAGING STRUCTURES FOR ARTICLES OF FOOTWEAR
(73) Nike Innovate C.V.
(72) Hollinger, Kevin
Thornhill, Cheresse
(31) 201562258208 P
(32) 20.11.2015
(33) United States of America

(51) A43B 1/04
A43B 3/00
A43B 13/12
A43B 13/14
B29D 35/00
B29D 35/14
A43B 23/04
(11) EP4218476
(21) EP23167727.9
(47) 21.05.2025
(22) 29.08.2018
(54) SOLE STRUCTURE OF AN ARTICLE OF FOOTWEAR
(73) NIKE Innovate C.V.
(72) Choi, Yoon Jeong
Cross, Tory M.
Steinbeck, Christian Alexander
Zormeir, James
(31) 201762552885 P
(32) 31.08.2017
(33) United States of America

(51) A43B 3/00
A43B 11/00
A43B 13/14
A43C 11/00
(11) EP3908141
(21) EP19909287.5
(47) 21.05.2025
(87) US2019069110
16.07.2020
(22) 31.12.2019
(54) RAPID-ENTRY FOOTWEAR HAVING AN EXPANDABLE OPENING
(73) Fast IP, LLC
(72) PRATT, Michael
HERMANN, Steven
EDDINGTON, Joseph
CHENEY, Craig
(31) 201962937107 P
201962789395 P
(32) 18.11.2019
07.01.2019
(33) United States of America
United States of America

(51) A43B 7/14
A43B 13/16

A43B 13/18
(11) EP4233618
(21) EP23180847.8
(47) 21.05.2025
(22) 27.02.2017
(54) SYSTEM FOR MANUFACTURING A CUSTOMIZED SOLE MEMBER FOR AN ARTICLE OF FOOTWEAR
(73) NIKE Innovate C.V.
(72) Cook, Christopher S.
Kohatsu, Shane S.
Schoolmeester, Bret
Rowe, Daniel T.
(31) 201615055113
(32) 26.02.2016
(33) United States of America

(51) A43B 13/12
B29D 35/00
A43B 9/18
A43B 23/04
B29D 35/10
B29C 33/18
B29D 35/06
(11) EP4215077
(21) EP23161995.8
(47) 21.05.2025
(22) 07.02.2019
(54) MOLD FOR MANUFACTURING A DIRECT BOTTOMED ARTICLE OF FOOTWEAR WITH A FILM
(73) NIKE Innovate C.V.
(72) PLOEM, Steven Edmund Jan Cornelis
(31) 201862628134 P
(32) 08.02.2018
(33) United States of America

(51) A43B 13/18
(11) EP4351376
(21) EP22738810.5
(47) 21.05.2025
(87) US2022032655
15.12.2022
(22) 08.06.2022
(54) SOLE STRUCTURES WITH MIDFOOT GAPS AND FOREFOOT BLADDERS IN REINFORCING CAGES FOR ARTICLES OF FOOTWEAR
(73) NIKE Innovate C.V.
(72) NEUMANN IV, Kort W.
YOUNGS, Bryan K.
(31) 202163208961 P
(32) 09.06.2021
(33) United States of America

(51) A43B 13/18
A43B 13/20
(11) EP4316299
(21) EP23215859.2
(47) 21.05.2025
(22) 27.11.2019
(54) FOOT SUPPORT SYSTEMS INCLUDING FLUID FILLED BLADDERS WITH MOVEMENT OF FLUID BETWEEN BLADDERS
(73) NIKE Innovate C.V.
(72) BAILLY, Devin
LANGVIN, Elizabeth
PATTON, Levi J.
VOLLMER, Adam
(31) 201862772786 P
(32) 29.11.2018
(33) United States of America

(51) A43C 13/14
A43B 23/08
(11) EP4491055
(21) EP24187771.1
(47) 21.05.2025
(22) 10.07.2024
(54) REMOVABLE TOE BOX PROTECTOR FOR SNEAKERS
(73) Crep Protect Limited
(72) AHMED, Rizwan
(31) 202310562
(32) 10.07.2023
(33) United Kingdom

(51) A44C 9/02
A44C 9/00
A44C 5/00
(11) EP4355164
(21) EP21758360.8
(47) 21.05.2025
(87) EP2021071989
09.02.2023
(22) 06.08.2021
(54) ADJUSTABLE RING
(73) Huawei Technologies Co., Ltd.
(72) KAIJA, Jyri

(51) A44C 11/00
A44C 5/00
A44C 15/00
A44C 25/00
(11) EP3606373
(21) EP18717826.4
(47) 21.05.2025
(87) DK2018050066
11.10.2018
(22) 06.04.2018
(54) AN ORNAMENT FOR BEING STRUNG ON AN ELONGATED MEMBER
(73) Pandora A/S
(72) BENNET, Patrick Scott
SELBE, Jean-Piere Phouthapanya
REEPIA, Kasem
(31) PA201770251
(32) 07.04.2017
(33) Denmark

(51) A44C 21/00
(11) EP3646750
(21) EP19212775.1
(47) 21.05.2025
(22) 30.07.2012
(54) MULTIPART COIN BLANK AND COIN
(73) Mint of Finland GmbH
Bayerisches Hauptmünzamt
Crane Payment Innovations GmbH
Staatliche Münzen Baden-Württemberg
Münzstätte Stuttgart und Münzstätte Karlsruhe
(72) BILAS, Thomas
HUBER, Peter
LI, Konstantin
MEYER-STEFFENS, Klaus
SIEGEL, Stephan
WAADT, Günther

(51) A44C 21/00
G06Q 50/34
A63F 3/00
G07F 17/32
A63F 1/18
G06Q 50/10
A63F 1/06
A63F 9/24
A63F 11/00
(11) EP4234053
(21) EP23172139.0
(47) 21.05.2025
(22) 02.08.2016
(54) MANAGEMENT SYSTEM OF SUBSTITUTE CURRENCY FOR GAMING
(73) Angel Playing Cards Co., Ltd.
(72) SHIGETA, Yasushi
(31) 2016030443
2015240631
2015163213
(32) 01.02.2016
19.11.2015
03.08.2015
(33) Japan
Japan
Japan

(51) A45C 13/10
A45F 5/02
F16G 11/10
F16G 11/14
A41D 1/04
A45C 13/30
A45F 3/14
A45F 3/04
(11) EP4309542
(21) EP23184570.2
(47) 21.05.2025
(22) 11.07.2023
(54) FASTENING DEVICE AND WEARABLE ARTICLE WITH A FASTENING DEVICE
(73) On Clouds GmbH
(72) Schneider, Damian
Beeken, Alexandra
Runzo, Zachary
(31) 8642022
(32) 20.07.2022
(33) Switzerland

(51) A45C 13/10
G06F 1/16
A47B 23/04
F16M 13/02
F16M 11/20
A45C 11/00
F16M 11/10
(11) EP4324356
(21) EP23000114.1
(47) 21.05.2025
(22) 14.08.2023
(54) DEVICE FOR HOLDING AND/OR TRANSPORTING, USE AND METHOD
(73) Tobollik, Dorian
Weber, Klaus
(72) Tobollik, Dorian
Weber, Klaus
(31) 102022002962
(32) 16.08.2022
(33) Germany

(51) A45D 34/04
A45D 40/22
(11) EP3855974

(21) EP19790687.8
(47) 21.05.2025
(87) FR2019052220
02.04.2020
(22) 23.09.2019
(54) BOTTLE WITH A ROLL-ON APPLICATOR AND A STOPPER
(73) Chanel Parfums Beauté
(72) SAVOYE, Guillaume
(31) 1858802
(32) 26.09.2018
(33) France

(51) A45D 40/26
(11) EP4151121
(21) EP22193829.3
(47) 21.05.2025
(22) 05.09.2022
(54) WIPING DEVICE FOR COSMETIC PRODUCT APPLICATOR
(73) Qualipac
(72) JOUAN, Frédéric
EL HASSAIN, Alim
(31) 2109753
(32) 16.09.2021
(33) France

(51) A46B 9/02
A46B 11/00
A45D 33/34
A45D 40/00
B65D 51/32
A46B 15/00
(11) EP4410147
(21) EP22874514.7
(47) 21.05.2025
(87) CN2022115104
06.04.2023
(22) 26.08.2022
(54) COSMETIC TOOL
(73) Wang, Shigang
(72) Wang, Shigang
(31) 202220986509 U
202210458737
202221003339 U
202210454615
202220442551 U
202210200552
202122339389 U
202111141297
(32) 29.04.2022
29.04.2022
29.04.2022
29.04.2022
03.03.2022
03.03.2022
28.09.2021
28.09.2021
(33) China
China
China
China
China
China
China
China

(51) A47B 57/50
A47B 96/14
F16B 12/34
A47B 47/02
F16B 12/38
F16B 12/50
(11) EP4275549
(21) EP23168763.3
(47) 21.05.2025
(22) 19.04.2023
(54) PREFABRICATED SHELF
(73) Speedrack Co., Ltd.
(72) YOON, Hyo Sang
KIM, Yoon Ki
HAN, Jae Koon
LEE, Jun Hyuk
(31) 20220058370
(32) 12.05.2022
(33) Korea (Republic)

(51) A47B 88/443
A47B 88/49
A47B 88/57
H05K 7/14
(11) EP4393348
(21) EP23178095.8
(47) 21.05.2025
(22) 07.06.2023
(54) SLIDE RAIL ASSEMBLY
(73) King Slide Works Co., Ltd.
King Slide Technology Co., Ltd.
(72) Chen, Ken-Ching
Yang, Shun-Ho
Chang, Wei-Chen
Wang, Chun-Chiang
(31) 111150803
(32) 28.12.2022
(33) Taiwan, Chinese Taipei

(51) A47B 88/463
A47B 88/467
E05B 65/462
(11) EP4384048
(21) EP22762058.0
(47) 21.05.2025
(87) EP2022072316
16.02.2023
(22) 09.08.2022
(54) FURNITURE ITEM WITH A DEVICE FOR HOLDING, BRAKING OR ACCELERATING A MOVABLE FURNITURE PART
(73) Paul Hettich GmbH & Co. KG
(72) KLAUS, Stefan
POHLMANN, Volker
(31) 102021120931
(32) 11.08.2021
(33) Germany

(51) A47C 1/035
A47C 1/0355
A47C 1/032
(11) EP4387490
(21) EP22798059.6
(47) 21.05.2025
(87) DE2022100704
30.03.2023
(22) 21.09.2022
(54) PIECE OF SEATING FURNITURE WITH JUST ONE DISPLACEMENT UNIT FOR SEAT-PART AND BACK-PART ADJUSTMENT
(73) M. Schuster Patentverwertungs GmbH
(72) SCHUSTER, Michael
(31) 202021003061 U
(32) 27.09.2021
(33) Germany

(51) A47C 7/38
A47C 31/10
(11) EP4321055
(21) EP23190535.7
(47) 21.05.2025
(22) 09.08.2023
(54) TRAVEL PILLOW WITH CHIN-SUPPORTING STRUCTURE
(73) Azurous, Inc.
(72) STERNLIGHT, David B.
(31) 202217987068
202263397054 P
PCT/US2022/050481
(32) 15.11.2022
11.08.2022
18.11.2022
(33) United States of America
United States of America
World Intellectual Property Office (WIPO)

(51) A47C 17/86
A47C 19/02
A61G 7/002
A61G 7/015
A61G 7/018
(11) EP3846663
(21) EP19857763.7
(47) 21.05.2025
(87) US2019049723
12.03.2020
(22) 05.09.2019
(54) ADJUSTABLE BED SYSTEMS WITH ROTATING ARTICULATING BED FRAME
(73) PPJ, LLC
(72) ESKRIDGE, Horace Robert
SHERMAN, Philip Reid
MCCARTY, Philip Woods
SHIH, Chuan-Hang
(31) 201816123560
(32) 06.09.2018
(33) United States of America

(51) A47C 27/08
A47C 31/12
A47C 27/10
(11) EP3682768
(21) EP17924028.8
(47) 21.05.2025
(87) KR2017011412
14.03.2019
(22) 16.10.2017
(54) AIR POCKET MODULE, AND AIR MATTRESS COMPRISING SAME
(73) BEREX Tech co., Ltd
(72) YU, Young Jun
LEE, Dong Hun
LEE, Keon Yong
SHIN, Dong Wook
KIM, Seung Mo
(31) 20170115956
(32) 11.09.2017
(33) Korea (Republic)

(51) A47F 9/04
A47F 10/04
B65G 1/07
A47F 10/02
(11) EP4309547

(21) EP22770672.8
(47) 21.05.2025
(87) ES2022070147
22.09.2022
(22) 15.03.2022
(54) BASKET LIFTING-STACKING MACHINE
(73) Cano Gómez, José Antonio
(72) Cano Gómez, José Antonio
(31) 202100031
(32) 15.03.2021
(33) Spain

(51) A47G 9/10
A61F 5/56
A61B 5/00
A47G 9/00
(11) EP3884814
(21) EP19895562.7
(47) 21.05.2025
(87) KR2019013469
18.06.2020
(22) 15.10.2019
(54) EXTERNAL FORCE DETECTING SYSTEM AND METHOD FOR DRIVING EXTERNAL FORCE DETECTING SYSTEM
(73) Tenminds Co., Ltd.
(72) JANG, Seung Woong
GAO, Lanzhou
(31) 20190041223
20180160801
(32) 09.04.2019
13.12.2018
(33) Korea (Republic)
Korea (Republic)

(51) A47G 27/02
A47G 27/04
B32B 27/02
B32B 5/02
(11) EP4298960
(21) EP22922520.6
(47) 21.05.2025
(87) CN2022103555
16.11.2023
(22) 04.07.2022
(54) DETACHABLE CARPET
(73) Kunshan Yijia Ju Textile Co., Ltd.
(72) CAO, Shunlin
ZHANG, Yi
ZHAI, Zixiang
SUN, Yuhao
(31) 202221122673 U
(32) 11.05.2022
(33) China

(51) A47H 1/04
A47H 1/08
A47H 23/05
E06B 9/52
(11) EP4342340
(21) EP23187753.1
(47) 21.05.2025
(22) 26.07.2023
(54) SLAT CURTAIN
(73) tesa SE
(72) WEIGL, Robert
FRANZEN, Jana
VAN LEEUWEN, Ritske Johannes
BÜDENBENDER, Arnd
(31) 102022122150
(32) 01.09.2022
(33) Germany

(51) A47J 27/21
A47J 31/54
B67D 1/00
B67D 1/08
(11) EP4081079
(21) EP20800148.7
(47) 21.05.2025
(87) EP2020080940
01.07.2021
(22) 04.11.2020
(54) APPARATUS FOR PROVIDING HOT WATER
(73) BRITA SE
(72) DUCHARDT, Thomas
MACHUI, Oliver
MARQUISS, Dan
(31) 19219190
(32) 23.12.2019
(33) European Patent Office (EPO)

(51) A47J 31/00
(11) EP4233647
(21) EP23177295.5
(47) 21.05.2025
(22) 05.09.2011
(54) BUILT-IN COFFEE MAKER
(73) Iacobucci HF Aerospace S.p.a.
(72) IACOBUCCI, Lucio
(31) RM20100469
(32) 06.09.2010
(33) Italy

(51) A47J 31/36
A47J 31/38
A47J 31/46
(11) EP4042910
(21) EP22156001.4
(47) 21.05.2025
(22) 09.02.2022
(54) MACHINE AND METHOD FOR BREWING ESPRESSO COFFEE
(73) Rocket Milano S.r.L.
(72) BERTI, Ennio
FERRETTI, Matteo
(31) 202100002957
(32) 10.02.2021
(33) Italy

(51) A47J 31/36
A47J 31/42
A47J 31/44
A47J 42/38
A47J 42/40
(11) EP3666134
(21) EP18843194.4
(47) 21.05.2025
(87) JP2018028918
14.02.2019
(22) 01.08.2018
(54) BEVERAGE PRODUCING APPARATUS
(73) Daito Giken, Inc.
(72) KIHARA, Kaishun
SAITO, Toshio
(31) 2017152699
(32) 07.08.2017
(33) Japan

(51) A47J 31/44
(11) EP4081087
(21) EP21707992.0
(47) 21.05.2025
(87) EP2021054641
23.09.2021
(22) 25.02.2021
(54) EMULSIFYING DEVICE FOR EMULSIFYING MILK AND COFFEE MACHINE THAT COMPRISES SAID EMULSIFYING DEVICE FOR EMULSIFYING MILK
(73) De'Longhi Appliances S.r.l.
(72) PANCIERA, Antonio
ROSETTA, Simone
(31) 202000005713
(32) 18.03.2020
(33) Italy

(51) A47J 37/04
(11) EP4166050
(21) EP21210065.5
(47) 21.05.2025
(22) 23.11.2021
(54) BARBECUE BASKET
(73) Haohong Electric Technology (Hubei) Co., Ltd.
(72) Wang, Min
(31) 202111190061
(32) 12.10.2021
(33) China

(51) A47J 37/07
(11) EP4340686
(21) EP22722354.2
(47) 21.05.2025
(87) IB2022053983
24.11.2022
(22) 29.04.2022
(54) CHARCOAL BARBECUE HAVING AN INTEGRATED COAL STARTER
(73) Livwise
(72) BONNAERENS, Wietse
(31) 202105402
(32) 18.05.2021
(33) Belgium

(51) A47J 43/07
A47J 43/08
(11) EP3936015
(21) EP21180882.9
(47) 21.05.2025
(22) 26.06.2013
(54) BLENDER WITH ELEVATOR ASSEMBLY AND REMOVABLE SPINDLE
(73) F'REAL! FOODS, LLC
(72) FARRELL, James J.
VOGES, Jens P.
BRADLEY, Chris M.
CAUCHOIS, Gage C.
CONNELL, Steve T.
GARDNER, Clayton G.
LAU, Shek Fai
LEHMAN, Joseph M.
(31) 201213533950
201213533938
201213533928
201213533922
(32) 26.06.2012
26.06.2012
26.06.2012
26.06.2012

(33) United States of America
United States of America
United States of America
United States of America

(51) A47K 1/02
A45D 19/04
E03C 1/18
(11) EP4380419
(21) EP22762142.2
(47) 21.05.2025
(87) IB2022057372
09.02.2023
(22) 08.08.2022
(54) WATER DISPENSING APPARATUS
(73) Glass, Peter
(72) Glass, Peter
(31) 202111404
(32) 06.08.2021
(33) United Kingdom

(51) A47K 3/00
A47K 3/16
A47K 3/30
(11) EP4434420
(21) EP24164934.2
(47) 21.05.2025
(22) 20.03.2024
(54) BATH TUB WITH SPLASH GUARD WALL
(73) Artweger GmbH & Co. KG
(72) Laimer, Alois
Spielbüchler, Robert
(31) 502122023
(32) 22.03.2023
(33) Austria

(51) A47K 11/02
A47K 11/12
(11) EP4023124
(21) EP21175993.1
(47) 21.05.2025
(22) 26.05.2021
(54) DRY SEPARATION CASSETTE TOILET
(73) Mahn, Sven
(72) Mahn, Sven
(31) 202021100585 U
202021100010 U
(32) 05.02.2021
04.01.2021
(33) Germany
Germany

(51) A47L 9/04
A47L 11/283
A47L 11/40
(11) EP4385379
(21) EP22213880.2
(47) 21.05.2025
(22) 15.12.2022
(54) ROTATING PAD HOLDER FOR VACUUM CLEANER
(73) BSH Hausgeräte GmbH
(72) Florek, Zenon
Osiniak, Mateusz
Slaby, Michal

(51) A47L 9/16
(11) EP4120884
(21) EP21712119.3
(47) 21.05.2025
(87) EP2021056227
23.09.2021
(22) 11.03.2021
(54) FILTER AND METHOD OF CLEANING
(73) Robert Thomas Metall- und Elektrowerke GmbH & Co. KG
(72) BEICHLER, Michael
SCHNEIDER, Hans-Werner
SCHLEICHT, Arthur
(31) 102020107583
(32) 19.03.2020
(33) Germany

(51) A47L 9/19
A47L 9/14
A47L 5/36
A47L 9/28
(11) EP3661402
(21) EP18750412.1
(47) 21.05.2025
(87) EP2018071054
07.02.2019
(22) 02.08.2018
(54) METHOD FOR OPERATING A SUCTION UNIT, AND SUCTION UNIT
(73) Alfred Kärcher SE & Co. KG
(72) LANGEN, Thorsten
KAISER, Michael
PEFLOF,Gábor
STEINBACH, Jürgen
STÖCKER, Heiko
(31) 102017117684
(32) 03.08.2017
(33) Germany

(51) A47L 9/24
A47L 7/00
(11) EP3768137
(21) EP19711607.2
(47) 21.05.2025
(87) EP2019057017
26.09.2019
(22) 21.03.2019
(54) WET AND/OR DRY VACUUM CLEANING UNIT
(73) Hilti Aktiengesellschaft
(72) HANSLMEIER, Xaver
MÜLLER, Svenja
GENC, Mihael
RICHTER, Wolfgang
HESS, Stefan
(31) 18163236
(32) 22.03.2018
(33) European Patent Office (EPO)

(51) A47L 11/10
A47L 11/40
(11) EP4064951
(21) EP20747362.0
(47) 21.05.2025
(87) EP2020070771
03.06.2021
(22) 23.07.2020
(54) CLEANING ROBOT AND CLEANING SYSTEM
(73) Carl Freudenberg KG
(72) WEIS, Norbert
HEILAND, Marc
STENGLEIN, Christian
(31) 102019132312
(32) 28.11.2019
(33) Germany

(51) A47L 15/00
A47L 15/42
(11) EP4110155
(21) EP21704512.9
(47) 21.05.2025
(87) EP2021053146
02.09.2021
(22) 10.02.2021
(54) SYSTEM COMPRISING A DISHWASHER, AND METHOD FOR OPERATING A DISHWASHER
(73) BSH Hausgeräte GmbH
(72) TERRÁDEZ ALEMANY, Maria
TUTAL, Berkay Ogulcan
(31) 102020202501
(32) 27.02.2020
(33) Germany

(51) A47L 15/42
(11) EP3692886
(21) EP20155751.9
(47) 21.05.2025
(22) 05.02.2020
(54) DISHWASHER WITH DRAIN ASSEMBLY AND CHECK VALVE
(73) Beko Europe Management S.r.l.
(72) Jaske, Matthew Jerel
Rappette, Antony M.
Miller, John Alan
Jozwiak, Todd Michael
(31) 201916268846
(32) 06.02.2019
(33) United States of America

(51) A47L 15/44
A47L 15/00
D06F 39/02
A47L 15/42
(11) EP4133985
(21) EP21764185.1
(47) 21.05.2025
(87) CN2021075191
10.09.2021
(22) 04.02.2021
(54) DISPENSING DEVICE AND CONTROL METHOD FOR DISPENSING DEVICE
(73) Foshan Shunde Midea Washing Appliances Manufacturing Co., Ltd.
(72) LU, Zhenliang
LIU, Richao
LI, Xiang
GENG, Jie
XU, Pingping
(31) 202010147786
(32) 05.03.2020
(33) China

(51) A61B 1/00
A61B 1/005
(11) EP3490424
(21) EP17746310.6
(47) 21.05.2025
(87) US2017043060
01.02.2018
(22) 20.07.2017
(54) BRAKE MECHANISM OF A STEERABLE CATHETER
(73) Cook Medical Technologies LLC
(72) SIMMONS, Victor
DILLON, Travis, E.
(31) 201662367918 P

(32) 28.07.2016
(33) United States of America

(51) A61B 1/00
A61B 1/267
A61B 1/012
A61B 1/005
(11) EP4099887
(21) EP21708497.9
(47) 21.05.2025
(87) US2021016386
12.08.2021
(22) 03.02.2021
(54) ROTATABLE MEDICAL DEVICE
(73) Boston Scientific Scimed, Inc.
(72) GRAY, Jeff
WALES, Ryan
BRECHBIEL, Scott
SMITH, Paul
MANSFIELD, Richard
(31) 202062969925 P
(32) 04.02.2020
(33) United States of America

(51) A61B 1/00
G02B 6/38
A61M 25/01
A61B 5/00
A61L 29/06
(11) EP3120749
(21) EP15764629.0
(47) 21.05.2025
(87) JP2015000845
24.09.2015
(22) 23.02.2015
(54) OPTICAL IMAGE DIAGNOSTIC DEVICE AND CATHETER USED IN SAME
(73) Terumo Kabushiki Kaisha
(72) SAKAGUCHI, Yuuki
WATANABE, Kenji
(31) 2014057097
(32) 19.03.2014
(33) Japan

(51) A61B 1/00
G02B 23/24
A61B 1/05
H04N 23/50
H04N 23/55
(11) EP4129148
(21) EP21192759.5
(47) 21.05.2025
(22) 24.08.2021
(54) IMAGE CAPTURING ASSEMBLY AND RELATED ENDOSCOPE
(73) Altek Biotechnology Corporation
(72) Huang, Yu-Cheng
(31) 202117395481
(32) 06.08.2021
(33) United States of America

(51) A61B 1/005
A61B 1/00
(11) EP4316346
(21) EP22904599.2
(47) 21.05.2025
(87) KR2022019628
15.06.2023
(22) 05.12.2022
(54) ENDOSCOPE HAVING FRICTION CONTROL PART
(73) Medintech Inc.
(72) LEE, Chi Won
KIM, Myung Joon
KOH, Suk Gyu
(31) 20210174910
(32) 08.12.2021
(33) Korea (Republic)

(51) A61B 3/00
A61B 3/024
A61B 3/13
A61B 3/16
A61B 3/18
(11) EP4027860
(21) EP20781046.6
(47) 21.05.2025
(87) FR2020051578
18.03.2021
(22) 11.09.2020
(54) MULTIPURPOSE OPHTHALMOLOGICAL MEASURING DEVICE
(73) E-Swin Developpement
(72) BROTTIER, Yves-Vincent
OBIN, Arnaud
PERRIN, Nelson
(31) 1910131
(32) 13.09.2019
(33) France

(51) A61B 3/00
A61B 3/04
G02C 7/02
G06T 1/00
(11) EP4356351
(21) EP22733638.5
(47) 21.05.2025
(87) EP2022066604
22.12.2022
(22) 17.06.2022
(54) METHOD FOR SIMULATING OPTICAL PRODUCTS
(73) ACEP France
(72) SAYAG, Jean-philippe
(31) 2106475
(32) 18.06.2021
(33) France

(51) A61B 3/00
A61B 3/14
A61B 5/00
A61B 3/12
A61B 3/10
(11) EP2632321
(21) EP11838484.1
(47) 21.05.2025
(87) US2011057532
10.05.2012
(22) 24.10.2011
(54) DETECTING AMYLOID IN THE RETINA
(73) NeuroVision Imaging, Inc.
(72) VERDOONER, Steven
(31) 406551 P
(32) 25.10.2010
(33) United States of America

(51) A61B 3/12
A61B 3/13
G02B 21/00
G02B 7/02
A61B 90/70
G02B 25/00
G02B 27/00
A61F 9/00
A61B 3/125
(11) EP4376700
(21) EP22744451.0
(47) 21.05.2025
(87) EP2022068719
02.02.2023
(22) 06.07.2022
(54) CONTACTLESS VISUALIZATION SYSTEM FOR A SURGICAL MICROSCOPE FOR EYE SURGERY
(73) Carl Zeiss Meditec AG
(72) ESSIG, Jonathan
BEDER, Christian
(31) 102021119297
(32) 26.07.2021
(33) Germany

(51) A61B 5/00
(11) EP4370017
(21) EP22748605.7
(47) 21.05.2025
(87) US2022036169
19.01.2023
(22) 06.07.2022
(54) SYSTEMS UTILIZING RAMAN SPECTROSCOPY FOR IN VIVO ANALYSIS
(73) Boston Scientific Scimed, Inc.
(72) GETTYS, Rebecca Jane
VIERING, Kirsten
DUVAL, George Wilfred
(31) 202163203204 P
(32) 13.07.2021
(33) United States of America

(51) A61B 5/00
(11) EP4072405
(21) EP20820375.2
(47) 21.05.2025
(87) EP2020084563
17.06.2021
(22) 04.12.2020
(54) ELECTRODE CONFIGURATION TO RECORD EAR ELECTROENCEPHALOGRAM (EEG) DURING SLEEP AND WAKEFULNESS
(73) Koninklijke Philips N.V.
(72) GARCIA MOLINA, Gary Nelson
BARBER, James Edward
KALYAN, Boomika
AQUINO, Antonio
BLICE, Rebecca Lynn
TILK, Jason Grant
NOWAK, Vikki
(31) 201962945507 P
(32) 09.12.2019
(33) United States of America

(51) A61B 5/00
A61B 5/0531
A61B 5/145
G16H 10/40
G16H 40/63
G16H 50/20
(11) EP4346557
(21) EP22731196.6
(47) 21.05.2025
(87) EP2022064783
08.12.2022
(22) 31.05.2022

(54) DETECTION OF A CHEMICAL SPECIES IN THE SWEAT OF A SUBJECT
(73) NOPTRACK
(72) AMATORE, Christian
FAVRE, Gilles
BEDIOUI, Fethi
CHEN, Yong
GRIVEAU, Sophie
SELLA, Catherine
THOUIN, Laurent
(31) 2105827
(32) 02.06.2021
(33) France

(51) A61B 5/00
A61B 5/103
G01R 33/20
G06T 7/00
A61B 5/243
(11) EP4306050
(21) EP23213080.7
(47) 21.05.2025
(22) 09.08.2018
(54) BIOMAGNETIC DETECTION
(73) Genetesis, Inc.
(72) ERASALA, Vineet
VON STEIN, Jon
SEDLAK, Tatiana
PRINCE, Julia
(31) 201715673067
(32) 09.08.2017
(33) United States of America

(51) A61B 5/00
A61B 5/103
H04M 1/725
(11) EP3289966
(21) EP16821624.0
(47) 21.05.2025
(87) KR2016007260
12.01.2017
(22) 05.07.2016
(54) ELECTRONIC DEVICE AND METHOD FOR PROVIDING INFORMATION RELATED TO SKIN TYPE OF OBJECT
(73) Samsung Electronics Co., Ltd.
(72) TIWARI, Vijay Narayan
VENKATESAN, Shankar M.
NARAYANAN, Rangavittal
(31) 3495CH2015
3495CH2015
20160081170
(32) 05.02.2016
08.07.2015
28.06.2016
(33) India
India
Korea (Republic)

(51) A61B 5/00
A61B 5/1455
A61B 5/265
A61B 5/291
A61B 5/31
A61B 5/384
(11) EP4393376
(21) EP23208600.9
(47) 21.05.2025
(22) 08.11.2023
(54) MULTIMODAL BRAIN FUNCTION SIGNAL ACQUISITION DEVICE AND METHOD
(73) Nanjing Kingfar Health Technology Inc.
Kingfar International Inc.
(31) 202211726822
202211726776
(32) 30.12.2022
30.12.2022
(33) China
China

(51) A61B 5/02
A61B 5/021
A61B 5/024
(11) EP3815602
(21) EP20191028.8
(47) 21.05.2025
(22) 14.08.2020
(54) APPARATUS AND METHOD FOR MONITORING HEALTH, AND MOBILE DEVICE
(73) Samsung Electronics Co., Ltd.
(72) LEE, So Young
HWANG, Jeong Eun
CHOI, Ka Ram
(31) 20190136305
(32) 30.10.2019
(33) Korea (Republic)

(51) A61B 5/02
A61B 5/022
A61B 5/0245
A61B 5/021
A61B 5/024
A61B 5/00
G16H 50/30
A61B 7/00
(11) EP3925525
(21) EP20755539.2
(47) 21.05.2025
(87) JP2020001107
20.08.2020
(22) 15.01.2020
(54) PHYSICAL CONDITION DETERMINATION DEVICE, COMPUTER PROGRAM, AND RECORDING MEDIUM
(73) Delta Kogyo Co., Ltd.
(72) FUJITA, Etsunori
OGURA, Yumi
NOBUHIRO, Yoshika
(31) 2019024065
(32) 14.02.2019
(33) Japan

(51) A61B 5/02
A61B 5/055
(11) EP4076161
(21) EP20820145.9
(47) 21.05.2025
(87) EP2020085080
24.06.2021
(22) 08.12.2020
(54) INDUCTIVE SENSING SYSTEM
(73) Koninklijke Philips N.V.
(72) STEUNEBRINK, Tim Patrick
VERNOOIJ, Carlijn Andrea
PEETERS, Wouter Herman
DOODEMAN, Gerardus Johannes Nicolaas
ROCK, Joseph Ernest
(31) 201962948833 P
20150306
(32) 17.12.2019
06.01.2020
(33) United States of America
European Patent Office (EPO)

(51) A61B 5/024
(11) EP4023150
(21) EP20944067.6
(47) 21.05.2025
(87) CN2020100694
13.01.2022
(22) 07.07.2020
(54) SIGNAL ADJUSTMENT METHOD FOR PPG APPARATUS AND PPG APPARATUS
(73) Shenzhen Goodix Technology Co., Ltd.
(72) CHEN, Liangshou
LU, Saiwen

(51) A61B 5/055
A61B 5/372
A61B 5/375
(11) EP4176805
(21) EP21831592.7
(47) 21.05.2025
(87) JP2021024927
06.01.2022
(22) 01.07.2021
(54) ESTIMATION SYSTEM, ESTIMATION METHOD, PROGRAM, ESTIMATION MODEL, BRAIN ACTIVITY TRAINING DEVICE, BRAIN ACTIVITY TRAINING METHOD, AND BRAIN ACTIVITY TRAINING PROGRAM
(73) Advanced Telecommunications Research Institute International
Shionogi & Co., Ltd
(72) OGAWA, Takeshi
TAMANO, Ryuta
KAWANABE, Motoaki
KAWATO, Mitsuo
(31) 2020115053
(32) 02.07.2020
(33) Japan

(51) A61B 5/06
A61B 34/20
G01N 27/72
A61B 17/00
A61B 90/00
(11) EP3768188
(21) EP19721731.8
(47) 21.05.2025
(87) IB2019052170
26.09.2019
(22) 18.03.2019
(54) MAGNETIC MARKERS FOR SURGICAL GUIDANCE
(73) Endomagnetics Ltd.
(72) AGOSTINELLI, Tiziano
LORIMER, Kevin
HARMER, Quentin
(31) 201804683
(32) 23.03.2018
(33) United Kingdom

(51) A61B 5/107
A61B 5/00
(11) EP4120909

(21) EP21717709.6
(47) 21.05.2025
(87) US2021022791
23.09.2021
(22) 17.03.2021
(54) FOOT STRUCTURE AND FUNCTION ASSESSMENT DEVICE AND METHODS OF USING SAME
(73) New York Society for the Relief of the Ruptured and Crippled, maintaining the Hospital for Special Surgery
(72) MORGAN, Oliver
HILLSTROM, Howard
ELLIS, Scott, J.
SONG, Jinsup
TURNER, Robert
DELAND, Jonathan
HILLSTROM, Rajshree
(31) 202062990816 P
(32) 17.03.2020
(33) United States of America

(51) A61B 5/11
A61B 5/00
(11) EP3592229
(21) EP18764974.4
(47) 21.05.2025
(87) US2018021763
13.09.2018
(22) 09.03.2018
(54) APPARATUS AND METHOD FOR REMOTE RANGE-OF-MOTION TESTING
(73) Medidata Solutions, Inc.
(72) LIU, Jingshu
SOMASHEKAR, Pramod
BEINEKE, Philip
HOWLAND, Andrew
MEUNIER, Francois
SAVAGE, John
(31) 201715641075
201762470174 P
(32) 03.07.2017
10.03.2017
(33) United States of America
United States of America

(51) A61B 5/145
(11) EP3749198
(21) EP19708698.6
(47) 21.05.2025
(87) US2019016575
08.08.2019
(22) 05.02.2019
(54) NOTES AND EVENT LOG INFORMATION ASSOCIATED WITH ANALYTE SENSORS
(73) Abbott Diabetes Care Inc.
(72) KUMAR, Ashwin
GOLDSMITH, Joel
(31) 201862626410 P
(32) 05.02.2018
(33) United States of America

(51) A61B 5/145
(11) EP4186421
(21) EP22210637.9
(47) 21.05.2025
(22) 30.11.2022
(54) METHOD FOR PRODUCING AN ELEMENTARY MODULE OF A MICRONEEDLE SENSOR
(73) WIZP AS
(72) PIERART, Luc
HUANG, YULIN
(31) 2112709
(32) 30.11.2021
(33) France

(51) A61B 5/15
A61B 5/153
A61B 5/154
A61M 39/10
(11) EP4489645
(21) EP23718475.9
(47) 21.05.2025
(87) US2023016439
05.10.2023
(22) 27.03.2023
(54) HEMOLYSIS-REDUCTION CONNECTOR FOR DIRECT BLOOD DRAW
(73) CareFusion 303, Inc.
(72) SALEHI BOROJERDI, Alireza
JADHAV, Amarsinh Deeliprao
KHAN, Mohammed Mehtab
BIERITZ, Shelby Ann
(31) 202263324991 P
(32) 29.03.2022
(33) United States of America

(51) A61B 5/305
(11) EP4429548
(21) EP22801759.6
(47) 21.05.2025
(87) EP2022078004
11.05.2023
(22) 09.10.2022
(54) SIGNAL LINEARIZATION IN A MEASUREMENT DEVICE
(73) Koninklijke Philips N.V.
(72) FRANCK, Christoph Florian
(31) 21206863
(32) 08.11.2021
(33) European Patent Office (EPO)

(51) A61B 5/361
(11) EP3528702
(21) EP17791884.4
(47) 21.05.2025
(87) US2017057100
26.04.2018
(22) 18.10.2017
(54) SYSTEM FOR ARRHYTHMIA DETECTION
(73) Cardiac Pacemakers, Inc.
(72) PERSCHBACHER, David L.
SHARMA, Arjun D.
SAHA, Sunipa
SIEJKO, Krzysztof Z.
(31) 201662409515 P
(32) 18.10.2016
(33) United States of America

(51) A61B 6/00
G06T 7/00
A61B 5/00
G06N 3/0464
G06N 3/084
G06T 7/73
(11) EP4212101
(21) EP22151400.3
(47) 21.05.2025
(22) 13.01.2022
(54) PROVIDING A COMPLETE SET OF KEY ELEMENTS IN AN X-RAY IMAGE
(73) Siemens Healthineers AG
(72) Biniazan, Ramyar
Kappler, Steffen
Ritschl, Ludwig

(51) A61B 6/03
A61B 6/00
(11) EP3991660
(21) EP20830804.9
(47) 21.05.2025
(87) KR2020008411
30.12.2020
(22) 26.06.2020
(54) COMPUTED TOMOGRAPHY APPARATUS USING PLURALITY OF LIGHT SOURCES
(73) Koh Young Technology Inc.
(72) ROH, Young Jun
SHIN, Min Sik
KANG, Sung Hoon
OH, Tae Seok
(31) 201962866967 P
(32) 26.06.2019
(33) United States of America

(51) A61B 6/03
A61B 6/00
A61B 5/00
G06T 11/00
A61B 6/02
A61B 6/58
(11) EP3542722
(21) EP18728916.0
(47) 21.05.2025
(87) ES2018070194
20.09.2018
(22) 15.03.2018
(54) DEVICE AND METHOD FOR GENERATING TOMOGRAMS
(73) Fundación para la Investigación Biomédica del Hospital Gregorio Marañón
Universidad Carlos III de Madrid
(72) DESCO MENÉNDEZ, Manuel
ABELLA GARCÍA, Mónica
(31) 201730341
(32) 15.03.2017
(33) Spain

(51) A61B 6/03
A61B 6/04
A61B 6/00
A61B 6/06
G21K 1/02
A61B 6/02
(11) EP4387527
(21) EP22762105.9
(47) 21.05.2025
(87) EP2022072765
23.02.2023
(22) 15.08.2022
(54) CONTROLLING A COMPUTED TOMOGRAPHY IMAGING PROCEDURE
(73) Koninklijke Philips N.V.
(72) LIU, Jinling

MANJESHWAR, Ravindra Mohan
UTRUP, Steven J.
WOLACH, Gad Yehuda
WANG, Hao H
(31) PCT/CN2021/113285
21196236
(32) 18.08.2021
13.09.2021
(33) World Intellectual Property Office (WIPO)
European Patent Office (EPO)

(51) A61B 6/04
(11) EP4076200
(21) EP20845255.7
(47) 21.05.2025
(87) US2020065563
24.06.2021
(22) 17.12.2020
(54) PATIENT IMAGING AND TREATMENT TABLE EXTENSION WITH INTEGRATED HANDRAILS
(73) Medtec, Inc.
(72) WILSON, Roger F.
(31) 201962949090 P
(32) 17.12.2019
(33) United States of America

(51) A61B 6/04
A61B 6/10
A61G 13/12
(11) EP3905958
(21) EP19907635.7
(47) 21.05.2025
(87) US2019069162
09.07.2020
(22) 31.12.2019
(54) PATIENT HEAD PROTECTION DEVICE
(73) Radiaction Ltd.
(72) YIFAT, Jonathan
BELSON, Amir
BAR, Yossi
(31) 201962787653 P
(32) 02.01.2019
(33) United States of America

(51) A61B 6/06
G01T 1/24
G01T 1/29
G02B 27/30
A61B 6/42
A61B 6/00
(11) EP3946057
(21) EP19923073.1
(47) 21.05.2025
(87) CN2019080410
08.10.2020
(22) 29.03.2019
(54) AN IMAGE SENSOR WITH RADIATION DETECTORS AND A COLLIMATOR
(73) Shenzhen Xpectvision Technology Co., Ltd.
(72) CAO, Peiyan
LIU, Yurun

(51) A61B 6/40
A61B 6/00
(11) EP3718480
(21) EP20167574.1
(47) 21.05.2025
(22) 01.04.2020
(54) X-RAY DIAGNOSIS APPARATUS
(73) Canon Medical Systems Corporation
(72) AIDA, Takuya
SHIRAISHI, Kunio
(31) 2019070829
2019070826
(32) 02.04.2019
02.04.2019
(33) Japan
Japan

(51) A61B 7/00
A61B 5/00
A61B 5/11
A61B 5/349
G16H 50/20
A61N 1/362
G06T 11/00
(11) EP4185207
(21) EP21740366.6
(47) 21.05.2025
(87) US2021037867
27.01.2022
(22) 17.06.2021
(54) SYSTEMS AND METHODS FOR GENERATING AND APPLYING MATRIX IMAGES TO MONITOR CARDIAC DISEASE
(73) ZOLL Medical Corporation
(72) MASUDA, Tsuyoshi
VOLOSIN, Kent
(31) 202016938244
(32) 24.07.2020
(33) United States of America

(51) A61B 8/00
A61B 8/08
G16H 50/20
G16H 15/00
A61B 17/34
G01S 7/52
G16H 30/20
(11) EP3957251
(21) EP21201121.7
(47) 21.05.2025
(22) 18.07.2017
(54) ULTRASOUND IMAGING APPARATUS WITH IMAGE SELECTOR
(73) Fujifilm Sonosite, Inc.
(72) LUNDBERG, Andrew
KELLY, Gina
KARADAYI, Kerem
(31) 201615214838
(32) 20.07.2016
(33) United States of America

(51) A61B 8/00
A61N 5/00
A61B 8/08
(11) EP3742976
(21) EP19743270.1
(47) 21.05.2025
(87) IL2019050089
01.08.2019
(22) 22.01.2019
(54) ACOUSTIC FIELD MAPPING WITH ULTRASONIC PARTICLE VELOCITY ESTIMATOR
(73) Nina Medical Ltd.
(72) BEN-EZRA, Shmuel
(31) 201862621140 P
(32) 24.01.2018
(33) United States of America

(51) A61B 8/06
A61B 8/00
A61B 8/08
(11) EP4486216
(21) EP24717135.8
(47) 21.05.2025
(87) EP2024058678
03.10.2024
(22) 28.03.2024
(54) AN ULTRASOUND TRANSDUCER ATTACHMENT SYSTEM
(73) Cimon Medical AS
(72) INGUL, Charlotte Björk
HERGUM, Torbjørn
TORP, Hans
HAGEN, Gard
(31) 202304759
(32) 30.03.2023
(33) United Kingdom

(51) A61B 8/08
(11) EP3639752
(21) EP19201159.1
(47) 21.05.2025
(22) 02.10.2019
(54) ANALYZING APPARATUS AND ANALYZING PROGRAM
(73) Canon Medical Systems Corporation
(72) HONJO, Yasunori
KAWAGISHI, Tetsuya
WATANABE, Masaki
(31) 2019181189
2018188529
(32) 01.10.2019
03.10.2018
(33) Japan
Japan

(51) A61B 8/08
A61B 8/12
(11) EP3975868
(21) EP20746379.5
(47) 21.05.2025
(87) US2020035217
03.12.2020
(22) 29.05.2020
(54) SYSTEMS AND METHODS FOR DETECTING TISSUE CONTACT BY AN ULTRASOUND PROBE
(73) Intuitive Surgical Operations, Inc.
(72) MCLEOD, A. Jonathan
SHIRAZIAN, Pourya
PROKSCH, Daniel
AZIZIAN, Mahdi
SHADEMAN, Azad
(31) 201962855881 P
(32) 31.05.2019
(33) United States of America

(51) A61B 10/00
A61F 13/38
A61F 13/36
(11) EP4308006
(21) EP21715679.3
(47) 21.05.2025
(87) IB2021052278
22.09.2022
(22) 18.03.2021
(54) BREAKABLE SWAB APPLICATOR FOR USE WITH A SAMPLING CLOTH AND A SWAB KIT

(73) Chaffringeon, Bernard-Marie
(72) Chaffringeon, Bernard-Marie
(51) A61B 10/06
A61B 10/04
A61B 18/08
(11) EP3984469
(21) EP20822627.4
(47) 21.05.2025
(87) CN2020095843
17.12.2020
(22) 12.06.2020
(54) SAMPLING SYSTEM
(73) Tam, Chi Chun Terence
(72) YUEN, Mae Ann Michele
TAM, Chi Chun Terence
(31) 19125288
(32) 14.06.2019
(33) Hong Kong

(51) A61B 17/00
A61B 17/34
(11) EP4122402
(21) EP22195819.2
(47) 21.05.2025
(22) 18.08.2015
(54) SYSTEMS FOR TISSUE CONTAINMENT AND RETRIEVAL
(73) Applied Medical Resources Corporation
(72) DO, Alexandra
BRESLIN, Tracy
YIN, Emily
WACHLI, Serene
HART, Charles C
FILEK, Jacob J
(31) 201462038740 P
(32) 18.08.2014
(33) United States of America

(51) A61B 17/00
A61B 17/70
A61B 34/20
A61B 90/00
(11) EP4395670
(21) EP21799431.8
(47) 21.05.2025
(87) US2021053720
09.03.2023
(22) 06.10.2021
(54) ROD REDUCTION INSTRUMENT FEEDBACK SYSTEM
(73) Nuvasive, Inc.
(72) NELSEN, Christopher
GERMAN, Robert
SERRA, Michael
(31) 202163239148 P
(32) 31.08.2021
(33) United States of America

(51) A61B 17/04
(11) EP4368148
(21) EP24161420.5
(47) 21.05.2025
(22) 12.10.2010
(54) SYSTEM FOR SECURING TISSUE TO BONE
(73) CONMED Corporation
(72) HEAVEN, Malcom
KO, Michael
(31) 37079110 P
25122009 P
(32) 04.08.2010
13.10.2009
(33) United States of America
United States of America

(51) A61B 17/04
A61B 17/00
A61B 90/00
(11) EP3826549
(21) EP19758501.1
(47) 21.05.2025
(87) IB2019055872
30.01.2020
(22) 10.07.2019
(54) CUTTING DEVICE FOR SURGICAL THREADS
(73) Medacta International SA
(72) TROMBETTA, Christian
BERNARDONI, Massimiliano
SICCARDI, Francesco
(31) 201800007518
(32) 26.07.2018
(33) Italy

(51) A61B 17/062
(11) EP4125626
(21) EP21720138.3
(47) 21.05.2025
(87) US2021024855
07.10.2021
(22) 30.03.2021
(54) SUTURE BASED CLOSURE DEVICE
(73) Boston Scientific Scimed Inc.
(72) BAGLEY, Kevin L.
(31) 202063002822 P
(32) 31.03.2020
(33) United States of America

(51) A61B 17/072
A61B 17/20
A61B 90/98
A61B 17/29
(11) EP4236821
(21) EP21819276.3
(47) 21.05.2025
(87) US2021057365
05.05.2022
(22) 29.10.2021
(54) SURGICAL STAPLER HAVING A POWERED HANDLE
(73) Applied Medical Resources Corporation
(72) HUDSON, Kevin
PHAM, Andy
NASH, Jonathan, R.
GYUGYI, Zachary, W.
BAUTISTA, Travis
VON STEIN, Jonathan
KIRAZ, Ata
WEISS, Eric, J.
(31) 202063107336 P
(32) 29.10.2020
(33) United States of America

(51) A61B 17/072
A61B 17/28
A61B 34/30
A61B 17/00
A61B 17/29
(11) EP3446640
(21) EP18186942.1
(47) 21.05.2025
(22) 02.08.2018
(54) SURGICAL SYSTEM BAILOUT
(73) Ethicon LLC
(72) SHELTON, IV, Frederick, E.
BAKOS, Gregory, J.
HARRIS, Jason, L.
(31) 201715668301
(32) 03.08.2017
(33) United States of America

(51) A61B 17/072
A61B 18/14
A61B 34/30
A61B 90/90
A61B 90/98
A61B 17/00
A61B 17/29
A61B 17/115
A61B 18/08
A61B 34/00
A61B 17/32
A61B 90/00
G05G 9/047
A61B 18/00
(11) EP3744262
(21) EP20184274.7
(47) 21.05.2025
(22) 03.03.2014
(54) ROTARY POWERED SURGICAL INSTRUMENTS WITH MULTIPLE DEGREES OF FREEDOM
(73) Ethicon LLC
(72) AULD, Michael D.
(31) 201313782375
(32) 01.03.2013
(33) United States of America

(51) A61B 17/12
A61M 25/00
(11) EP3799803
(21) EP20199892.9
(47) 21.05.2025
(22) 02.10.2020
(54) MEDICAL DEVICE DELIVERY MEMBER WITH FLEXIBLE STRETCH RESISTANT MECHANICAL RELEASE
(73) DePuy Synthes Products, Inc.
(72) LORENZO, Juan
(31) 201916592320
(32) 03.10.2019
(33) United States of America

(51) A61B 17/128
(11) EP4272659
(21) EP22182144.0
(47) 21.05.2025
(22) 30.06.2022
(54) SURGICAL CLIP APPLIER WITH LOCKING STRUTURE
(73) Taiwan Surgical Corporation
(72) Lin, Wu Shen
Wang, Yun Hsiang
(31) 111117234
(32) 06.05.2022
(33) Taiwan, Chinese Taipei

(51) A61B 17/135
A61B 17/12
A61B 17/00
A61B 17/132
A61M 39/10
A61B 90/00
(11) EP3930594
(21) EP20767421.9

(47) 21.05.2025
(87) US2020020500
10.09.2020
(22) 28.02.2020
(54) METHODS OF CONSTRUCTING HEMOSTASIS DEVICES WITH FOLDED BALLOON ASSEMBLIES
(73) TERUMO Kabushiki Kaisha
(72) O'BRIEN, Victoria Moore
HOFFMAN, Brian
HAZAMA, Kenichi
VARAMO, Nicholas
(31) 201962812436 P
(32) 01.03.2019
(33) United States of America

(51) A61B 17/15
A61B 34/10
A61B 34/00
A61B 34/30
A61B 34/32
A61B 34/37
A61B 34/20
A61B 5/00
A61B 5/103
(11) EP4087467
(21) EP20848772.8
(47) 21.05.2025
(87) US2020067719
15.07.2021
(22) 31.12.2020
(54) TENSIONER TOOL AND SOCK WITH PRESSURE SENSOR GRID FOR USE THEREWITH
(73) Smith&Nephew, Inc.
Smith & Nephew Orthopaedics AG
Smith & Nephew Asia Pacific Pte. Limited
(72) NIKOU, Constantinos
JARAMAZ, Branislav
BOZEMAN, Michael
(31) 202062957574 P
(32) 06.01.2020
(33) United States of America

(51) A61B 17/16
A61F 2/30
A61F 2/42
(11) EP3930596
(21) EP20714067.4
(47) 21.05.2025
(87) US2020019928
03.09.2020
(22) 26.02.2020
(54) TOOL FOR REAMING A CARPAL BONE
(73) Zimmer, Inc.
(72) VERSTREKEN, Frederik Marie Andre Jozef
(31) 201905122
(32) 27.02.2019
(33) Belgium

(51) A61B 17/16
B25B 23/14
A61B 17/88
A61B 17/00
A61B 90/00
B25B 23/00
(11) EP3965670
(21) EP19927936.5
(47) 21.05.2025
(87) US2019031622
12.11.2020
(22) 09.05.2019
(54) SHAFT RETENTION MECHANISM
(73) ECA Medical Instruments
(72) MILELLA, Michael J.

(51) A61B 17/22
A61B 17/221
A61B 5/107
A61B 5/00
A61B 18/24
A61B 17/00
A61B 18/00
A61B 18/22
A61B 90/00
(11) EP4342395
(21) EP24155828.7
(47) 21.05.2025
(22) 09.11.2018
(54) BASKET FOR A CATHETER DEVICE
(73) Thrombolex, Inc.
(72) GREEN, Nicholas
(31) 201715808649
(32) 09.11.2017
(33) United States of America

(51) A61B 17/221
A61B 17/22
A61B 17/00
(11) EP3895633
(21) EP21163947.1
(47) 21.05.2025
(22) 22.03.2021
(54) WIRE-EQUIPPED STENT
(73) Otsuka Medical Devices Co., Ltd.
(72) Doi, Yuta
(31) 2020052300
(32) 24.03.2020
(33) Japan

(51) A61B 17/3207
(11) EP4236835
(21) EP21810226.7
(47) 21.05.2025
(87) US2021056616
05.05.2022
(22) 26.10.2021
(54) MAGNETICALLY DRIVEN ATHERECTOMY SYSTEM
(73) Boston Scientific Scimed Inc.
(72) NEUHARTH, Jarrod Kenneth
(31) 202063106164 P
(32) 27.10.2020
(33) United States of America

(51) A61B 17/34
A61B 34/20
A61B 90/00
A61B 1/05
A61B 1/00
(11) EP4081141
(21) EP20829985.9
(47) 21.05.2025
(87) IB2020061565
08.07.2021
(22) 06.12.2020
(54) NAVIGATED TROCAR WITH INTERNAL CAMERA
(73) Biosense Webster (Israel) Ltd.
(72) GOVARI, Assaf
ALGAWI, Yehuda
SITNITSKY, Ilya
KATZIR, Stanislav
(31) 201916729432
(32) 29.12.2019
(33) United States of America

(51) A61B 17/70
(11) EP4129219
(21) EP20929506.2
(47) 21.05.2025
(87) CN2020083228
07.10.2021
(22) 03.04.2020
(54) PEDICLE SCREW ROD SYSTEM CAPABLE OF GRADUALLY CHANGING FROM RIGID FIXATION TO NON-RIGID FIXATION
(73) Jiangxi Provincial People's Hospital
(72) DONG, Xieping
LI, Qingli
HE, Weiyi

(51) A61B 17/70
(11) EP4087504
(21) EP21747282.8
(47) 21.05.2025
(87) US2021015576
05.08.2021
(22) 28.01.2021
(54) SPINAL ROD-TO-ROD CONNECTORS
(73) OrthoPediatrics Corp.
(72) LENGYEL, Rebecca Boerigter
GIBBS, Collin
LUBENSKY, Scott
DANIELS, David Wayne
(31) 202062966761 P
(32) 28.01.2020
(33) United States of America

(51) A61B 17/70
A61B 17/86
(11) EP4278998
(21) EP23199942.6
(47) 21.05.2025
(22) 28.07.2017
(54) BONE ANCHOR HOUSING LIMITER
(73) Zimmer Biomet Spine, Inc.
(72) ZIEMEK, Terry
CASTLEMAN, David W.
(31) 201762482136 P
201662368345 P
(32) 05.04.2017
29.07.2016
(33) United States of America
United States of America

(51) A61B 17/70
A61B 34/10
B25J 9/00
A61B 17/88
A61B 34/20
A61B 34/30
A61B 90/00
A61B 17/56
(11) EP4241709
(21) EP23188910.6
(47) 21.05.2025
(22) 23.06.2017
(54) MINIMALLY INVASIVE INTERVERTEBRAL ROD INSERTION
(73) Mazor Robotics Ltd.
(72) ZUKER, Edo

SHOHAM, Moshe
CHEN, Yuval
(31) 201662353780 P
(32) 23.06.2016
(33) United States of America

(51) A61B 17/80
(11) EP4248890
(21) EP23162811.6
(47) 21.05.2025
(22) 20.03.2023
(54) VETERINARY DISTAL HUMERUS FRACTURE PLATES
(73) Arthrex Inc
(72) KARNES, G. Joshua
CROWLEY, Casey
HOUBRE, Matthew
MURPHY, Sean
WALLS, Charles
HOLSWORTH, Ian
(31) 202263322969 P
(32) 23.03.2022
(33) United States of America

(51) A61B 17/80
A61B 17/88
A61C 3/00
A61C 7/10
A61C 7/18
A61C 8/00
(11) EP3979935
(21) EP20818545.4
(47) 21.05.2025
(87) US2020036033
10.12.2020
(22) 04.06.2020
(54) ORTHODONTIC EXPANSION DEVICE
(73) Achaemenid, LLC
(72) RADMAND, Reza
COLE, Stephen J
(31) 201962857294 P
(32) 05.06.2019
(33) United States of America

(51) A61B 18/12
A61B 18/00
A61B 18/14
(11) EP4291123
(21) EP22705688.4
(47) 21.05.2025
(87) US2022015881
18.08.2022
(22) 09.02.2022
(54) SYSTEMS FOR PRE-ABLATION PULSES IN PULSED FIELD ABLATION APPLICATIONS
(73) Boston Scientific Scimed, Inc.
(72) VISWANATHAN, Raju
BOWERS, William
WILKINS, Colt J.
PARÉ, Michael A.
(31) 202163148524 P
(32) 11.02.2021
(33) United States of America

(51) A61B 18/12
A61B 18/00
A61B 90/00
A61B 17/00
A61B 18/14
(11) EP4027926
(21) EP20790089.5
(47) 21.05.2025
(87) US2020050533
18.03.2021
(22) 11.09.2020
(54) SYSTEMS FOR FORMING AN ANASTOMOSIS
(73) Alleviant Medical, Inc.
(72) PATE, Thomas D.
BERMAN, Zachary R.
(31) 202062971357 P
201962900034 P
(32) 07.02.2020
13.09.2019
(33) United States of America
United States of America

(51) A61B 18/14
(11) EP3998978
(21) EP21743274.9
(47) 21.05.2025
(87) IB2021056393
20.01.2022
(22) 15.07.2021
(54) JAW FOR SURGICAL INSTRUMENT END EFFECTOR
(73) Cilag GmbH International
(72) WILSON, James M.
STEWART, Randolph C.
LESKO, Jason R.
TREES, Gregory A.
D'UVA, Kristen L.
(31) 202016931495
(32) 17.07.2020
(33) United States of America

(51) A61B 18/14
A61B 5/318
A61N 1/04
A61N 1/05
A61B 90/94
A61B 34/20
(11) EP3922199
(21) EP21178056.4
(47) 21.05.2025
(22) 07.06.2021
(54) FEATURES TO ASSIST IN ASSEMBLY AND TESTING OF DEVICES
(73) Biosense Webster (Israel) Ltd.
(72) Beeckler, Christopher Thomas
Espinoza, Zulema Berenice
(31) 202016896104
(32) 08.06.2020
(33) United States of America

(51) A61B 18/14
A61B 5/367
A61B 34/20
A61B 5/06
A61B 5/36
A61B 17/00
A61B 5/00
A61B 18/00
A61B 90/00
(11) EP4193946
(21) EP22212459.6
(47) 21.05.2025
(22) 09.12.2022
(54) ELECTRICAL PATHS ALONG FLEXIBLE SECTION OF DEFLECTABLE SHEATH
(73) Biosense Webster (Israel) Ltd
(72) SUAREZ, Paul A.
HIGHSMITH, Debby E.
BAR-TAL, Meir
LOVEJOY, Erica E.
HAIMOVICH, Roee
YAKOBOVITCH, Ohad
(31) 202117547517
(32) 10.12.2021
(33) United States of America

(51) A61B 18/14
A61B 18/00
(11) EP3941378
(21) EP20754591.4
(47) 21.05.2025
(87) US2020044000
04.02.2021
(22) 29.07.2020
(54) ELECTROSURGICAL TIP
(73) Boston Scientific Scimed, Inc.
(72) MAYO, Joseph
JONES, Matthew P.
GESSLER, Raymond
D'CUNHA, Asha
SCOTT, Serena
HANSEN, Katrina
LERSCH, Jeffery T.
(31) 201962880226 P
(32) 30.07.2019
(33) United States of America

(51) A61B 18/14
A61B 18/00
(11) EP4268750
(21) EP23170325.7
(47) 21.05.2025
(22) 27.04.2023
(54) STRENGTHENED EXPANDABLE BASKETS FOR MEDICAL PROBES AND MEDICAL PROBES CONTAINING STRENGTHENED EXPANDABLE BASKETS
(73) BIOSENSE WEBSTER (ISRAEL) LTD.
(72) JIMENEZ, Jose
RORICK, Kevin
XU, Guo
BEECKLER, Christopher Thomas
PAPAIOANNOU, Athanassios
KEYES, Joseph Thomas
(31) 202218147200
202263336023 P
(32) 28.12.2022
28.04.2022
(33) United States of America
United States of America

(51) A61B 18/18
(11) EP4117562
(21) EP21717621.3
(47) 21.05.2025
(87) US2021022108
16.09.2021
(22) 12.03.2021
(54) RAMPING UP FUNCTION FOR MICROWAVE ABLATION DEVICES
(73) Biocompatibles UK Limited
(72) DAVIS, Ian
MUELLER, Kevin L.
CHEN, Ji
GRANATA, Alysa
CONDIE, Catherine
KOLLMANN, Daniel

MOSESOV, Oleg
BROWN, Andrew
(31) 202062989297 P
(32) 13.03.2020
(33) United States of America

(51) A61B 18/18
(11) EP3920819
(21) EP20709023.4
(47) 21.05.2025
(87) US2020016474
13.08.2020
(22) 04.02.2020
(54) INTERNALLY COOLED CERAMIC ELEMENT FOR A MICROWAVE ABLATION RADIATOR
(73) Covidien LP
(72) BRANNAN, Joseph D.
(31) 201962801691 P
(32) 06.02.2019
(33) United States of America

(51) A61B 18/20
A61N 5/06
A61M 37/00
(11) EP3937816
(21) EP20773818.8
(47) 21.05.2025
(87) US2020015200
24.09.2020
(22) 27.01.2020
(54) SYSTEMS FOR LASER-ASSISTED TOPICAL TREATMENT OF NAIL FUNGAL INFECTIONS
(73) The General Hospital Corporation
(72) ANDERSON, Richard Rox
GARIBYAN, Lilit
LEE, Kachiu
ONWUDIWE, Oge
FARINELLI, William A.
MANSTEIN, Dieter
(31) 201962848213 P
201962818987 P
(32) 15.05.2019
15.03.2019
(33) United States of America
United States of America

(51) A61B 18/24
G02B 6/38
(11) EP4391946
(21) EP22764507.4
(47) 21.05.2025
(87) US2022039678
02.03.2023
(22) 08.08.2022
(54) CONNECTOR FOR MULTIPLEXER OPTICAL COUPLING
(73) Bolt Medical, Inc.
(72) COOK, Christopher A.
SCHULTHEIS, Eric
(31) 202217882586
202163236633 P
(32) 07.08.2022
24.08.2021
(33) United States of America
United States of America

(51) A61B 34/00
A61B 17/28
A61B 17/56
(11) EP3197382
(21) EP15843781.4
(47) 21.05.2025
(87) CA2015050939
31.03.2016
(22) 23.09.2015
(54) TRACKING MARKER SUPPORT STRUCTURE AND SURFACE REGISTRATION METHODS EMPLOYING THE SAME FOR PERFORMING NAVIGATED SURGICAL PROCEDURES
(73) 7D Surgical ULC
(72) SIEGLER, Peter
LEUNG, Michael
MARIAMPILLAI, Adrian
STANDISH, Beau Anthony
YANG, Victor X.D.
(31) 201462054784 P
(32) 24.09.2014
(33) United States of America

(51) A61B 34/10
A61C 1/08
A61B 34/00
A61C 13/00
(11) EP3743007
(21) EP19721407.5
(47) 21.05.2025
(87) US2019015032
01.08.2019
(22) 24.01.2019
(54) A SYSTEM FOR AIDING IN PREPARING A TOOTH OF A PATIENT, AND COMPUTER PROGRAM THEREFOR
(73) Align Technology, Inc.
(72) KOPELMAN, Avi
(31) 201862622728 P
(32) 26.01.2018
(33) United States of America

(51) A61B 34/30
A61B 17/34
A61B 17/16
A61B 17/17
A61B 90/00
A61B 90/50
(11) EP3972516
(21) EP20730946.9
(47) 21.05.2025
(87) US2020033822
26.11.2020
(22) 20.05.2020
(54) RETRACTING TOOL FOR ROBOTIC SURGERY
(73) Globus Medical, Inc.
(72) LARK, James, D.
LORD, Thomas J.
BONO, Peter L.
(31) 201962850323 P
(32) 20.05.2019
(33) United States of America

(51) A61B 34/30
A61B 34/00
A61B 34/35
A61B 17/29
A61B 17/00
F16H 7/02
(11) EP3723651
(21) EP18889370.5
(47) 21.05.2025
(87) US2018064728
20.06.2019
(22) 10.12.2018
(54) MEDICAL TOOLS HAVING TENSION BANDS
(73) Intuitive Surgical Operations, Inc.
(72) ABBOTT, Ryan
HEYE, Isabelle
(31) 201762598628 P
201762598626 P
201762598620 P
(32) 14.12.2017
14.12.2017
14.12.2017
(33) United States of America
United States of America
United States of America

(51) A61B 34/30
A61B 90/00
A61B 34/00
(11) EP3525712
(21) EP17860651.3
(47) 21.05.2025
(87) US2017056506
19.04.2018
(22) 13.10.2017
(54) SYSTEMS TO APPLY PRELOAD TENSION FOR SURGICAL INSTRUMENTS AND RELATED METHODS
(73) Intuitive Surgical Operations Inc.
(72) WIXEY, Matthew Aaron
BURBANK, William
COOPER, Thomas Grosvenor
FLANAGAN, Patrick
RAGOSTA, Nicholas H.
WILSON, Donald Frank, Jr.
(31) 201662408242 P
(32) 14.10.2016
(33) United States of America

(51) A61B 34/30
A61N 1/05
A61N 1/36
(11) EP3768189
(21) EP19771122.9
(47) 21.05.2025
(87) US2019023075
26.09.2019
(22) 20.03.2019
(54) SEMIAUTOMATED ROBOTIC COCHLEAR IMPLANT SURGERY
(73) Med-El Elektromedizinische Geraete GmbH
(72) POLAK, Marek
(31) 201862645883 P
(32) 21.03.2018
(33) United States of America

(51) A61B 34/35
A61B 34/00
A61B 34/20
A61B 18/08
A61B 17/3203
A61B 18/14
A61B 18/22
A61B 34/30
A61B 90/30
A61B 90/00

A61B 90/50
A61B 17/29
A61B 18/04
A61B 34/10
A61G 13/08
A61G 13/12
A61B 18/00
A61B 90/57
A61G 12/00
(11) EP3883492
(21) EP20744474.6
(47) 21.05.2025
(87) US2020012691
30.07.2020
(22) 08.01.2020
(54) VESSEL SEALER WITH HEATING CAPABILITIES
(73) Auris Health, Inc.
(72) WITTE, Spencer, James
BAEZ, JR., Luis, Andrade
JULIAN, Christopher, Allen
JENKINS, Thomas, R.
TSE, Gregory
(31) 201962797128 P
(32) 25.01.2019
(33) United States of America

(51) A61B 46/20
A61B 46/00
A61B 17/00
A61B 46/23
(11) EP3429503
(21) EP17767321.7
(47) 21.05.2025
(87) US2017022278
21.09.2017
(22) 14.03.2017
(54) SURGICAL DRAPE
(73) Medline Industries, LP
(72) CHUA, Mark Spencer
SEEFELDT, Michael
(31) 201615069380
(32) 14.03.2016
(33) United States of America

(51) A61B 90/00
A61B 17/08
A61B 17/10
A61B 17/122
A61B 17/128
(11) EP4119088
(21) EP21803573.1
(47) 21.05.2025
(87) CN2021088489
18.11.2021
(22) 20.04.2021
(54) THREE-ARM CLAMP
(73) Micro-Tech (Nanjing) Co., Ltd.
Zhang, Qiang
(72) ZHANG, Qiang
LI, Changqing
SHEN, Zhenghua
MA, Xiaojun
QIU, Weiqin
DONG, Hao
JIN, Hongyan
(31) 202010390270
(32) 09.05.2020
(33) China

(51) A61B 90/00
A61B 34/20
A61B 17/00
(11) EP4173590
(21) EP21306486.8
(47) 21.05.2025
(22) 26.10.2021
(54) METHOD FOR REGISTERING A 3D MEDICAL IMAGE WITH A REGISTRATION PHANTOM
(73) Ecential Robotics
(72) LAVALLEE, Stéphane
VIDAL, Clément
PIERRE, Arnaud

(51) A61C 1/14
A61B 17/16
(11) EP4262612
(21) EP23706767.3
(47) 21.05.2025
(87) EP2023054416
14.09.2023
(22) 22.02.2023
(54) INSTRUMENT HEAD WITH LEVER MECHANISM FOR CLAMPING A TREATMENT TOOL
(73) KaVo Dental GmbH
(72) BUTSCHER, Jürgen
RÖSCH, Thomas
(31) 102022105626
(32) 10.03.2022
(33) Germany

(51) A61C 1/14
A61B 17/16
A61C 1/12
(11) EP4197484
(21) EP22213738.2
(47) 21.05.2025
(22) 15.12.2022
(54) DENTAL HANDPIECE
(73) Nakanishi Inc.
(72) INOUE, Yamato
IWAI, Yasuo
OTSUKA, Hiroki
(31) 2022148345
2021205568
(32) 16.09.2022
17.12.2021
(33) Japan
Japan

(51) A61C 7/08
A61C 7/14
A61C 13/00
(11) EP4380495
(21) EP22735835.5
(47) 21.05.2025
(87) EP2022066601
09.02.2023
(22) 17.06.2022
(54) DENTAL PROSTHESIS SUPPORT DEVICE
(73) Valere, Frédéric
(72) Valere, Frédéric
(31) 2108548
(32) 06.08.2021
(33) France

(51) A61C 7/36
A61F 5/56
(11) EP4351471
(21) EP22740535.4
(47) 21.05.2025
(87) IT2022050166
15.12.2022
(22) 08.06.2022
(54) MANDIBULAR ADVANCEMENT DEVICE AND SPACER KIT FOR A MANDIBULAR ADVANCEMENT DEVICE
(73) Teor Srl
Anelli, Fabrizio
(72) ANELLI, Fabrizio
(31) 202100015263
(32) 11.06.2021
(33) Italy

(51) A61C 8/00
(11) EP3721828
(21) EP18886621.4
(47) 21.05.2025
(87) KR2018013727
13.06.2019
(22) 12.11.2018
(54) DENTAL IMPLANT FIXTURE
(73) Megagen Implant Co., Ltd.
(72) PARK, Kwang Bum
(31) 20170164968
(32) 04.12.2017
(33) Korea (Republic)

(51) A61C 9/00
(11) EP4340773
(21) EP22729932.8
(47) 21.05.2025
(87) US2022029780
24.11.2022
(22) 18.05.2022
(54) INTRAORAL SCANNER SLEEVE
(73) Align Technology, Inc.
(72) GORFINKEL, Roee
ISHAY, Eran
GORDON, Benny
KOPELMAN, Avi
MAKMEL, Nir
(31) 202163189915 P
(32) 18.05.2021
(33) United States of America

(51) A61C 13/00
A61C 13/271
(11) EP4134042
(21) EP21190668.0
(47) 21.05.2025
(22) 10.08.2021
(54) DENTAL BLANK AND FABRICATION OF A DENTAL PARTIAL DENTURE FROM A DENTAL BLANK
(73) Ivoclar Vivadent AG
(72) WATZKE, Ronny

(51) A61C 13/00
B23Q 17/09
(11) EP4306074
(21) EP22184944.1
(47) 21.05.2025
(22) 14.07.2022
(54) DENTAL RESTORATION MANUFACTURING APPARATUS
(73) Ivoclar Vivadent AG
(72) Frey, Alen
Reinhardt, Jonas
Gurschler, Hannes
Wellinger, Christian

(51) A61C 15/04
A61C 17/02
(11) EP4041122
(21) EP20875360.8
(47) 21.05.2025
(87) US2020054978
15.04.2021
(22) 09.10.2020
(54) WATER FLOSSER
(73) Garrigues, Jeffrey M.
Trembath, Jon
(72) Garrigues, Jeffrey M.
Trembath, Jon
(31) 201962913556 P
(32) 10.10.2019
(33) United States of America

(51) A61C 19/00
A61C 13/15
A61B 1/05
A61C 1/08
G01B 11/02
(11) EP4372309
(21) EP24169093.2
(47) 21.05.2025
(22) 03.10.2019
(54) DENTAL CURING LIGHT
(73) Garrison Dental Solutions, L.L.C.
(72) PETERSON, Steven H.
CARGILL, Mark A.
(31) 201816190368
(32) 14.11.2018
(33) United States of America

(51) A61C 19/04
A46B 15/00
G01N 21/64
(11) EP3424461
(21) EP17770069.7
(47) 21.05.2025
(87) JP2017010328
28.09.2017
(22) 15.03.2017
(54) PLAQUE DETECTING DEVICE AND TOOTHBRUSH
(73) Omron Healthcare Co., Ltd.
Colgate-Palmolive Company
(72) YAMASHITA, Hideyuki
ABE, Kosuke
YOSHIDA, Hideaki
KAWABATA, Yasuhiro
KITAMURA, Masashi
(31) 2017028048
2016060012
(32) 17.02.2017
24.03.2016
(33) Japan
Japan

(51) A61C 19/04
A61C 5/80
(11) EP4014926
(21) EP20214675.9
(47) 21.05.2025
(22) 16.12.2020
(54) DENTAL OBJECT FOR FIXING TO A TOOTH
(73) Ivoclar Vivadent AG
(72) TICHY, Raimund
REINHARDT, Jonas

(51) A61F 2/04
A61F 2/24
(11) EP3634306
(21) EP18802714.8
(47) 21.05.2025
(87) US2018032403
22.11.2018
(22) 11.05.2018
(54) VALVE SEALING TISSUE AND MESH STRUCTURE
(73) Edwards Lifesciences Corporation
(72) GONDA, Edward L.
SOK, Sinatha
(31) 201762506480 P
(32) 15.05.2017
(33) United States of America

(51) A61F 2/14
A61N 1/05
(11) EP4048201
(21) EP20879132.7
(47) 21.05.2025
(87) US2020057423
29.04.2021
(22) 26.10.2020
(54) RETINAL PROSTHESES
(73) Nanovision Biosciences, Inc.
The Regents of the University of California
(72) DAMLE, Samir
LIU, Yu-Hsin
OESCH, Nicholas W.
LO, Yu-Hwa
(31) 201962926411 P
(32) 25.10.2019
(33) United States of America

(51) A61F 2/16
(11) EP3989879
(21) EP20732677.8
(47) 21.05.2025
(87) IB2020055386
30.12.2020
(22) 08.06.2020
(54) IOL BASE COMPRESSION DEVICE HAVING AN IOL TOWING MECHANISM
(73) Alcon Inc.
(72) ZACHER, Rudolph F.
(31) 201962867349 P
(32) 27.06.2019
(33) United States of America

(51) A61F 2/16
(11) EP4021347
(21) EP20753741.6
(47) 21.05.2025
(87) EP2020072217
04.03.2021
(22) 07.08.2020
(54) INTRAOCULAR LENS COMPRISING AN ARM WITH AN ADJUSTABLE LENGTH AS A HAPTIC
(73) Carl Zeiss Meditec AG
(72) MÜLLER, Stephanie
(31) 102019123300
(32) 30.08.2019
(33) Germany

(51) A61F 2/24
(11) EP4178488
(21) EP21748770.1
(47) 21.05.2025
(87) US2021041002
13.01.2022
(22) 09.07.2021
(54) LEAFLET AND SKIRT ATTACHMENT CONFIGURATIONS TO THE FRAMES OF PROSTHETIC VALVES
(73) Edwards Lifesciences Corporation
(72) LEVI, Tamir, S.
GUROVICH, Nikolay
SHERMAN, Elena
YOHANAN, Ziv
(31) 202163211417 P
202063050657 P
(32) 16.06.2021
10.07.2020
(33) United States of America
United States of America

(51) A61F 2/24
(11) EP4079261
(21) EP22167589.5
(47) 21.05.2025
(22) 15.12.2008
(54) LEAFLET ATTACHMENT FRAME FOR A PROSTHETIC VALVE
(73) Edwards Lifesciences Corporation
(72) BENICHOU, Netanel
(31) 1400707 P
(32) 14.12.2007
(33) United States of America

(51) A61F 2/24
(11) EP4186473
(21) EP22216445.1
(47) 21.05.2025
(22) 11.12.2014
(54) DEVICES FOR TRANSCATHETER MITRAL VALVE REPLACEMENT IN A DOUBLE-ORIFICE MITRAL VALVE
(73) Cedars-Sinai Medical Center
(72) AL-JILAIHAWI, Hasanian
(31) 201361914591 P
(32) 11.12.2013
(33) United States of America

(51) A61F 2/30
C08J 3/075
C08F 283/00
C08F 261/04
A61L 27/52
A61L 27/16
A61L 27/26
C08J 3/24
C08F 220/06
C08F 222/38
(11) EP3383325
(21) EP16871599.3
(47) 21.05.2025
(87) US2016064682
08.06.2017
(22) 02.12.2016
(54) DOUBLE NETWORK HYDROGEL WITH ANIONIC POLYMER AND USES THEREOF
(73) Poly-Med Inc.
(72) VAUGHN, Michael, Aaron
(31) 201562262945 P
(32) 04.12.2015
(33) United States of America

(51) A61F 2/38
(11) EP4112010
(21) EP20920892.5

(47) 21.05.2025
(87) CN2020077251
02.09.2021
(22) 28.02.2020
(54) KNEE PROSTHESIS
(73) Beijing AK Medical Co., Ltd.
(72) ZHANG, Weiping

(51) A61F 2/44
A61F 2/46
(11) EP4072476
(21) EP20828770.6
(47) 21.05.2025
(87) IB2020061749
17.06.2021
(22) 10.12.2020
(54) INTERSOMATIC CAGE FOR VERTEBRAL STABILIZATION
(73) SPS S.r.l.
(72) LAURENTI, Riccardo
(31) 201900023913
(32) 13.12.2019
(33) Italy

(51) A61F 2/44
A61F 2/46
A61F 2/30
(11) EP3568109
(21) EP18738659.4
(47) 21.05.2025
(87) US2018013207
19.07.2018
(22) 10.01.2018
(54) EXPANDABLE INTERVERTEBRAL FUSION DEVICE
(73) Integrity Implants Inc.
(72) SHOSHTAEV, Eugene
(31) 201762481565 P
201762471206 P
201762444663 P
(32) 04.04.2017
14.03.2017
10.01.2017
(33) United States of America
United States of America
United States of America

(51) A61F 2/46
(11) EP4277580
(21) EP21831368.2
(47) 21.05.2025
(87) IB2021062002
21.07.2022
(22) 20.12.2021
(54) BONE PLUG INSERTION INSTRUMENT
(73) Eggli, Stefan
(72) HÄBERLI, Janosch
OVERES, Tom
EGGLI, Stefan
(31) 352021
(32) 15.01.2021
(33) Switzerland

(51) A61F 2/64
A61F 2/68
A61F 5/01
A61F 2/50
(11) EP3897468
(21) EP19820731.8
(47) 21.05.2025
(87) EP2019084495
25.06.2020
(22) 10.12.2019
(54) PROSTHETIC DEVICE
(73) Ottobock SE & Co. KGaA
(72) PUSCH, Martin
(31) 102018133103
(32) 20.12.2018
(33) Germany

(51) A61F 2/82
A61F 2/90
A61M 25/09
(11) EP4066794
(21) EP20908312.0
(47) 21.05.2025
(87) CN2020114612
01.07.2021
(22) 10.09.2020
(54) KNITTED STENT AND KNITTED STENT SYSTEM
(73) Shanghai VasoLutions MedTech Co., Ltd.
(72) ZHU, Qing
ZHU, Yongfeng
LIU, Mengqin
(31) 201911360870
(32) 25.12.2019
(33) China

(51) A61F 2/95
(11) EP3708130
(21) EP18876082.1
(47) 21.05.2025
(87) CN2018113566
16.05.2019
(22) 02.11.2018
(54) DELIVERY DEVICE FOR CONVEYING AN IMPLANT
(73) Lifetech Scientific (Shenzhen) Co., Ltd.
(72) ZHANG, Junqiang
(31) 201810837954
201711097891
(32) 26.07.2018
09.11.2017
(33) China
China

(51) A61F 9/00
A61M 11/00
A61M 15/00
(11) EP3749262
(21) EP19705134.5
(47) 21.05.2025
(87) EP2019052777
15.08.2019
(22) 05.02.2019
(54) DEVICE FOR ASSISTING WITH THE USE OF A DEVICE FOR DISPENSING A LIQUID PRODUCT
(73) NEMERA LA VERPILLIERE
(72) DECOCK, Thierry
CASSAGNE, Loïck
PINTUS, Pierre
(31) 1850987
(32) 06.02.2018
(33) France

(51) A61F 11/00
A61M 3/02
A61F 7/12
A61F 7/00
(11) EP4091590
(21) EP21206311.9
(47) 21.05.2025
(22) 13.07.2018
(54) ATTACHMENT FOR A DEVICE FOR DISPENSING A FLUID INTO THE OUTER AUDITORY CANAL
(73) EARBREEZE GMBH
(72) KURSCHEL, Martin

(51) A61F 11/00
G01N 33/00
(11) EP3804672
(21) EP19811002.5
(47) 21.05.2025
(87) JP2019021688
05.12.2019
(22) 31.05.2019
(54) VESTIBULAR STIMULATION DEVICE, DIZZINESS TREATMENT DEVICE, AND HEALTH PROMOTION DEVICE
(73) National University Corporation Tokai National Higher Education and Research System
(72) KATO, Masashi
OHGAMI, Nobutaka
SONE, Michihiko
SUGIMOTO, Satofumi
KATO, Masashi
(31) 2018104637
(32) 31.05.2018
(33) Japan

(51) A61F 11/08
(11) EP3091953
(21) EP15700824.4
(47) 21.05.2025
(87) US2015010265
16.07.2015
(22) 06.01.2015
(54) MOLDED FOAM PUSH-TO-FIT EARPLUG AND METHOD
(73) 3M Innovative Properties Company
(72) TEETERS, Kenneth F.
HAMER, Jeffrey L.
(31) 201461925770 P
(32) 10.01.2014
(33) United States of America

(51) A61F 13/12
A61H 9/00
(11) EP4042991
(21) EP21212952.2
(47) 21.05.2025
(22) 04.10.2016
(54) HEAD AND NECK COMPRESSION THERAPY SYSTEM
(73) Tactile Systems Technology, Inc.
(72) WENNEN, Darren Jay
ZANDER, Wade Andrew
CHASE, Daniel G.
GAMBLE, Kristian Dior
RILEY, Mark R.
GOLLA, Alison Humble
HOY, Sunday Jo
GREEN, Julie Louise
TILK, Jason Grant
ERTEL, Jason R.
COLOSIMO, Rachel Nottingham
MCNEELEY, Carolyn Marie
BLICE, Rebecca L.
(31) 201562237209 P
201562237200 P
201562237192 P

(32) 05.10.2015
05.10.2015
05.10.2015
(33) United States of America
United States of America
United States of America

(51) A61F 13/511
A61F 13/53
A61F 13/537
A61F 13/15
A61F 13/512
D04H 11/00
(11) EP3706695
(21) EP18804213.9
(47) 21.05.2025
(87) US2018059348
09.05.2019
(22) 06.11.2018
(54) ABSORBENT ARTICLE WITH CONFORMING FEATURES
(73) The Procter & Gamble Company
(72) BEWICKSONNTAG, Christopher Philip
POONDRU, Shirdish
HAMMONS, John Lee
ARORA, Kelyn Anne
(31) 201762581813 P
(32) 06.11.2017
(33) United States of America

(51) A61F 13/532
A61F 13/539
B05C 19/04
B32B 3/08
B32B 3/20
B32B 3/26
B32B 5/02
B32B 5/24
B32B 5/26
B32B 5/30
B32B 7/02
B32B 7/04
B32B 7/08
B32B 7/12
B32B 27/06
B32B 27/08
B32B 27/10
B32B 27/12
B32B 29/00
B32B 29/02
B32B 37/00
(11) EP3797746
(21) EP20199909.1
(47) 21.05.2025
(22) 13.10.2011
(54) COMPOSITE STRUCTURE AND METHOD FOR PRODUCING SAME
(73) Drylock Technologies NV
(72) VAN DE MAELE, Marleen
(31) 11153268
10447020
10447021
10447022
10447023
10447024
(32) 03.02.2011
13.10.2010
13.10.2010
13.10.2010
13.10.2010
13.10.2010
(33) European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)

(51) A61G 3/06
B60P 1/44
(11) EP4098236
(21) EP21177806.3
(47) 21.05.2025
(22) 04.06.2021
(54) MOTOR VEHICLE WITH PLATFORM LIFT SYSTEM FOR SAFELY LOADING AND UNLOADING AS WELL AS TRANSPORTING PASSENGERS AND METHOD
(73) Ambulanz Mobile GmbH & Co. KG
(72) SCHWARZ, Hans-Jürgen
RAULIEN, Volker

(51) A61G 5/04
A61G 5/06
A61G 5/10
(11) EP3654899
(21) EP18755586.7
(47) 21.05.2025
(87) US2018042114
24.01.2019
(22) 13.07.2018
(54) MOBILITY DEVICE
(73) DEKA Products Limited Partnership
(72) NORRIS, Matthew, A.
DOHERTY, David, B.
MYERS, Matthew, J.
PERET, Bob, D.
GRAY, Brian, G.
COULTER, Stewart, M.
KANE, Derek, G.
STREETER, Alexander, D.
DASTOUS, Susan, D.
VAN DER MERWE, Dirk, A.
KAMEN, Dean
COUTURE, David, J.
PAWLOSKI, Daniel, F.
(31) 201815982737
201715787613
201762532993 P
(32) 17.05.2018
18.10.2017
15.07.2017
(33) United States of America
United States of America
United States of America

(51) A61G 5/10
A47C 7/28
B60N 2/70
A61G 7/057
(11) EP3801430
(21) EP19743016.8
(47) 21.05.2025
(87) NL2019050305
05.12.2019
(22) 28.05.2019
(54) DEVICE FOR SUPPORTING A PERSON
(73) Hans Voorwinde Beheer B.V.
Tinke 7 Mei BV
(72) VOORWINDE, Hans
TINKE, Cornelis Willem
(31) 2021000
(32) 29.05.2018
(33) Netherlands

(51) A61G 7/012
A61G 7/015
A61G 7/018
A61G 7/05
A61G 13/06
A61G 7/005
(11) EP4103129
(21) EP21812037.6
(47) 21.05.2025
(87) US2021034393
02.12.2021
(22) 27.05.2021
(54) LIFT SYSTEMS AND LOAD CELLS FOR PATIENT SUPPORT APPARATUS
(73) Stryker Corporation
(72) BARTLEY, Gary, L.
CHILDS, William, D.
ST. JOHN, Connor, F.
PAUL, Anish
TESSMER, Brian, J.
(31) 202063030478 P
(32) 27.05.2020
(33) United States of America

(51) A61G 15/16
A61G 15/14
(11) EP4355282
(21) EP22735937.9
(47) 21.05.2025
(87) FI2022050428
22.12.2022
(22) 17.06.2022
(54) DENTAL CARE UNIT INSTRUMENT BRIDGE
(73) Finndent OY
(72) KIVELÄ, Tapani
RANTANEN, Timo
(31) 20215714
(32) 17.06.2021
(33) Finland

(51) A61H 1/02
A61H 3/00
B25J 11/00
(11) EP4108221
(21) EP21756769.2
(47) 21.05.2025
(87) JP2021004745
26.08.2021
(22) 09.02.2021
(54) WEARABLE MOTION ASSIST DEVICE
(73) CYBERDYNE INC.
(72) HARA, Hiromasa
TAKAMA, Masahiro
WATARI, Hiroki
(31) 2020027617
(32) 20.02.2020
(33) Japan

(51) A61H 5/00
(11) EP3185746
(21) EP15837049.4
(47) 21.05.2025
(87) CA2015000479
03.03.2016
(22) 27.08.2015
(54) VISION STRENGTHENING SYSTEMS

(73) The Royal Institution for the Advancement of Learning / McGill University
(72) HESS, Robert F.
FARIVAR-MOHSENI, Reza
REYNAUD, Alexandre
(31) 201462042293 P
(32) 27.08.2014
(33) United States of America

(51) A61H 31/00
(11) EP4434510
(21) EP24193156.7
(47) 21.05.2025
(22) 16.11.2015
(54) CPR CHEST COMPRESSION MACHINE ADJUSTING MOTION-TIME PROFILE IN VIEW OF DETECTED FORCE
(73) Physio-Control, Inc.
(72) NILSSON, Anders
LAGERSTROM, Jonas
MELLBERG, Bo
JEPPSSON, Anders
EHRSTEDT, Marcus
HARDIG, Bjarne Madsen
ARNWALD, Fredrik
VON SCHENCK, Erik
RASMUSSON, Paul
LINDROTH, Sara
CHAPMAN, Fred
LANDON, Ryan
SMITH, Mitchell A.
DUKE, Steven B.
SZUL, Krystyna
KAVOUNAS, Gregory, T.
(31) 201514616056
201462080969 P
(32) 06.02.2015
17.11.2014
(33) United States of America
United States of America

(51) A61H 33/00
G05B 23/02
G06F 3/0484
G01N 33/18
H04Q 9/00
(11) EP3691597
(21) EP18865172.3
(47) 21.05.2025
(87) US2018054139
11.04.2019
(22) 03.10.2018
(54) REMOTE SPA CONTROL SYSTEM
(73) Sundance Spas, Inc.
(72) OVALLE, Larry, R.
(31) 201816148384
201762567908 P
(32) 01.10.2018
04.10.2017
(33) United States of America
United States of America

(51) A61J 1/20
A61M 5/28
A61M 5/20
A61M 5/31
A61M 5/178
A61M 39/00
A61M 39/10
(11) EP3603603
(21) EP18771817.6
(47) 21.05.2025
(87) JP2018010267
27.09.2018
(22) 15.03.2018
(54) FEMALE SYRINGE AND SYRINGE KIT
(73) Terumo Kabushiki Kaisha
(72) OKIHARA, Hitoshi
(31) 2017055227
(32) 22.03.2017
(33) Japan

(51) A61J 3/00
A61J 1/20
(11) EP4426258
(21) EP22801241.5
(47) 21.05.2025
(87) NL2022050608
04.05.2023
(22) 31.10.2022
(54) COMPOUNDING SYSTEM
(73) The Compounding Company B.V.
(72) BOSSCHER, Kasper
KLUSKENS, Luc Peter Eléonore Marie
(31) 2031054
2029580
(32) 23.02.2022
01.11.2021
(33) Netherlands
Netherlands

(51) A61J 7/00
(11) EP4117605
(21) EP21709452.3
(47) 21.05.2025
(87) EP2021055944
16.09.2021
(22) 09.03.2021
(54) MULTI-DOSAGE TABLET ARRAY
(73) Alfasan Nederland B.V.
(72) HELSPER, Freek
TESINK, Anthonie, Sebastiaan
(31) 20162131
(32) 10.03.2020
(33) European Patent Office (EPO)

(51) A61J 15/00
A61M 25/00
A61M 39/16
A61B 90/70
A61F 13/38
(11) EP3943060
(21) EP20776620.5
(47) 21.05.2025
(87) JP2020009511
01.10.2020
(22) 05.03.2020
(54) WIPING TIP
(73) JMS Co., Ltd.
(72) UKITA, Junji
UEHARA, Yasumasa
WADA, Ryohei
(31) 2019054556
(32) 22.03.2019
(33) Japan

(51) A61J 17/00
A61M 16/04
(11) EP4000591
(21) EP20840641.3
(47) 21.05.2025
(87) JP2020027283
21.01.2021
(22) 13.07.2020
(54) PACIFIER
(73) Pigeon Corporation
(72) SAITO, Satoru
KOYAMA, Satoshi
OHARA, Masatomo
MORI, Chikako
(31) 2019132296
(32) 17.07.2019
(33) Japan

(51) A61K 8/04
A61Q 17/04
A61K 8/73
A61K 8/49
A61K 8/41
(11) EP4021375
(21) EP20764043.4
(47) 21.05.2025
(87) EP2020073492
04.03.2021
(22) 21.08.2020
(54) SUNSCREEN SPRAY CONTAINING ETHYL CELLULOSE
(73) Beiersdorf AG
(72) NILSSON, Jan
BLECKMANN, Andreas
PEIRANO, Reto
(31) 102019212924
(32) 28.08.2019
(33) Germany

(51) A61K 8/34
A61K 8/35
A61K 8/37
A61Q 13/00
C07C 29/143
C07C 31/135
C07C 49/303
C07C 69/14
C11B 9/00
C11D 3/50
(11) EP3868358
(21) EP21160197.6
(47) 21.05.2025
(22) 12.11.2019
(54) SYNTHESIS AND USE OF 2-ETHYL-5,5-DIMETHYL-CYCLOHEXANOL AS FRAGRANCE AND FLAVOR MATERIAL
(73) Symrise AG
(72) CHANDRASEKARAN, Vijayanand
HÖLSCHER, Bernd
(31) PCT/EP2018/080899
(32) 12.11.2018
(33) World Intellectual Property Office (WIPO)

(51) A61K 8/34
A61K 8/365
A61K 8/368
A61K 8/39
A61K 8/92
A61Q 19/00
(11) EP3366353
(21) EP17158294.3
(47) 21.05.2025
(22) 28.02.2017

(54) PERSONAL CARE COMPOSITION COMPRISING A PRESERVATIVE SYSTEM
(73) Colgate-Palmolive Company
(72) PIMENTA, Paloma
SYED, Farrah
REED, Jesse
(51) A61K 8/362
A61Q 11/00
A61K 8/22
A61K 8/19
(11) EP3654930
(21) EP17752545.8
(47) 21.05.2025
(87) US2017045661
14.02.2019
(22) 07.08.2017
(54) ORAL CARE COMPOSITIONS INCLUDING CYCLIC ANHYDRIDES
(73) Colgate-Palmolive Company
(72) HUANG, Chun
XU, Guofeng
DOGO-ISONAGIE, Cajetan
(51) A61K 8/37
A61Q 19/00
A61K 8/85
(11) EP4355291
(21) EP22733580.9
(47) 21.05.2025
(87) EP2022065659
22.12.2022
(22) 09.06.2022
(54) COSMETIC PRODUCT CONSISTING OF PACKAGING AND A PREPARATION CONTAINING ETHYLHEXYL OXYSTEARATE ESTER
(73) Beiersdorf AG
(72) MÜLLER, Claudia
NEBEN, Jette Mareike
DIEKERT, Sabrina
LEHMBECK, Frank
(31) 102021206049
(32) 14.06.2021
(33) Germany
(51) A61K 8/49
A61K 8/42
A61K 8/365
A61Q 11/00
(11) EP4192423
(21) EP21759027.2
(47) 21.05.2025
(87) EP2021071109
10.02.2022
(22) 28.07.2021
(54) COOLING SENSATION COMPOSITIONS
(73) Givaudan SA
(72) BARTHOLOMEW, Tracy
SAJI, Norikazu
COCITO ARMANINO, Nicolas
(31) 202012170
(32) 05.08.2020
(33) United Kingdom
(51) A61K 8/92
A61K 8/73
A61Q 19/00
A61Q 19/08
(11) EP4445893
(21) EP23382336.8
(47) 21.05.2025
(22) 11.04.2023
(54) SKIN CARE COMPOSITION
(73) Larrosa Díaz, María Ester
(72) Larrosa Díaz, María Ester
(51) A61K 9/10
A61K 47/02
A61K 47/12
A61K 47/26
A61K 47/34
A61K 47/38
A61P 9/12
A61K 31/4422
(11) EP3960158
(21) EP21190149.1
(47) 21.05.2025
(22) 06.10.2017
(54) AMLODIPINE FORMULATIONS
(73) Silvergate Pharmaceuticals, Inc.
(72) BRAUER, Scott
MOSHER, Gerold L
(31) 201662405455 P
(32) 07.10.2016
(33) United States of America
(51) A61K 9/127
A61K 9/48
A61K 48/00
C12N 15/11
C07H 21/04
A61P 9/00
A61K 31/7088
(11) EP3973955
(21) EP21205388.8
(47) 21.05.2025
(22) 22.11.2017
(54) PARTICLE-MEDIATED DELIVERY OF INHIBITORY RNA
(73) Mayo Foundation for Medical Education and Research
(72) Behfar, Atta
Terzic, Andre
(31) 201662426090 P
(32) 23.11.2016
(33) United States of America
(51) A61K 31/05
A61K 31/197
A61K 31/55
A61P 25/08
(11) EP4181899
(21) EP21751750.7
(47) 21.05.2025
(87) EP2021069889
27.01.2022
(22) 15.07.2021
(54) USE OF CANNABIDIOL IN THE TREATMENT OF SEIZURES ASSOCIATED WITH RARE EPILEPSY SYNDROMES RELATED TO GENETIC ABNORMALITIES
(73) Jazz Pharmaceuticals Research UK Limited
(72) CHECKETTS, Daniel Adam
CRAIG, Kevin James
(31) 202011161
(32) 20.07.2020
(33) United Kingdom
(51) A61K 31/09
A61K 9/107
A61P 7/04
A61K 9/00
A61K 47/44
(11) EP4205734
(21) EP21950502.1
(47) 21.05.2025
(87) CN2021107800
26.01.2023
(22) 22.07.2021
(54) ALPHA-ASARONE FOR USE IN THE TREATMENT OF HEMORRHAGIC STROKE
(73) CHENGDU XINRUI TAIKANG TECHNOLOGY CO., LTD.
(72) MAO, Shengjun
GAO, Xiaofeng
LUO, Lijun
LI, Rui
ZHANG, Jian
YANG, Peng
ZHANG, Di
LIU, Qi
YANG, Huiyuan
(51) A61K 31/122
A61K 45/06
A61K 31/422
A61K 31/437
A61K 31/5377
A61K 31/4545
A61P 7/02
A61K 31/4439
(11) EP3938040
(21) EP20717988.8
(47) 21.05.2025
(87) NO2020050066
17.09.2020
(22) 11.03.2020
(54) VITAMIN K2 IN COMBINATION WITH ANTICOAGULANTS FOR USE IN TREATING MUSCLE SORENESS
(73) Lesaffre et Compagnie
(72) VAN GORP, Rick
(31) 201962817037 P
(32) 12.03.2019
(33) United States of America
(51) A61K 31/137
A61K 31/485
A61P 3/04
A61P 9/00
A61P 9/04
A61P 9/10
A61K 9/20
G01G 19/414
G09B 5/06
G09B 19/00
G16H 20/10
(11) EP4104824
(21) EP22170364.8
(47) 21.05.2025
(22) 05.06.2013
(54) COMPOSITION FOR USE IN A METHOD OF TREATING OVERWEIGHT AND OBESITY IN PATIENTS WITH HIGH CARDIOVASCULAR RISK
(73) Nalpropion Pharmaceuticals LLC
(72) KLASSEN, Preston
TAYLOR, Kristin

(31) 201261656451 P
(32) 06.06.2012
(33) United States of America

(51) A61K 31/167
A61P 11/00
A61P 11/16
A61K 31/00
A61K 9/00
A61K 9/70
A61K 47/44
A61P 1/06
A61P 9/10
A61P 13/02
A61P 13/10
A61P 13/12
A61P 19/02
A61P 25/02
A61P 25/08
A61P 25/28
A61P 35/00
A61P 37/00
A61P 37/08
(11) EP4125843
(21) EP21717576.9
(47) 21.05.2025
(87) NL2021050208
07.10.2021
(22) 31.03.2021
(54) TREATMENT OF HYPERINFLAMMATORY SYNDROME
(73) Remicine IP B.V.
(72) HASAN, Djohan
(31) 2027321
2025541
2025253
(32) 14.01.2021
08.05.2020
31.03.2020
(33) Netherlands
Netherlands
Netherlands

(51) A61K 31/19
A61K 31/194
A61K 31/60
A61K 33/30
A61K 9/00
A61P 31/10
A61P 17/00
A61P 31/12
(11) EP3801455
(21) EP19727397.2
(47) 21.05.2025
(87) EP2019063934
05.12.2019
(22) 29.05.2019
(54) MILD COMPOSITION FOR USE IN TOPICAL TREATMENT OF SKIN AND NAIL DISORDERS CAUSED BY VIRUS AND FUNGUS
(73) Eviderm Institute AB
(72) LODÉN, Marie
SWAHN, Britt-Marie
(31) 18175098
(32) 30.05.2018
(33) European Patent Office (EPO)

(51) A61K 31/201
A61K 31/231
(11) EP3481388
(21) EP17734597.2
(47) 21.05.2025
(87) US2017038286
11.01.2018
(22) 20.06.2017
(54) COMPOSITIONS COMPRISING RUMENIC ACID-RICH CONJUGATED LINOLEIC ACID FOR JOINT HEALTH
(73) Stepan Specialty Products, LLC
(72) HEYDINGER GALANTE, Jenifer
KEIZER, Hiskias, Gerrit
(31) 201662359718 P
(32) 08.07.2016
(33) United States of America

(51) A61K 31/401
A61K 31/506
A61K 45/06
A61K 31/4422
A61K 31/513
A61K 31/549
A61P 9/12
A61K 31/41
(11) EP3658140
(21) EP17794712.4
(47) 21.05.2025
(87) EP2017078371
30.08.2018
(22) 06.11.2017
(54) COMBINATIONS OF APROCITENTAN WITH FURTHER ACTIVE INGREDIENTS FOR THE TREATMENT OF RESISTANT HYPERTENSION
(73) Idorsia Pharmaceuticals Ltd
(72) BELLET, Marc
BOLLI, Martin
CLOZEL, Martine
IGLARZ, Marc
KOHLER, Philipp
SCHINDELHOLZ, Ivan
VON RAUMER, Markus
(31) PCT/EP2017/061487
PCT/EP2017/054489
(32) 12.05.2017
27.02.2017
(33) World Intellectual Property Office (WIPO)
World Intellectual Property Office (WIPO)

(51) A61K 31/4155
A61K 9/16
A61K 9/20
A61K 9/48
A61P 3/10
(11) EP3556354
(21) EP17882225.0
(47) 21.05.2025
(87) CN2017116209
21.06.2018
(22) 14.12.2017
(54) ORAL PREPARATION OF GLUCOKINASE ACTIVATOR AND PREPARATION METHOD THEREFOR
(73) Hua Medicine (Shanghai) Ltd.
(72) CHEN, Li
LI, Yongguo
WANG, Gaosen
(31) 201611162346
(32) 15.12.2016
(33) China

(51) A61K 31/4164
C07D 233/22
A61P 31/00
A61K 45/06
(11) EP3244890
(21) EP15870799.2
(47) 21.05.2025
(87) US2015065545
23.06.2016
(22) 14.12.2015
(54) ORNIDAZOLE FOR USE IN TREATING INFECTIONS CAUSED BY BURKHOLDERIA MALLEI OR BURKHOLDERIA PSEUDOMALLEI
(73) Gregg, John Malcolm Hall
(72) Gregg, John Malcolm Hall
(31) 201462124472 P
201462124471 P
201462124470 P
201462124469 P
201462124468 P
201462124467 P
(32) 20.12.2014
20.12.2014
20.12.2014
20.12.2014
20.12.2014
20.12.2014
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) A61K 31/436
A61P 3/10
C07K 14/47
C07K 14/705
G01N 33/50
G01N 33/68
A61K 31/4745
A61K 31/519
A61K 31/53
A61K 31/5377
A61K 45/06
(11) EP3474849
(21) EP17821057.1
(47) 21.05.2025
(87) US2017039431
04.01.2018
(22) 27.06.2017
(54) COMPOSITIONS AND METHODS FOR DETECTING AND TREATING DIABETES
(73) The Broad Institute, Inc.
President and Fellows of Harvard College
Instituto Carlos Slim de la Salud
(72) HOCH, Eitan
BETH ROSENBERG JACOBS, Suzanne
RUSU, Victor
ZHAO, Liping
M. MERCADER BIGAS, Jose
(31) 201762458832 P
201662355190 P
(32) 14.02.2017
27.06.2016
(33) United States of America
United States of America

(51) A61K 31/47
A61K 31/5375
A61K 38/07
A61K 38/55
C12Q 1/37
G01N 33/53
G01N 33/574
A61P 17/02
A61P 35/00
(11) EP3525791
(21) EP17860888.1
(47) 21.05.2025
(87) IB2017056364
19.04.2018
(22) 13.10.2017
(54) USE OF CASPASE-3 INHIBITORS AND CASPASE-3 ACTIVATORS IN THE MANUFACTURE OF MEDICAMENT FOR TREATING CANCER AND WOUND HEALING
(73) Technion Research & Development Foundation Limited
(72) FUCHS, Yaron
YOSEFZON, Yahav
SOTERIOU, Despina
(31) 24846816
(32) 13.10.2016
(33) Israel

(51) A61K 31/4704
A61P 35/00
C07K 16/24
(11) EP4185292
(21) EP21749566.2
(47) 21.05.2025
(87) EP2021070629
27.01.2022
(22) 23.07.2021
(54) S100 PROTEINS AS NOVEL THERAPEUTIC TARGETS IN MYELOPROLIFERATIVE NEOPLASMS
(73) Erasmus University Medical Center Rotterdam
(72) SCHNEIDER-KRAMANN, Rebekka Katharina Marita
(31) 20187323
(32) 23.07.2020
(33) European Patent Office (EPO)

(51) A61K 31/4741
A61P 9/06
A61K 31/353
(11) EP3903882
(21) EP19903918.1
(47) 21.05.2025
(87) JP2019051456
02.07.2020
(22) 27.12.2019
(54) THERAPEUTIC AGENT FOR INHERITED BRADYARRHYTHMIA
(73) Osaka University
Nissan Chemical Corporation
(72) ASANO, Yoshihiro
TAKASHIMA, Seiji
YAMADA, Noriaki
YAMASHITA, Toru
(31) 2018247919
(32) 28.12.2018
(33) Japan

(51) A61K 31/5365
A61K 9/20
A61P 31/18
A61K 9/28
(11) EP4171572
(21) EP21737779.5
(47) 21.05.2025
(87) IB2021055533
30.12.2021
(22) 23.06.2021
(54) DISPERSIBLE TABLET FORMULATIONS COMPRISING DOLUTEGRAVIR
(73) VIIV Healthcare Company
(72) CONN, Ian Paul
DAVIES, Mark Robert
HEAFIELD, Joanne
HOLTON, Michael
MORTIMER, Neil
(31) 202009684
(32) 25.06.2020
(33) United Kingdom

(51) A61K 31/5383
C07D 498/14
A61P 31/18
(11) EP3474857
(21) EP17816189.9
(47) 21.05.2025
(87) US2017038693
28.12.2017
(22) 22.06.2017
(54) COMPOSITIONS AND METHODS FOR THE DELIVERY OF THERAPEUTICS
(73) VIIV Healthcare Company
Board of Regents of the University of Nebraska
(72) EDAGWA, Benson, J.
GENDELMAN, Howard, E.
JOHNS, Brian, Alvin
(31) 201662353736 P
(32) 23.06.2016
(33) United States of America

(51) A61K 31/555
A61P 35/00
C07D 207/02
(11) EP3606614
(21) EP18781786.1
(47) 21.05.2025
(87) US2018026002
11.10.2018
(22) 04.04.2018
(54) METHODS, COMPOSITIONS, AND KITS FOR TREATING AND/OR PREVENTING A SIDE EFFECT ASSOCIATED WITH RADIATION AND/OR CHEMOTHERAPY EXPOSURE
(73) Biomimetix JV LLC
Duke University
(72) ASHCRAFT, Kathleen
DEWHIRST, Mark
BATINIC-HABERLE, Ines
CRAPO, James D.
(31) 201762481460 P
(32) 04.04.2017
(33) United States of America

(51) A61K 31/7034
A61P 35/00
A61K 31/352
A61K 31/404
A61K 31/44
A61K 31/4439
A61K 31/47
A61K 31/4709
A61K 31/496
A61K 31/5025
A61K 31/506
A61K 31/517
A61K 31/519
A61K 31/53
A61K 31/5377
A61K 31/55
A61K 45/06
(11) EP3957310
(21) EP20886183.1
(47) 21.05.2025
(87) CN2020109969
13.01.2022
(22) 19.08.2020
(54) COMPOSITION COMPRISING SOTAGLIFLOZIN AND A TYROSINE KINASE ACTIVITY INHIBITOR FOR USE IN THE TREATMENT OF CANCER
(73) Newish Technology (Beijing) Co., Ltd.
(72) QI, Hailong
WANG, Xiaofang
SUN, Zhongjie
(31) 202010643576
(32) 06.07.2020
(33) China

(51) A61K 31/7088
A61K 48/00
A61K 9/00
A61P 35/04
C12N 15/11
(11) EP3733212
(21) EP18897202.0
(47) 21.05.2025
(87) KR2018016776
04.07.2019
(22) 27.12.2018
(54) PHARMACEUTICAL COMPOSITION FOR PREVENTING OR TREATING CANCER METASTASIS TO LUNG, CONTAINING CHI3L1 SILENCING RNA AS ACTIVE INGREDIENT
(73) Industry-University Cooperation Foundation Hanyang University
(72) CHOI, Je-Min
KIM, Do-Hyun
(31) 20170182538
(32) 28.12.2017
(33) Korea (Republic)

(51) A61K 33/00
A61K 35/74
A61K 36/185
A61P 11/00
A61P 3/00
A61P 9/00
A23L 2/52
A61K 45/06
A61K 31/375
A23L 33/105
A23L 33/135
A23L 33/16
(11) EP3159000
(21) EP16202454.1
(47) 21.05.2025

(22) 26.02.2008
(54) PERFORMANCE ENHANCING COMPOSITION
(73) HeartBeet Ltd.
(72) Lundberg, Jon
Weitzberg, Eddie
(31) 0700729
0700520
(32) 22.03.2007
26.02.2007
(33) Sweden
Sweden

(51) A61K 33/00
C01B 33/02
C01B 3/08
A61P 39/06
A61P 13/12
A61P 9/10
C01B 3/06
(11) EP3659610
(21) EP18838677.5
(47) 21.05.2025
(87) JP2018025315
31.01.2019
(22) 04.07.2018
(54) SILICON NANOPARTICLES FOR USE IN TREATING KIDNEY DISEASES
(73) Osaka University
(72) KOBAYASHI, Hikaru
KOBAYASHI, Yuki
IMAMURA, Ryoichi
NONOMURA, Norio
(31) 2017145030
(32) 27.07.2017
(33) Japan

(51) A61K 35/30
A61K 35/545
A61P 25/16
C12N 5/00
C12N 5/071
C12N 5/0793
C12N 5/0797
(11) EP4070803
(21) EP22157782.8
(47) 21.05.2025
(22) 01.06.2016
(54) METHODS OF IN VITRO DIFFERENTIATION OF MIDBRAIN DOPAMINE (MDA) NEURONS
(73) Memorial Sloan-Kettering Cancer Center
(72) STUDER, Lorenz
IRION, Stefan
TOMISHIMA, Mark
KRIKS, Sonja
(31) 201562169444 P
201562169379 P
(32) 01.06.2015
01.06.2015
(33) United States of America
United States of America

(51) A61K 35/51
A61K 31/7105
C12N 15/113
A61P 17/00
(11) EP3432897
(21) EP17724103.1
(47) 21.05.2025
(87) IB2017000412
28.09.2017
(22) 24.03.2017
(54) USE OF UMBILICAL CORD BLOOD DERIVED EXOSOMES FOR TISSUE REPAIR
(73) Stemlab SA
Biocant - Associação De Transferência De Tecnologia
(72) FERREIRA, Lino Da Silva
CORREIA, Joana, Rita, Simoes
CARDOSO, Renato, Manuel, Soares
ANTUNES, Maria, Helena, Henriques
(31) 201662336907 P
201662313002 P
(32) 16.05.2016
24.03.2016
(33) United States of America
United States of America

(51) A61K 38/00
A61K 39/00
A61K 45/06
(11) EP4059510
(21) EP21200884.1
(47) 21.05.2025
(22) 22.05.2019
(54) ENGINEERED EXTRACELLULAR VESICLES AND USES THEREOF
(73) Lonza Sales AG
(72) DOOLEY, Kevin P.
HARRISON, Rane A.
XU, Ke
HOUDE, Damian J.
HAUPT, Sonya
KULMAN, John D.
WILLIAMS, Douglas E.
MCCONNELL, Russell E.
YOUNISS, Madeleine
(31) 201962835430 P
PCT/US2018/061679
(32) 17.04.2019
16.11.2018
(33) United States of America
World Intellectual Property Office (WIPO)

(51) A61K 38/07
A61P 27/02
A61P 27/12
(11) EP4302829
(21) EP23194389.5
(47) 21.05.2025
(22) 23.08.2010
(54) PEPTIDE FOR USE IN PREVENTING OR TREATING MACULAR DEGENERATION
(73) Stealth BioTherapeutics Inc.
(72) TANG, Shibo
LIU, Liping
LIANG, Xiaoling
(31) 34847010 P
23774509 P
23644009 P
(32) 26.05.2010
28.08.2009
24.08.2009
(33) United States of America
United States of America
United States of America

(51) A61K 38/16
A61K 38/43
A61P 35/00
(11) EP3914283
(21) EP20702894.5
(47) 21.05.2025
(87) GB2020050170
30.07.2020
(22) 24.01.2020
(54) CBM USES
(73) Omideon Ltd.
(72) ROGERS, Graeme
CONNARIS, Helen
(31) 201901057
(32) 25.01.2019
(33) United Kingdom

(51) A61K 38/17
A61K 31/198
A61K 31/4425
A61K 31/09
A61K 33/10
A61P 1/02
A61C 19/06
A61C 13/08
A61C 7/12
(11) EP3842041
(21) EP18930407.4
(47) 21.05.2025
(87) KR2018009469
20.02.2020
(22) 17.08.2018
(54) COMPOSITION FOR TREATING AND PREVENTING GINGIVOPERIODONTITIS OR PERI-IMPLANTITIS, AND INTERDENTAL BRUSH COATED WITH SAME
(73) Nibec Co., Ltd.
(72) CHUNG, Chong-Pyoung
LEE, Jue-Yeon

(51) A61K 38/20
A61K 39/395
C07K 14/54
(11) EP3268028
(21) EP16762206.7
(47) 21.05.2025
(87) US2016020864
15.09.2016
(22) 04.03.2016
(54) COMPOSITIONS AND METHODS FOR TREATING CANCER
(73) Rush University Medical Center
(72) PAHAN, Kalipada
(31) 201562131343 P
(32) 11.03.2015
(33) United States of America

(51) A61K 39/02
C12N 1/36
A61K 8/20
A61Q 19/08
A61K 38/48
A61K 8/66
A61K 8/29
A61Q 19/00
A61P 25/06
A61P 25/00
A61P 21/00
A61P 19/02
A61P 17/10
A61P 17/00
A61P 1/00

A61K 8/02
(11) EP3248614
(21) EP17178151.1
(47) 21.05.2025
(22) 22.12.2011
(54) KITS FOR TOPICAL APPLICATION, REMOVAL, AND INACTIVATION OF THERAPEUTIC OR COSMETIC BOTULINUM TOXIN COMPOSITIONS
(73) ReVance Therapeutics, Inc.
(72) WAUGH, Jacob
RUEGG, Curtis
(31) 201161430868 P
(32) 07.01.2011
(33) United States of America

(51) A61K 39/12
(11) EP2590673
(21) EP10854531.0
(47) 21.05.2025
(87) US2010041406
12.01.2012
(22) 08.07.2010
(54) DESIGNER PEPTIDE-BASED PCV2 VACCINE
(73) United Biomedical, Inc.
(72) WANG, Chang Yi
PENG, Wen-Jiun

(51) A61K 39/395
(11) EP4110387
(21) EP21709758.3
(47) 21.05.2025
(87) GB2021050460
02.09.2021
(22) 24.02.2021
(54) EX VIVO GAMMA DELTA T CELL POPULATIONS
(73) GammaDelta Therapeutics LTD
(72) NUSSBAUMER, Oliver
POLYAKOVA, Oxana
HAYDAY, Adrian
VANTOUROUT, Pierre
(31) 202002581
(32) 24.02.2020
(33) United Kingdom

(51) A61K 41/00
A61B 18/18
A61N 5/02
A61B 18/00
(11) EP3906058
(21) EP20736154.4
(47) 21.05.2025
(87) IL2020050003
09.07.2020
(22) 01.01.2020
(54) PRECISE ABLATION TREATMENT OF CANCER USING SYNERGETIC EFFECTS OF ELECTROMAGNETIC RADIATION WITH NANOPARTICLES
(73) Synergymed Devices Inc.
(72) COPTY, Anan
(31) 201962787792 P
(32) 03.01.2019
(33) United States of America

(51) A61K 45/06
A61K 31/428
A61P 35/00
A61K 31/282
(11) EP3405194
(21) EP17700554.3
(47) 21.05.2025
(87) EP2017050971
27.07.2017
(22) 18.01.2017
(54) A TEMPORARY INHIBITOR OF P53 IN COMBINATION WITH AN ANTICANCER AGENT FOR USE IN THE PREVENTING OR REDUCING CANCER RELAPSE
(73) Institut National de la Santé et de la Recherche Médicale (INSERM)
Université de Montpellier
(72) PUEL, Jean-Luc
MENARDO, Julien
WANG, Jing
BENKAFADAR, Nesrine
(31) 16305046
(32) 18.01.2016
(33) European Patent Office (EPO)

(51) A61K 47/18
A61K 47/08
A61K 31/175
A61K 9/127
(11) EP3695850
(21) EP20157580.0
(47) 21.05.2025
(22) 30.12.2011
(54) PHARMACEUTICAL COMPOSITIONS COMPRISING A NEGATIVELY CHARGED DRUG AND A CATIONIC LIPID
(73) Samyang Holdings Corporation
(72) CHOI, Sung-Won
LA, Muhn-Ho
SON, Ji-Yeon
SEO, Min-Hyo
(31) 20100138427
(32) 30.12.2010
(33) Korea (Republic)

(51) A61K 47/54
C12N 15/11
C07H 21/02
C40B 50/14
C12N 15/113
(11) EP4444357
(21) EP23855796.1
(47) 21.05.2025
(87) US2023084692
27.06.2024
(22) 18.12.2023
(54) ARNATAR COMPOUNDS AND METHODS FOR ENHANCED CELLULAR UPTAKE
(73) Arnatar Therapeutics, Inc
(72) STEINER, Derek
WANG, Yanfeng
LIANG, Xuehai
(31) 202363602245 P
202363533273 P
202263433730 P
(32) 22.11.2023
17.08.2023
19.12.2022
(33) United States of America
United States of America
United States of America

(51) A61K 48/00
C12N 15/86
C12N 9/02
(11) EP3740244
(21) EP19706059.3
(47) 21.05.2025
(87) US2019013991
25.07.2019
(22) 17.01.2019
(54) ADENO-ASSOCIATED VIRUS GENE THERAPY FOR 21-HYDROXYLASE DEFICIENCY
(73) Adrenas Therapeutics, Inc.
(72) BOUGNERES, Pierre
GAO, Guangping
(31) 201862640311 P
201862618307 P
(32) 08.03.2018
17.01.2018
(33) United States of America
United States of America

(51) A61K 51/08
A61K 51/12
A61K 47/22
A61K 47/12
A61K 9/08
A61K 9/00
(11) EP3826686
(21) EP18783136.7
(47) 21.05.2025
(87) IB2018057415
30.01.2020
(22) 25.09.2018
(54) STABLE, CONCENTRATED RADIONUCLIDE COMPLEX SOLUTIONS
(73) Advanced Accelerator Applications S.A.
(72) CHICCO, Daniela
BARBATO, Donato
DE PALO, Francesco
FUGAZZA, Lorenza
MARIANI, Maurizio
TESORIERE, Giovanni
BRAMBATI, Clementina
(31) 201816045484
PCT/IB2018/055575
(32) 25.07.2018
25.07.2018
(33) United States of America
World Intellectual Property Office (WIPO)

(51) A61L 2/14
F15D 1/00
F15D 1/02
(11) EP4117738
(21) EP21712255.5
(47) 21.05.2025
(87) NL2021050169
16.09.2021
(22) 12.03.2021
(54) METHOD AND DEVICE FOR STERILIZING MEDICAL INSTRUMENTS USING A PLASMA
(73) Log10 B.V.
(72) VERHOEVEN, Franciscus Maria
VAN DER LEIJ, Theo Alex Eduard
PEETERS, Mirte
DE JONG, Thijs
(31) 2025108
(32) 12.03.2020

(33) Netherlands

(51) A61L 2/18
B67C 3/10
(11) EP3233140
(21) EP15820829.8
(47) 21.05.2025
(87) EP2015080160
23.06.2016
(22) 17.12.2015
(54) METHOD AND DEVICE FOR TREATING A MIXTURE OF EXPANSION GAS AND FILLING PRODUCT FOAM IN A BEVERAGE FILLING PLANT
(73) Krones AG
(72) KIENINGER, Stefan
(31) 102014118815
(32) 17.12.2014
(33) Germany

(51) A61L 2/20
B65B 55/19
C12M 1/12
(11) EP3038663
(21) EP14839276.4
(47) 21.05.2025
(87) US2014052792
05.03.2015
(22) 27.08.2014
(54) METHOD OF PERFORMING STERILIZATION CYCLE
(73) American Sterilizer Company
(72) KLOBUSNIK, Kenneth, J.
(31) 201414468654
201361872256 P
(32) 26.08.2014
30.08.2013
(33) United States of America
United States of America

(51) A61L 2/28
A61L 2/24
A61L 2/20
A61L 2/07
A61L 2/26
(11) EP3808384
(21) EP20210450.1
(47) 21.05.2025
(22) 12.03.2014
(54) METHOD FOR OBTAINING VALIDATED STERILIZATION PROCESS MEASUREMENTS
(73) Stryker Corporation
(72) HENNIGES, Bruce
CHILDERS, Robert, W.
CHMELAR, Erik, Vaclac
DUDYCHA, Adam
MILLER, Michael
MOAIERY, Ali
PURRENHAGE, Benjamin John
(31) 201361779956 P
(32) 13.03.2013
(33) United States of America

(51) A61L 2/28
A61L 2/26
(11) EP3952931
(21) EP20719707.0
(47) 21.05.2025
(87) GB2020050930
15.10.2020
(22) 09.04.2020
(54) MONITORING DEVICE
(73) Randox Laboratories Ltd.
(72) MCCOOKE, Catherine
FITZGERALD, Peter
(31) 201905193
(32) 12.04.2019
(33) United Kingdom

(51) A61L 9/20
A61L 9/12
A61L 9/04
(11) EP3589332
(21) EP18708844.8
(47) 21.05.2025
(87) US2018019012
07.09.2018
(22) 21.02.2018
(54) METHOD AND DEVICE FOR ENHANCING THE REDUCTION OF PATHOGENS, ALLERGENS AND ODOR-CAUSING AGENTS
(73) DBG Group Investments, LLC
(72) EIDE, Andrew
URSO, Joseph
(31) 201715446825
(32) 01.03.2017
(33) United States of America

(51) A61L 24/10
A61L 24/08
A61L 24/02
A61K 9/16
A61K 9/00
A61K 38/38
A61K 47/06
A61P 7/04
A61K 9/10
A61K 38/36
A61K 38/39
A61K 38/48
A61L 24/04
(11) EP4069324
(21) EP20897608.4
(47) 21.05.2025
(87) CN2020133059
10.06.2021
(22) 01.12.2020
(54) FLOWABLE FIBRINOGEN THROMBIN PASTE
(73) Guangzhou Bioseal Biotech Co., Ltd.
(72) TIAN, Yuan
LI, Hai
FENG, Dengmin
TENG, Ling
WANG, Yalin
CAI, Yinghua
WANG, Peiqiu
XIE, Tingwan
(31) PCT/CN2019/123652
(32) 06.12.2019
(33) World Intellectual Property Office (WIPO)

(51) A61L 27/18
A61L 27/38
A61L 27/58
A61L 27/54
D01D 5/00
B29C 67/00
B33Y 10/00
B33Y 80/00
A61L 27/20
A61L 27/24
A61L 27/50
(11) EP3741397
(21) EP20185814.9
(47) 21.05.2025
(22) 12.12.2016
(54) SYSTEMS AND METHODS FOR OPTIMIZED PATIENT SPECIFIC TISSUE ENGINEERING VASCULAR GRAFTS
(73) Research Institute at Nationwide Children's Hospital
(72) BREUER, Christopher
BEST, Cameron
STROUSE, Robert
HIBINO, Narutoshi
UNG-LEE, Yong
(31) 201662309285 P
201562266309 P
(32) 16.03.2016
11.12.2015
(33) United States of America
United States of America

(51) A61L 27/20
A61L 27/52
A61L 27/54
A61F 2/00
C08L 5/08
A61K 9/00
(11) EP3804769
(21) EP19830465.1
(47) 21.05.2025
(87) KR2019008374
09.01.2020
(22) 08.07.2019
(54) HYALURONIC ACID FILLER HAVING HIGH VISCOELASTICITY AND HIGH COHESIVENESS
(73) LG CHEM, LTD.
(72) JANG, Cheol
LEE, Chung
KIM, Ji Sun
JUNG, Hyun Tae
LEE, Chang Hyun
SO, Jineon
REE, Hwayoun
(31) 20180078989
(32) 06.07.2018
(33) Korea (Republic)

(51) A61L 31/06
A61B 1/005
A61L 31/12
C08J 7/04
C08K 5/3435
C08L 77/12
F16L 11/08
G02B 23/24
A61L 29/08
B32B 27/36
B29C 48/09
B29C 48/21
B29C 48/151
B29C 48/92
B29C 48/34
B32B 15/02
B32B 15/08
C08J 7/043
C08K 5/52

C09D 167/02
F16L 55/11
(11) EP3646900
(21) EP18825075.7
(47) 21.05.2025
(87) JP2018024966
03.01.2019
(22) 29.06.2018
(54) ENDOSCOPE FLEXIBLE TUBE, ENDOSCOPE-TYPE MEDICAL DEVICE, RESIN COMPOSITION FOR COATING ENDOSCOPE FLEXIBLE TUBE SUBSTRATE, AND RESIN COMPOSITION SET FOR COATING ENDOSCOPE FLEXIBLE TUBE SUBSTRATE
(73) FUJIFILM Corporation
(72) FURUKAWA, Kazushi
NAKAI, Yoshihiro
(31) 2017129905
(32) 30.06.2017
(33) Japan

(51) A61M 1/00
(11) EP3519001
(21) EP17777258.9
(47) 21.05.2025
(87) EP2017074764
05.04.2018
(22) 29.09.2017
(54) NEGATIVE PRESSURE WOUND TREATMENT APPARATUSES AND METHODS WITH INTEGRATED ELECTRONICS
(73) Smith & Nephew plc
(72) BEADLE, Victoria
HESKETH, Mark
KELBIE,William
MUSGRAVE, Damyn
ROBINSON, Joseph, William
STEWARD, Daniel
(31) 201762558263 P
201662402551 P
(32) 13.09.2017
30.09.2016
(33) United States of America
United States of America

(51) A61M 1/00
(11) EP4008370
(21) EP21216443.8
(47) 21.05.2025
(22) 20.12.2016
(54) WASTE COLLECTION UNIT
(73) Stryker Corporation
(72) DAVIE, Daniel
ZOLLINGER, Michael
MACLACHLAN, Brian
ISHAM, Steve
EDINGER, Benjamin
DURNELL, Troy
(31) 201562387394 P
(32) 24.12.2015
(33) United States of America

(51) A61M 1/00
(11) EP3765107
(21) EP18792579.7
(47) 21.05.2025
(87) US2018051086
19.09.2019
(22) 14.09.2018
(54) SURGICAL SUCTION SYSTEM
(73) CONMED Corporation
(72) SNYDER, Jessica
(31) 201862642693 P
(32) 14.03.2018
(33) United States of America

(51) A61M 1/00
A61B 17/32
A61B 17/16
A61B 10/02
(11) EP4324494
(21) EP23184210.5
(47) 21.05.2025
(22) 07.07.2023
(54) COLLECTING DEVICE
(73) H & B Electronic GmbH & Co. KG
(72) MORLOK, Tobias
HEIMSCH, Jochen
REMY, Nico
BAYERBACH, Jan
(31) 102022121041
(32) 19.08.2022
(33) Germany

(51) A61M 1/16
(11) EP3677292
(21) EP18882395.9
(47) 21.05.2025
(87) JP2018043600
06.06.2019
(22) 27.11.2018
(54) METHOD FOR REGENERATING ADSORBER AND DIALYSIS SYSTEM
(73) Nikkiso Co., Ltd.
(72) FUJIWARA, Masato
NIMURA, Hiroshi
YOKOYAMA, Takayoshi
(31) 2017228862
(32) 29.11.2017
(33) Japan

(51) A61M 1/16
A61M 1/32
(11) EP3938007
(21) EP20711845.6
(47) 21.05.2025
(87) EP2020056455
17.09.2020
(22) 11.03.2020
(54) COOLING UNIT FOR A HEAT EXCHANGER
(73) ResuSciTec GmbH
(72) GRUDKE, Jürgen
BENK, Christoph
(31) 102019203253
(32) 11.03.2019
(33) Germany

(51) A61M 1/16
G16H 20/40
G16H 10/60
G06F 21/32
A61M 1/14
G16H 40/20
G16H 40/67
H04L 9/40
H04L 67/12
H04W 12/06
H04W 12/08
H04W 12/63
(11) EP4034188
(21) EP20867878.9
(47) 21.05.2025
(87) US2020050365
01.04.2021
(22) 11.09.2020
(54) BIOMETRIC SECURITY FOR SECURE ACCESS TO A DIALYSIS MACHINE
(73) Fresenius Medical Care Holdings, Inc.
(72) MERICS, Thomas
WANG, Fei
RODRIGUEZ, Fred
(31) 201916585956
(32) 27.09.2019
(33) United States of America

(51) A61M 1/18
B01D 61/14
B01D 63/02
B01D 69/00
B01D 69/02
B01D 69/08
B01D 71/68
D01F 6/76
(11) EP3854430
(21) EP19862019.7
(47) 21.05.2025
(87) JP2019036560
26.03.2020
(22) 18.09.2019
(54) POROUS HOLLOW FIBER MEMBRANE
(73) Daicen Membrane-Systems Ltd.
Nipro Corporation
(72) NAKATSUKA Shuji
SUNOHARA Takashi
TAKAHASHI Toshinari
(31) 2018175815
(32) 20.09.2018
(33) Japan

(51) A61M 1/28
(11) EP3941549
(21) EP20719002.6
(47) 21.05.2025
(87) US2020023556
24.09.2020
(22) 19.03.2020
(54) MEDICAL TREATMENT SYSTEMS, METHODS, AND APPARATUSES USING A PLURALITY OF FLUID LINES
(73) DEKA Products Limited Partnership
(72) KAROL, Daniel Scott
NORRIS, Matthew Allen
SANTOS, Tyler Christopher
TIPTON, Christopher Allen
SULJEVIC, Adnan
(31) 201962820551 P
(32) 19.03.2019
(33) United States of America

(51) A61M 1/30
A61M 1/34
(11) EP4073254
(21) EP20898090.4
(47) 21.05.2025
(87) US2020064110
17.06.2021
(22) 09.12.2020
(54) EXTRACORPOREAL BLOOD TREATMENT SYSTEMS AND

METHODS EMPLOYING BATCH PROCESSING
(73) Stavro Medical, Inc.
(72) CHAWLA, Lakhmir Singh
(31) 202063057129 P
201962947312 P
(32) 27.07.2020
12.12.2019
(33) United States of America
United States of America

(51) A61M 1/36
(11) EP3986501
(21) EP20740383.3
(47) 21.05.2025
(87) IB2020000469
24.12.2020
(22) 17.06.2020
(54) FILTER ASSEMBLY AND CONTAINER FOR COLLECTING A BODY FLUID CONTAINING THE SAME
(73) Fresenius Hemocare Italia S.r.l.
(72) ZAMBIANCHI, Laura
BOSELLI, Matteo
(31) 19181285
(32) 19.06.2019
(33) European Patent Office (EPO)

(51) A61M 1/36
A61M 1/02
B01D 39/16
B01D 39/18
D04H 1/485
D04H 1/54
D04H 1/72
(11) EP4058097
(21) EP20803211.0
(47) 21.05.2025
(87) EP2020081961
20.05.2021
(22) 12.11.2020
(54) FILTRATION UNIT FOR THE LEUCOCYTAPHERESIS OF THE BLOOD, COMPRISING A RELIEF-PERFORATED NONWOVEN
(73) Maco Pharma
(72) CODDEVILLE, Maxime
(31) 1912763
(32) 15.11.2019
(33) France

(51) A61M 1/36
G01F 1/661
G01F 1/74
A61M 1/34
(11) EP4112094
(21) EP22181411.4
(47) 21.05.2025
(22) 28.06.2022
(54) OPTICAL DEVICE AND METHOD FOR MEASURING FLOW RATE
(73) Fenwal, Inc.
(72) Kusters, Benjamin E.
(31) 202163217588 P
(32) 01.07.2021
(33) United States of America

(51) A61M 5/142
A61M 5/14
F04B 43/12
(11) EP3823693
(21) EP19737561.1
(47) 21.05.2025
(87) EP2019068988
23.01.2020
(22) 15.07.2019
(54) IMPROVED INJECTION SYSTEM AND PATIENT SET ASSEMBLY THEREFOR
(73) Acist Medical Systems Inc.
(72) CHASSOT, Pierre-Yves
WARMING, Jens
(31) 18183892
(32) 17.07.2018
(33) European Patent Office (EPO)

(51) A61M 5/142
A61M 5/145
A61M 5/32
(11) EP3484543
(21) EP17742974.3
(47) 21.05.2025
(87) EP2017067513
18.01.2018
(22) 12.07.2017
(54) MEDICAMENT DELIVERY SYSTEM
(73) Sanofi
(72) FRANKE, Beate
FORYS, Bernhard
VERLAAK, Stefan
MELZI, Ilario
(31) 16305916
(32) 14.07.2016
(33) European Patent Office (EPO)

(51) A61M 5/142
A61M 5/145
A61M 39/28
(11) EP3836984
(21) EP19762537.9
(47) 21.05.2025
(87) US2019046838
20.02.2020
(22) 16.08.2019
(54) MEDICAL PUMP
(73) DEKA Products Limited Partnership
(72) BAIER, Michael J.
BLUMBERG Jr., David
BODDINGTON, Hugh J.
FRIEDRICH, Thomas A.
GIROUARD, Paul G.
GRAY, Larry B.
NIVENS, David C.
(31) 201862765100 P
(32) 16.08.2018
(33) United States of America

(51) A61M 5/142
A61M 5/20
A61M 5/145
A61M 5/172
(11) EP3097932
(21) EP14879227.8
(47) 21.05.2025
(87) CN2014073992
23.07.2015
(22) 25.03.2014
(54) CATHETER-FREE DRUG FLUID INFUSION DEVICE
(73) Medtrum Technologies Inc.
(72) YANG, Cuijun
(31) 201410025209
(32) 20.01.2014
(33) China

(51) A61M 5/158
A61M 5/142
A61M 5/168
A61K 31/727
A61P 3/10
A61P 5/50
A61P 43/00
(11) EP3060273
(21) EP14799259.8
(47) 21.05.2025
(87) US2014061832
30.04.2015
(22) 22.10.2014
(54) METHODS AND SYSTEMS FOR INHIBITING FOREIGN-BODY RESPONSES IN DIABETIC PATIENTS
(73) Medtronic MiniMed, Inc.
(72) CHATTARAJ, Sarnath
DANG, Kiem H.
FUSSELMAN, Hsi Chung
GULATI, Poonam S.
HOFFMAN, Lance P.
ZHANG, Guangping
(31) 201414512788
201462032101 P
201461935010 P
201361894088 P
(32) 13.10.2014
01.08.2014
03.02.2014
22.10.2013
(33) United States of America
United States of America
United States of America
United States of America

(51) A61M 5/162
A61M 5/165
A61M 5/142
A61M 5/14
(11) EP4217018
(21) EP21790739.3
(47) 21.05.2025
(87) US2021051358
31.03.2022
(22) 21.09.2021
(54) INTRAVENOUS FILTER
(73) CareFusion 303, Inc.
(72) MASON, Eugene
WINE, Jason Andrew
FEITH, Raymond P.
(31) 202017030015
(32) 23.09.2020
(33) United States of America

(51) A61M 5/31
(11) EP3777933
(21) EP20184578.1
(47) 21.05.2025
(22) 19.02.2016
(54) SUPPLEMENTAL DEVICE FOR REMOVABLE ATTACHMENT TO A MEDICAMENT INJECTION DEVICE
(73) Sanofi-Aventis Deutschland GmbH
(72) GUGL, Christoph
ECKSTEIN, Johannes
GEIGER, Adrian
MÜLLER, Philipp
(31) 15155756
(32) 19.02.2015

(33) European Patent Office (EPO)
(51) A61M 5/31
(11) EP4196194
(21) EP21763456.7
(47) 21.05.2025
(87) US2021045298
17.02.2022
(22) 10.08.2021
(54) FEATURES FOR ANGIOGRAPHY SYRINGE
(73) Bayer HealthCare LLC
(72) SPOHN, Michael
COWAN, Kevin
CAMPBELL, Patrick
CALLAN, Gerald
(31) 202063073519 P
202062706340 P
(32) 02.09.2020
11.08.2020
(33) United States of America
United States of America

(51) A61M 5/315
A61M 25/10
(11) EP4015028
(21) EP21202350.1
(47) 21.05.2025
(22) 13.10.2021
(54) ACTUATING MECHANISM FOR FLUID DISPLACEMENT AND PRESSURIZING DEVICES
(73) Atrion Medical Products, Inc.
(72) Collins, Jonathan
Kanner, Rowland
Roberts, Brian
(31) 202063127369 P
(32) 18.12.2020
(33) United States of America

(51) A61M 5/32
(11) EP4346960
(21) EP22717569.2
(47) 21.05.2025
(87) EP2022057526
01.12.2022
(22) 22.03.2022
(54) MEDICAMENT DELIVERY MEMBER MODULES
(73) SHL Medical AG
(72) YIN, Ming-Ting
(31) 202163193133 P
(32) 26.05.2021
(33) United States of America

(51) A61M 5/32
(11) EP3592407
(21) EP18707935.5
(47) 21.05.2025
(87) EP2018055544
13.09.2018
(22) 07.03.2018
(54) CAP ASSEMBLY FOR A DRUG DELIVERY DEVICE, KIT FOR ASSEMBLING A CAP, METHOD FOR ASSEMBLING A CAP AND DRUG DELIVERY DEVICE COMPRISING A CAP ASSEMBLY
(73) Sanofi-Aventis Deutschland GmbH
(72) PLUMPTRE, David Aubrey
(31) 17159522
(32) 07.03.2017
(33) European Patent Office (EPO)

(51) A61M 5/32
A61M 5/00
(11) EP3659655
(21) EP19767542.4
(47) 21.05.2025
(87) JP2019008622
19.09.2019
(22) 05.03.2019
(54) INTRADERMAL NEEDLE, PACKAGED PRODUCT THEREOF, AND INJECTION DEVICE
(73) Terumo Kabushiki Kaisha
(72) NAKAJIMA, Kentaro
IWASE, Yoichiro
(31) 2018049357
(32) 16.03.2018
(33) Japan

(51) A61M 11/00
A61M 11/06
A61M 16/08
A61M 16/10
A61M 16/12
A61M 16/16
A61M 25/00
(11) EP4380655
(21) EP22782567.6
(47) 21.05.2025
(87) IB2022057215
09.02.2023
(22) 03.08.2022
(54) RESPIRATORY DEVICE AND A RESPIRATORY SET INTENDED THEREFOR
(73) Medspray Humidification B.V.
Medspray B.V.
(72) VAN RIJN, Cornelis Johannes Maria
VAN EGMOND, Henri Joseph
VAN DER VEGTE, Stefanus Maria
HUIJGEN, Tom Vincent
KROON, Eric Jacobus Cornelis
(31) 2028916
(32) 03.08.2021
(33) Netherlands

(51) A61M 15/06
A61M 11/04
A24F 47/00
(11) EP4108280
(21) EP22189474.4
(47) 21.05.2025
(22) 25.05.2017
(54) CONTROL OF AN ELECTRONIC VAPORIZER
(73) Juul Labs, Inc.
(72) ATKINS, Ariel
BOWEN, Adam
COHEN, Gal A.
GOULD, Alexander J.
HATTON, Nicholas J
MONSEES, James
XING, Chenyue
(31) 201662341579 P
(32) 25.05.2016
(33) United States of America

(51) A61M 16/00
A61B 5/1455
(11) EP4048356
(21) EP20878200.3
(47) 21.05.2025
(87) IB2020056237
29.04.2021
(22) 02.07.2020
(54) ALARM FOR RESPIRATORY THERAPY SYSTEM
(73) Fisher & Paykel Healthcare Limited
(72) GULLEY, Anton Kim
HUANG, Yi Lin
(31) 201962925973 P
(32) 25.10.2019
(33) United States of America

(51) A61M 16/06
(11) EP3946535
(21) EP20778814.2
(47) 21.05.2025
(87) AU2020050313
01.10.2020
(22) 30.03.2020
(54) PATIENT INTERFACE
(73) ResMed Pty Ltd
(72) EVES, Matthew
KIRKPATRICK, Ryan Michael
KHERA, Rahul
BARLOW, Adam Francis
BATE, Andrew James
(31) 2019903948
2019903360
2019901516
PCT/AU2019/050278
(32) 21.10.2019
10.09.2019
03.05.2019
28.03.2019
(33) Australia
Australia
Australia
World Intellectual Property Office (WIPO)

(51) A61M 16/06
(11) EP4028093
(21) EP20862176.3
(47) 21.05.2025
(87) AU2020050953
18.03.2021
(22) 09.09.2020
(54) ORO-NASAL PATIENT INTERFACE
(73) ResMed Pty Ltd
(72) EVES, Matthew
BATE, Andrew James
DEUBEL, Sebastien
WATSON, Paul Derrick
WELLS, Matthew Robin
TAN, Beng Hai
ONG, Chee Keong
HARTONO, Marvin Sugi
LIN, Han Cheng
(31) 2019903360
202063058001 P
(32) 10.09.2019
29.07.2020
(33) Australia
United States of America

(51) A61M 16/06
(11) EP4371597
(21) EP24150060.2
(47) 21.05.2025
(22) 23.09.2016

(54) PATIENT INTERFACE WITH A SEAL-FORMING STRUCTURE HAVING VARYING THICKNESS
(73) ResMed Pty Ltd
(72) EVES, Matthew
NGA, Lemmy
RUMMERY, Gerard Michael
SCHEINER, Rupert Christian
(31) 201662377158 P
201562222503 P
PCT/AU2016/050228
(32) 19.08.2016
23.09.2015
24.03.2016
(33) United States of America
United States of America
World Intellectual Property Office (WIPO)
(51) A61M 16/06
A61M 16/00
A61M 16/16
(11) EP3906957
(21) EP21170149.5
(47) 21.05.2025
(22) 16.03.2016
(54) PATIENT INTERFACE
(73) Fisher & Paykel Healthcare Limited
(72) RONAYNE, Michael Paul
JOHNSON, Chelsea Erin
MILNE, Robert Andrew David
(31) 201562252943 P
201562151898 P
201562133908 P
(32) 09.11.2015
23.04.2015
16.03.2015
(33) United States of America
United States of America
United States of America
(51) A61M 16/06
A61M 16/08
(11) EP3639877
(21) EP19191480.3
(47) 21.05.2025
(22) 02.06.2010
(54) PATIENT INTERFACE
(73) ResMed Pty Ltd
(72) BARLOW, Adam
EVES, Matthew
VON MOGER, Lochlan
HILL, Phoebe, Katherine
STUEBIGER, Kai
ANDERSON, Peter, Ross
(31) 2010902359
2009906101
2009902524
28269310 P
26317509 P
27225009 P
27216209 P
22271109 P
PCT/AU2010/000657
(32) 28.05.2010
15.12.2009
02.06.2009
18.03.2010
20.11.2009
04.09.2009
25.08.2009
02.07.2009
28.05.2010
(33) Australia
Australia
Australia
United States of America
United States of America
United States of America
United States of America
United States of America
World Intellectual Property Office (WIPO)
(51) A61M 16/06
A61M 16/10
A61M 16/16
A61M 16/20
A61M 16/00
A62B 18/08
A61F 9/02
(11) EP3777942
(21) EP20184210.1
(47) 21.05.2025
(22) 21.07.2016
(54) HEADGEAR WITH COVERED EDGE
(73) ResMed Pty Ltd
(72) KOOIJ, Michiel
SCHEINER, Rupert Christian
YU, Annie
YU, Tzu-Chin
YICK, Kit Lun
YiP, Yiu Wan
DUNN, Jessica Lea
(31) 201662321053 P
201562196329 P
(32) 11.04.2016
24.07.2015
(33) United States of America
United States of America
(51) A61M 16/16
A61M 16/00
(11) EP4210800
(21) EP21865384.8
(47) 21.05.2025
(87) AU2021051037
17.03.2022
(22) 08.09.2021
(54) HUMIDIFICATION PLATFORM FOR USE WITH A PORTABLE CPAP DEVICE
(73) ResMed Pty Ltd
(72) SHARMA, Skye Kimberley
MUN, Sung Hoon
TEH, Ting Lee
HORLER, Samuel Thomas
(31) 202063075375 P
(32) 08.09.2020
(33) United States of America
(51) A61M 25/00
(11) EP3302671
(21) EP16728571.7
(47) 21.05.2025
(87) US2016035700
08.12.2016
(22) 03.06.2016
(54) CATHETER ASSEMBLY
(73) W.L. Gore & Associates, Inc.
(72) CONIA, Jerome S.
CULLY, Edward H.
DUNCAN, Jeffrey B.
GOEPFRICH, James L.
WATSON, Woodrow W.
(31) 201562171392 P
(32) 05.06.2015
(33) United States of America
(51) A61M 25/00
A61M 25/01
A61M 27/00
(11) EP3943140
(21) EP21197247.6
(47) 21.05.2025
(22) 21.12.2018
(54) FEMALE CATHETER LOCATOR TIP
(73) ConvaTec Limited
(72) Donnelly, David A
Lambrethsen, Julie
Clutton, Melanie
(31) 201721956
201762610100 P
(32) 27.12.2017
22.12.2017
(33) United Kingdom
United States of America
(51) A61M 25/01
A61M 25/00
(11) EP3691732
(21) EP18864672.3
(47) 21.05.2025
(87) IB2018057765
11.04.2019
(22) 05.10.2018
(54) REINFORCED SHEATH FOR A STEERABLE SHEATH ASSEMBLY
(73) Boston Scientific Medical Device Limited
(72) THOMPSON SMITH, Melanie
GODARA, Neil
BRANNICK, Ros
CHAN, Audrey
CHEN, Jan-Hung
FRONCIONI, Michael
KEAVENEY, Luke
MA, Brian
MULLIGAN, David
ZHANG, Alice
(31) 201762569346 P
(32) 06.10.2017
(33) United States of America
(51) A61M 25/095
A61B 18/12
A61B 5/06
A61M 25/098
A61M 25/14
(11) EP4000677
(21) EP21215791.1
(47) 21.05.2025
(22) 09.11.2012
(54) RADIOFREQUENCY PERFORATION APPARATUS
(73) Boston Scientific Medical Device Limited
(72) DAVIES, Gareth
URBANSKI, John Paul
(31) 201261653967 P
(32) 31.05.2012
(33) United States of America
(51) A61M 25/10
A61F 2/962
A61F 2/97
B29C 63/00
B29C 63/18

A61F 2/07
A61F 2/82
(11) EP3886968
(21) EP19808734.8
(47) 21.05.2025
(87) EP2019081776
04.06.2020
(22) 19.11.2019
(54) PROCESS FOR ASSEMBLING A PROTECTIVE SHEATH ON A DRUG-COATED BALLOON CATHETER
(73) Biotronik AG
(72) RISCH, Fabian
(31) 102018129918
(32) 27.11.2018
(33) Germany

(51) A61M 27/00
A61M 3/02
A61M 1/00
(11) EP3817801
(21) EP19745401.0
(47) 21.05.2025
(87) US2019040285
09.01.2020
(22) 02.07.2019
(54) SYSTEMS, CATHETERS, AND METHODS FOR TREATING ALONG THE CENTRAL NERVOUS SYSTEM
(73) Minnetronix Neuro, Inc.
(72) CAMPBELL, Susan Rosemary
DARBANDI, Bejan Michael
GOHMAN, John Leonard
HEDSTROM, Blake Anthony
MONDRY, Jack Michael
(31) 201862693225 P
(32) 02.07.2018
(33) United States of America

(51) A61M 37/00
(11) EP3727557
(21) EP18833505.3
(47) 21.05.2025
(87) IB2018059627
27.06.2019
(22) 04.12.2018
(54) MICROARRAY APPLICATOR
(73) Kindeva Drug Delivery L.P.
(72) WIRTANEN, David J.
PUCKETT, Kevin L.
SCHUG, James L.
WHITE, David J.
(31) 201762607577 P
(32) 19.12.2017
(33) United States of America

(51) A61M 39/02
A61B 5/15
A61M 5/14
A61M 39/10
A61M 25/00
(11) EP4489644
(21) EP23715318.4
(47) 21.05.2025
(87) US2023015017
05.10.2023
(22) 10.03.2023
(54) OVERMOLDED HEMOLYSIS-REDUCTION ACCESSORIES FOR DIRECT BLOOD DRAW
(73) CareFusion 303, Inc.
(72) SALEHI BOROJERDI, Alireza
JADHAV, Amarsinh Deeliprao
KHAN, Mohammed Mehtab
BIERITZ, Shelby Ann
ZOLLINGER, Christopher Jesse
SCHOONMAKER, Ryan
(31) 202263326705 P
(32) 01.04.2022
(33) United States of America

(51) A61M 39/26
A61M 5/168
A61M 39/10
(11) EP3912672
(21) EP21184383.4
(47) 21.05.2025
(22) 13.04.2018
(54) NEEDLELESS IV INJECTION PORT
(73) Fresenius Kabi Deutschland GmbH
(72) KAISER, James
RYHERD, Anthony
RYAN, Dana
(31) 201715628990
(32) 21.06.2017
(33) United States of America

(51) A61M 60/13
A61M 60/237
A61M 60/414
A61M 60/808
A61M 60/81
A61M 60/888
A61M 60/865
A61M 60/857
(11) EP4218900
(21) EP23159725.3
(47) 21.05.2025
(22) 07.03.2022
(54) VENTRICULAR ASSIST DEVICE
(73) Magenta Medical Ltd.
(72) TUVAL, Yosi
LUBINSKY, Gad
ZEMER HAREL, Hagit
FRIEDLAND, Ori
ROSENBLUM, Daniel
ROZENFELD, Avi
(31) 202163254321 P
202163158708 P
(32) 11.10.2021
09.03.2021
(33) United States of America
United States of America

(51) A61M 60/174
A61M 60/232
A61M 60/416
A61M 60/515
A61M 60/808
A61M 60/814
A61M 60/861
A61M 60/865
A61M 60/876
A61M 60/135
(11) EP4100105
(21) EP21703697.9
(47) 21.05.2025
(87) EP2021052803
12.08.2021
(22) 05.02.2021
(54) IMPLANTABLE DEVICE FOR LONG-TERM ASSIST OF THE RIGHT VENTRICLE OF A HEART
(73) Brightflow
(72) MOUSSAFEUR, Amina
(31) 20305121
(32) 07.02.2020
(33) European Patent Office (EPO)

(51) A61N 1/05
A61N 1/36
(11) EP4048369
(21) EP20811132.8
(47) 21.05.2025
(87) US2020055948
29.04.2021
(22) 16.10.2020
(54) TRANSVAGINAL TREATMENT OF STRESS URINARY INCONTINENCE
(73) Hologic, Inc.
The Regents Of The University Of Michigan
(72) DE LANCEY, John O.
ASHTON-MILLER, James
ULM, Christian Michael
SCHENCK, Jessica Tina
(31) 201962924380 P
(32) 22.10.2019
(33) United States of America

(51) A61N 1/05
A61N 1/362
A61N 1/39
(11) EP3924032
(21) EP20709022.6
(47) 21.05.2025
(87) US2020016468
20.08.2020
(22) 04.02.2020
(54) LEAD-IN-LEAD SYSTEMS FOR CARDIAC THERAPY
(73) Medtronic, Inc.
(72) YANG, Zhongping C.
YOUNG Derek
(31) 202016780036
201962805749 P
(32) 03.02.2020
14.02.2019
(33) United States of America
United States of America

(51) A61N 1/05
A61N 1/372
A61N 1/375
(11) EP4385559
(21) EP24171970.7
(47) 21.05.2025
(22) 24.10.2019
(54) BIOSTIMULATOR FEEDTHROUGH HAVING INTEGRATED ELECTRODE CUP
(73) Pacesetter, Inc.
(72) Paspa, Paul
Eby, Thomas B
Fishler, Matthew G
Boling, Carl Lance
Luhrs, Thomas Robert
Klehn, Russell
Strang, Tyler J
Garabed, Arees
Sahabi, Kavous

Villavicencio, Brett
Alleman, Wes
Soriano, Alex
Malone, Matthew R
Foley, Conor P
(31) 201962895409 P
201862750681 P
(32) 03.09.2019
25.10.2018
(33) United States of America
United States of America

(51) A61N 1/36
A61N 1/05
A61B 17/34
(11) EP3765146
(21) EP19714070.0
(47) 21.05.2025
(87) US2019022626
19.09.2019
(22) 15.03.2019
(54) SYSTEM TO PERCUTANEOUSLY BLOCK PAINFUL SENSATIONS
(73) Avent Investment, LLC
(72) LIU, Wanzhan
ALEXEEVA, Natalia
BOYLE, Anthony
HANSON, Todd
OSTER, Daniel
SCHEPIS, Eric A.
SCHORR, Phillip A.
SASTRY, Shyamant R.
SOIN, Amol
CALDWELL, Ryan
PAGE, David M.
(31) 201862643216 P
(32) 15.03.2018
(33) United States of America

(51) A61N 5/10
(11) EP3980118
(21) EP20732544.0
(47) 21.05.2025
(87) EP2020065983
17.12.2020
(22) 09.06.2020
(54) A FLASH THERAPY TREATMENT PLANNING AND ONCOLOGY INFORMATION SYSTEM HAVING DOSE RATE PRESCRIPTION AND DOSE RATE MAPPING
(73) Siemens Healthineers International AG
Varian Medical Systems Particle Therapy GmbH & Co. KG
(72) KOPONEN, Timo
ABEL, Eric
MAGLIARI, Anthony
SMITH, Christel
FOLKERTS, Michael
VANDERSTRAETEN, Reynald
KHUNTIA, Deepak
PEREZ, Jessica
(31) 201916436762
(32) 10.06.2019
(33) United States of America

(51) A61N 5/10
(11) EP4221831
(21) EP21799378.1
(47) 21.05.2025
(87) US2021051199
07.04.2022
(22) 21.09.2021
(54) ELECTROMAGNETIC INTERFACE MOUNT FOR RADIATION MACHINES
(73) Varian Medical Systems, Inc.
(72) BAIC, Dusan
KOLEV, Veselin
(31) 202017038657
(32) 30.09.2020
(33) United States of America

(51) A61N 5/10
A61B 6/03
A61B 6/50
A61B 6/00
A61B 6/10
(11) EP4126213
(21) EP21715570.4
(47) 21.05.2025
(87) EP2021057959
07.10.2021
(22) 26.03.2021
(54) METHOD AND APPARATUS TO DERIVE AND UTILIZE VIRTUAL VOLUMETRIC STRUCTURES FOR PREDICTING POTENTIAL COLLISIONS WHEN ADMINISTERING THERAPEUTIC RADIATION
(73) Siemens Healthineers International AG
(72) YANG, Xinhui
ROSSELET, Armel C.
SABEL, Martin
NORD, Janne I.
(31) 202016833801
(32) 30.03.2020
(33) United States of America

(51) A61N 7/00
A61B 8/08
A61B 5/00
A61B 8/12
A61N 7/02
A61B 8/00
A61B 17/00
A61B 34/20
A61B 90/00
A61B 17/22
A61B 17/225
(11) EP3277378
(21) EP16722358.5
(47) 21.05.2025
(87) IB2016000523
06.10.2016
(22) 01.04.2016
(54) APPARATUS FOR TREATING VALVULAR DISEASE
(73) Cardiawave
(72) MESSAS, Emmanuel
PERNOT, Mathieu
TANTER, Mickael
VILLEMAIN, Olivier
(31) 201562142096 P
(32) 02.04.2015
(33) United States of America

(51) A61P 13/02
A61P 17/00
A61P 31/02
A61P 43/00
A61M 25/00
(11) EP3107612
(21) EP15714693.7
(47) 21.05.2025
(87) US2015017151
27.08.2015
(22) 23.02.2015
(54) METHOD FOR MAINTENANCE OF URETHRAL CATHETERS
(73) Avadim Technologies, Inc.
(72) WOODY, Steven Thomas
(31) 201462082019 P
201461943287 P
(32) 19.11.2014
21.02.2014
(33) United States of America
United States of America

(51) A61P 17/02
(11) EP4188320
(21) EP21759339.1
(47) 21.05.2025
(87) FR2021051425
03.02.2022
(22) 29.07.2021
(54) PHOTOPROTECTIVE COMPOSITION COMPRISING A GLYCINE BETAINE DERIVATIVE
(73) Surfactgreen
(72) GALLE, Francis
PESSEL, Freddy
ROUSSEL, Xavier
(31) 2008182
(32) 31.07.2020
(33) France

(51) A61P 31/18
C07D 401/14
C07F 9/00
A61K 31/4439
(11) EP4440702
(21) EP22846980.5
(47) 21.05.2025
(87) US2022051734
08.06.2023
(22) 02.12.2022
(54) THERAPEUTIC COMPOUNDS FOR HIV VIRUS INFECTION
(73) GILEAD SCIENCES, INC.
(72) FARAND, Julie
GRAUPE, Michael
GUNEY, Tezcan
KATO, Darryl
LI, Jiayao
LINK, John O.
MACK, James B.C.
MUN, Dong Min
SAITO, Roland D.
WATKINS, William J.
ZHANG, Jennifer R.
(31) 202263356889 P
202163285730 P
(32) 29.06.2022
03.12.2021
(33) United States of America
United States of America

(51) A61P 31/18
C07D 401/14
C07F 9/00
A61K 31/4439
(11) EP4445900
(21) EP24186082.4

(47) 21.05.2025
(22) 02.12.2022
(54) THERAPEUTIC COMPOUNDS FOR HIV VIRUS INFECTION
(73) Gilead Sciences, Inc.
(72) FARAND, Julie
GRAUPE, Michael
GUNEY, Tezcan
KATO, Darryl
LI, Jiayao
LINK, John O.
MACK, James B.C.
MUN, Dong Min
SAITO, Roland D.
WATKINS, William J.
ZHANG, Jennifer R.
(31) 202263356889 P
202163285730 P
(32) 29.06.2022
03.12.2021
(33) United States of America
United States of America

(51) A61P 35/00
A61P 37/00
C07D 471/14
C07D 521/00
A61K 31/437
(11) EP4175719
(21) EP21746885.9
(47) 21.05.2025
(87) US2021040185
06.01.2022
(22) 01.07.2021
(54) TRICYCLIC UREA COMPOUNDS AS JAK2 V617F INHIBITORS
(73) Incyte Corporation
(72) AI, Yanran
ATASOYLU, Onur
BAI, Yu
BARBOSA, Joseph
BURNS, David M.
LEVY, Daniel
DOUTY, Brent
FENG, Hao
KONKOL, Leah C.
LAI, Cheng-Tsung
LIU, Xun
MEI, Song
PAN, Jun
WANG, Haisheng
WU, Liangxing
YAO, Wenqing
YUE, Eddy W.
(31) 202163164302 P
202063047483 P
(32) 22.03.2021
02.07.2020
(33) United States of America
United States of America

(51) A61P 35/00
C07K 14/47
C07K 14/725
A61K 38/00
(11) EP3946621
(21) EP20719942.3
(47) 21.05.2025
(87) EP2020058779
01.10.2020
(22) 27.03.2020
(54) MAGE A4 T CELL RECEPTORS
(73) Medigene Immunotherapies GmbH
Regeneron Pharmaceuticals, Inc.
(72) ELLINGER, Christian
SOMMERMEYER, Daniel
BLACKBURN PARSONS, Geoffrey
MANN, Jasdeep
(31) 19165387
(32) 27.03.2019
(33) European Patent Office (EPO)

(51) A61P 35/02
C07K 16/30
C12N 5/09
C12Q 1/6886
(11) EP3515559
(21) EP17853809.6
(47) 21.05.2025
(87) US2017052506
29.03.2018
(22) 20.09.2017
(54) COMPOSITIONS AND METHODS FOR IDENTIFICATION, ASSESSMENT, PREVENTION, AND TREATMENT OF AML USING USP10 BIOMARKERS AND MODULATORS
(73) Dana-Farber Cancer Institute, Inc.
Buhrlage, Sara
Weisberg, Ellen
Griffin, James Douglas
(72) BUHRLAGE, Sara
WEISBERG, Ellen
GRIFFIN, James Douglas
(31) 201662397100 P
(32) 20.09.2016
(33) United States of America

(51) A61Q 5/06
A61K 8/34
A61K 8/894
A61K 8/41
(11) EP3875154
(21) EP19878780.6
(47) 21.05.2025
(87) JP2019042715
07.05.2020
(22) 31.10.2019
(54) HAIR COSMETIC AND HAIR TREATMENT METHOD USING SAME
(73) Shiseido Company, Ltd.
(72) KOJIRI, Momoka
KURASHIMA, Takumi
YOSHIBA, Ryo
(31) 2018206972
(32) 02.11.2018
(33) Japan

(51) A61Q 19/10
A61K 8/02
A61K 8/34
A61K 8/44
A61K 8/46
A61K 8/60
E03C 1/04
E03C 1/046
(11) EP3339517
(21) EP17210476.2
(47) 21.05.2025
(22) 22.12.2017
(54) APPARATUS AND METHOD FOR THE ENRICHMENT OF WATER AND AN ASSOCIATED SOLID, WATER-SOLUBLE COMPOSITIONS
(73) Showerplus Entwicklungs- und Vertriebsgesellschaft mbH
(72) SACKEL, Rene
(31) 202016008114 U
102016015354
(32) 22.12.2016
22.12.2016
(33) Germany
Germany

(51) A62B 7/08
A62B 7/14
(11) EP4438133
(21) EP24161065.8
(47) 21.05.2025
(22) 04.03.2024
(54) CUTTING MEANS FOR OPENING A MEMBRANE
(73) Diehl Aviation Gilching GmbH
(72) SPAGL, Markus
(31) 102023108088
(32) 30.03.2023
(33) Germany

(51) A62B 7/10
A62B 18/00
A62B 18/02
(11) EP4327891
(21) EP23159970.5
(47) 21.05.2025
(22) 03.03.2023
(54) MASK APPARATUS
(73) LG Electronics Inc.
(72) MUN, Yeongcheol
AN, Dongkwon
AHN, Sejeong
(31) 20220096140
(32) 02.08.2022
(33) Korea (Republic)

(51) A62B 9/04
A61M 16/06
A42B 7/00
A62B 18/08
B29C 65/08
A42B 1/06
(11) EP4098329
(21) EP22166679.5
(47) 21.05.2025
(22) 22.08.2012
(54) COMFORT PAD FOR USE WITH HEADGEAR IN HOLDING A RESPIRATORY MASK IN POSITION ON A PATIENT'S FACE AND METHOD OF MAKING IT
(73) ResMed Pty Ltd
(72) DUNN, Jessica Lea
OVZINSKY, Grant Milton
BARBARA, Anthony Paul
HASKARD, Kirrily Michele
FORMICA, Justin John
LAGUZZA, Michael Charles
(31) 201161526042 P
(32) 22.08.2011
(33) United States of America

(51) A62B 18/00
(11) EP3319696

(21) EP16739320.6
(47) 21.05.2025
(87) US2016039732
12.01.2017
(22) 28.06.2016
(54) POWERED EXHAUST APPARATUS FOR A PERSONAL PROTECTION RESPIRATORY DEVICE
(73) 3M Innovative Properties Company
(72) CURRAN, Desmond T.
DUFF, John A.
COOPER, Benjamin H.
GRAVES, Jason A.
ABDULQADER, Reyad A.
(31) 201511904
(32) 07.07.2015
(33) United Kingdom

(51) A62C 3/08
A62C 99/00
A62C 35/02
(11) EP3865183
(21) EP21156706.0
(47) 21.05.2025
(22) 11.02.2021
(54) FIRE SUPPRESSION SYSTEM AND METHOD OF USING THE SAME
(73) Kidde Technologies, Inc.
(72) FAZZIO, Mark P.
HAGGE, Harlan
CHATTAWAY, Adam
SIMPSON, Terry
(31) 202016791179
(32) 14.02.2020
(33) United States of America

(51) A62C 37/14
(11) EP4065244
(21) EP19836790.6
(47) 21.05.2025
(87) EP2019082558
03.06.2021
(22) 26.11.2019
(54) TRIGGERING ELEMENT FOR A FIRE PROTECTION SYSTEM, FIRE PROTECTION ELEMENT EQUIPPED THEREWITH, AND METHOD FOR DETECTING THE TRIGGERING OF A FIRE PROTECTION ELEMENT
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) SCHADE, Wolfgang

(51) A63B 21/005
A63B 71/06
A63B 21/00
A63B 23/04
A63B 24/00
(11) EP3717080
(21) EP18883097.0
(47) 21.05.2025
(87) US2018063388
06.06.2019
(22) 30.11.2018
(54) EXERCISE MACHINE WITH A FORCE TRANSDUCER
(73) Arx Fit, LLC
(72) ALEXANDER, Mark
BEAUDRY, Jay
(31) 201715829183
(32) 01.12.2017
(33) United States of America

(51) A63B 22/00
(11) EP4470633
(21) EP23220544.3
(47) 21.05.2025
(22) 28.12.2023
(54) LIFTING STRUCTURE FOR TREADMILL
(73) Yongkang Tiantian Aipao Intelligent Technology Co., Ltd.
(72) Miao, Qihua
Lv, Tiandong
Ye, Hui
Li, Qianhai
Luo, Guangyi
Zhou, Zhiping
Huang, Bo
(31) 202321391449 U
(32) 02.06.2023
(33) China

(51) A63B 49/08
A63B 21/00
A63B 60/06
A63B 60/16
A63B 60/50
A63B 102/02
A63B 102/04
A63B 102/06
A63B 102/08
A63B 102/16
(11) EP4226978
(21) EP22163683.0
(47) 21.05.2025
(22) 22.03.2022
(54) SPORTS RACQUET AND REMOVABLE WRIST STRAP
(73) Wilson Sporting Goods Co.
(72) KAPHEIM, Robert T.
VIGALLON, Kevin A.
PORTER, Benjamin
(31) 202217670449
(32) 12.02.2022
(33) United States of America

(51) A63B 69/24
A63B 69/00
(11) EP4360722
(21) EP23206787.6
(47) 21.05.2025
(22) 30.10.2023
(54) DEVICE FOR PERFORMING JUGGLING EXERCISES USING A SOCCER BALL
(73) Kocyigit, Denise Johanna
(72) Kocyigit, Denise Johanna
(31) 202023100597 U
102022128682
(32) 08.02.2023
28.10.2022
(33) Germany
Germany

(51) A63C 1/28
(11) EP3826736
(21) EP19749451.1
(47) 21.05.2025
(87) NL2019050441
30.01.2020
(22) 12.07.2019
(54) CLAP SKATE
(73) Schaatsenfabriek Viking B.V.
(72) VISSER, Hiddo
(31) 2021395
(32) 25.07.2018
(33) Netherlands

(51) A63C 13/00
(11) EP3723878
(21) EP18821750.9
(47) 21.05.2025
(87) IB2018059478
20.06.2019
(22) 29.11.2018
(54) FLEXIBLE SNOWSHOE
(73) Martin Plastique Participations
(72) VARAINE, Joël
PIRON, Hervé
REBOULLET, Olivier
(31) 1771366
(32) 15.12.2017
(33) France

(51) A63C 17/00
A63C 17/12
(11) EP4154954
(21) EP22196471.1
(47) 21.05.2025
(22) 20.09.2022
(54) ROAD VEHICLE FOR SINGLE PERSON WITH INDEPENDENT CONTROL OF OSCILLATION OF THE TWO SKIDS
(73) L.M. Gianetti S.r.l.
(72) VIARENGO, Marco
(31) 202100024516
(32) 23.09.2021
(33) Italy

(51) A63F 13/22
A63F 13/23
A63F 13/98
(11) EP4417277
(21) EP23178810.0
(47) 21.05.2025
(22) 13.06.2023
(54) METHOD FOR PROCESSING GAME CONTROL INSTRUCTION AND EXTENSION DEVICE OF GAME CONTROLLER
(73) Qingdao Thunderobot Technology Co., Ltd
(72) LI, Yanbing
LU, Kailin
WANG, Shaohua
(31) 202310144990
(32) 20.02.2023
(33) China

(51) A63F 13/818
A63F 13/65
G02B 27/01
G09B 9/00
G09B 19/00
A63F 13/245
(11) EP4049733
(21) EP20879207.7
(47) 21.05.2025
(87) KR2020014406
29.04.2021
(22) 21.10.2020
(54) FISHING SIMULATION APPARATUS AND METHOD
(73) RND labs Co., Ltd.

(72) SHIN, Jea Joong
YOUN, Eun Seok
(31) 20190133929
(32) 25.10.2019
(33) Korea (Republic)

(51) A63G 31/16
A63G 7/00
(11) EP4265311
(21) EP23196268.9
(47) 21.05.2025
(22) 25.09.2019
(54) MODULAR AUGMENTED AND VIRTUAL REALITY RIDE ATTRACTION
(73) Universal City Studios LLC
(72) GOERGEN, Patrick John
HOLSTINE, Danielle Marie
TRUJILLO, Tomas Manuel
(31) 201916580543
201862736433 P
(32) 24.09.2019
25.09.2018
(33) United States of America
United States of America

(51) A63H 27/10
(11) EP4061503
(21) EP19953582.4
(47) 21.05.2025
(87) CN2019127568
27.05.2021
(22) 23.12.2019
(54) A CONTAINER INFLATOR SYSTEM AND A METHOD FOR INFLATING A BALLOON
(73) Boti Global Limited
(72) PERRIN, Steve
(31) 201911150523
(32) 21.11.2019
(33) China

(51) B01D 15/02
B03D 1/02
B03C 1/01
B03D 1/004
(11) EP2714235
(21) EP12790002.5
(47) 21.05.2025
(87) US2012039534
29.11.2012
(22) 25.05.2012
(54) MINERAL SEPARATION USING FUNCTIONALIZED POLYMER COATED MEMBER
(73) Cidra Corporate Services, Inc.
(72) ROTHMAN, Paul, J.
FERNALD, Mark, R.
DIDDEN, Francis, K.
O'KEEFE, Christian, V.
ADAMSON, Douglas, H.
(31) 201161533544 P
201161489893 P
(32) 12.09.2011
25.05.2011
(33) United States of America
United States of America

(51) B01D 15/14
G01N 30/56
B01D 15/22
(11) EP3820586
(21) EP19870649.1
(47) 21.05.2025
(87) CA2019051453
16.04.2020
(22) 11.10.2019
(54) CHROMATOGRAPHY COLUMN WITH DUAL-PURPOSE VALVE ASSEMBLY
(73) TOSOH CORPORATION
(72) ABU-ROMEH, Ahmad
EBIED, Amer
(31) 201862744212 P
(32) 11.10.2018
(33) United States of America

(51) B01D 25/21
B01D 25/127
B01D 25/164
(11) EP4240509
(21) EP20960732.4
(47) 21.05.2025
(87) FI2020050737
12.05.2022
(22) 06.11.2020
(54) A FILTER PLATE SUBFRAME
(73) Metso Finland Oy
(72) MUSTAKANGAS, Mirva
JUVONEN, Ismo
KAIPAINEN, Janne
ELORANTA, Teemu
ILLI, Mika
VÄNTTINEN, Kari

(51) B01D 46/00
B01D 46/24
B01D 46/58
F02M 35/024
(11) EP4380715
(21) EP22747792.4
(47) 21.05.2025
(87) IB2022056927
09.02.2023
(22) 27.07.2022
(54) AIR FILTRATION ASSEMBLY
(73) UFI Innovation Center S.r.l.
(72) GIRONDI, Giorgio
(31) 202100020783
(32) 02.08.2021
(33) Italy

(51) B01D 46/52
B01D 46/00
F02M 35/024
(11) EP3730201
(21) EP20180531.4
(47) 21.05.2025
(22) 21.03.2013
(54) METHOD FOR PRODUCING A FILTER ELEMENT PROVIDED WITH A SEALING PART
(73) MANN+HUMMEL GmbH
(72) Sudermann, Arthur
Wagner, Fabian
Sieber, Thomas
Görg, Günter
Metzger, Michael
Röhrig, Markus
Jessberger, Thomas
Dirnberger, Timo
Joos, Bernd
(31) 102012005530
(32) 21.03.2012
(33) Germany

(51) B01D 53/04
(11) EP3145620
(21) EP15726904.4
(47) 21.05.2025
(87) EP2015061460
26.11.2015
(22) 22.05.2015
(54) METHOD AND CARTRIDGE FOR CARBON DIOXIDE RECOVERY
(73) Krajete GmbH
(72) KRAJETE, Alexander
(31) 201409157
(32) 22.05.2014
(33) United Kingdom

(51) B01D 53/04
B01D 53/86
F25J 3/04
(11) EP4326421
(21) EP21802513.8
(47) 21.05.2025
(87) US2021054455
27.10.2022
(22) 12.10.2021
(54) METHOD FOR REGENERATING A PRE-PURIFICATION VESSEL
(73) Praxair Technology, Inc.
(72) HANDLEY, James, R.
CYGANOVICH, Richard, C.
CELIK, Cem, E.
POWELL, Brian, S.
DASANI, Devang, Ashok
(31) 202117234100
(32) 19.04.2021
(33) United States of America

(51) B01D 53/14
B01D 53/26
B01D 53/64
B01D 53/77
C10L 3/10
B01D 53/96
(11) EP3468693
(21) EP17731430.9
(47) 21.05.2025
(87) US2017036788
14.12.2017
(22) 09.06.2017
(54) PROCESS, METHOD AND SYSTEM FOR REMOVAL OF MERCURY IN A GAS DEHYDRATION PROCESS
(73) Chevron U.S.A. Inc.
(72) THOMPSON, Joshua Allen
CHINN, Daniel
HATAKEYAMA, Evan Shigeto
OWEN, Ryan Oliver
(31) 201662348200 P
(32) 10.06.2016
(33) United States of America

(51) B01D 61/14
B01D 63/04
B01D 63/12
(11) EP4147769
(21) EP22205067.6
(47) 21.05.2025
(22) 28.08.2015
(54) PROCESSES FOR FILTERING LIQUIDS USING SINGLE PASS TANGENTIAL FLOW FILTRATION SYSTEMS AND TANGENTIAL FLOW FILTRATION

SYSTEMS WITH RECIRCULATION OF RETENTATE
(73) EMD Millipore Corporation
(72) STEEN, Jonathan
KOZLOV, Mikhail
LUTZ, Herbert
PARRELLA, Joseph
GOODRICH, Elizabeth M.
RAGHUNATH, Bala
(31) 201462043846 P
(32) 29.08.2014
(33) United States of America

(51) B01D 61/18
B01D 15/00
(11) EP3386613
(21) EP16802025.3
(47) 21.05.2025
(87) EP2016078760
15.06.2017
(22) 25.11.2016
(54) UNIT FOR TREATMENT OF A BIOPROCESS LIQUID WITH DISPOSABLE FLOW PATH ELEMENTS
(73) Cytiva Sweden AB
(72) SINGH, Amit, Kumar
GEBAUER, Klaus
DATTA, Supti
LIDERFELT, Jakob
KARMARKAR, Nachiket
VERNEKAR, Ajit, S.
OLSSON, Mats
RAJAN, Thiyaga
SHARMA, Amit, K.
NUTALAPATI, Sasi, Kumar
LUNDSTROM, Fredrik
NEFF, Jean Pierre
(31) 3975DE2015
(32) 07.12.2015
(33) India

(51) B01D 63/00
B01D 63/10
D04B 1/00
B29C 48/09
B29C 48/345
D04B 21/12
D04B 1/10
(11) EP4023325
(21) EP20858547.1
(47) 21.05.2025
(87) JP2020032195
04.03.2021
(22) 26.08.2020
(54) SEPARATION MEMBRANE ELEMENT
(73) Toray Industries, Inc.
(72) TANIGUCHI Shu
TAKAGI Kentaro
KONDA Takeshi
(31) 2020094335
2019231577
2019157773
(32) 29.05.2020
23.12.2019
30.08.2019
(33) Japan
Japan
Japan

(51) B01D 71/34
C08F 218/08
C08F 220/14
C08F 220/54
C08J 5/22
C08L 27/16
C08L 33/12
C08L 33/14
C08F 220/60
(11) EP4076714
(21) EP20841890.5
(47) 21.05.2025
(87) EP2020086268
24.06.2021
(22) 15.12.2020
(54) POLYMER ADDITIVE COMPRISING ZWITTERIONIC MOIETIES FOR VINYLIDENE FLUORIDE POLYMER BASED MEMBRANES
(73) SYENSQO SA
(72) DEROO, Sophie
DI NICOLO, Emanuele
GODY, Guillaume
LABEAU, Marie-Pierre
PAVAGEAU, Bertrand
WILSON, David James
CHOUIRFA, Hamza
(31) 19218196
(32) 19.12.2019
(33) European Patent Office (EPO)

(51) B01J 8/02
B01J 8/04
B01J 19/24
C07C 29/152
(11) EP4327929
(21) EP22192285.9
(47) 21.05.2025
(22) 26.08.2022
(54) METHANOL SYNTHESIS PLATE REACTOR
(73) L'AIR LIQUIDE, SOCIETE ANONYME POUR L'ETUDE ET L'EXPLOITATION DES PROCEDES GEORGES CLAUDE
(72) STROZYK, Michael
OELMANN, Tobias

(51) B01J 20/26
B01J 20/28
A61L 15/60
(11) EP3391961
(21) EP17167075.5
(47) 21.05.2025
(22) 19.04.2017
(54) METHOF OF OBTAINING AGGLOMERATED SUPERABSORBENT POLYMER PARTICLES HAVING A SPECIFIC SIZE RATIO
(73) The Procter & Gamble Company
(72) Kamphus, Juliane

(51) B01J 20/281
B01J 20/26
B01J 20/30
C08F 8/34
C08G 65/26
C08G 65/32
(11) EP3878551
(21) EP19881620.9
(47) 21.05.2025
(87) JP2019043553
14.05.2020
(22) 06.11.2019
(54) METHOD FOR PRODUCING ORGANIC SULFUR COMPOUND, CARRIER, METHOD FOR PRODUCING SAID CARRIER, LIGAND-IMMOBILIZING CARRIER, CHROMATOGRAPHY COLUMN, AND METHOD FOR DETECTING OR ISOLATING TARGET SUBSTANCE
(73) JSR Corporation
(72) KISHIDA, Takanori
NISHIDA, Takaya
(31) 2018208851
2018208850
(32) 06.11.2018
06.11.2018
(33) Japan
Japan

(51) B01J 20/30
B01J 20/28
G21F 9/12
C02F 1/28
B01D 35/06
C02F 1/58
C02F 101/00
B01J 20/02
(11) EP3479898
(21) EP17824486.9
(47) 21.05.2025
(87) KR2017007057
11.01.2018
(22) 04.07.2017
(54) METHOD OF PREPARING A MAGNETIC CESIUM ADSORBENT AND METHOD OF REMOVING CESIUM EMPLOYING SAID CESIUM ADSORBENT
(73) Korea Atomic Energy Research Institute
(72) PARK, Tae Hong
CHO, Young Jin
BAE, Sang Eun
LIM, Sang Ho
PARK, Jai Il
YOUN, Young Sang
YEON, Jei Won
(31) 20160084287
(32) 04.07.2016
(33) Korea (Republic)

(51) B01J 31/02
C08F 110/14
C08F 210/16
C08F 4/659
(11) EP3774035
(21) EP19716692.9
(47) 21.05.2025
(87) US2019024034
03.10.2019
(22) 26.03.2019
(54) OLEFIN POLYMERIZATION ACTIVATORS
(73) Dow Global Technologies LLC
(72) KEATON, Richard J.
HUACUJA, Rafael
WILSON, David R.
KLOSIN, Jerzy
PEARSON, David M.
SENECAL, Todd D.
MUKHOPADHYAY, Sukrit
WOODWARD, William H. H.

(31) 201862650412 P
(32) 30.03.2018
(33) United States of America

(51) B01L 3/00
(11) EP3481551
(21) EP17739663.7
(47) 21.05.2025
(87) GB2017051991
11.01.2018
(22) 06.07.2017
(54) MICROFLUIDIC DEVICE
(73) Oxford Nanopore Technologies plc
(72) WATERMAN, David
(31) 201611770
(32) 06.07.2016
(33) United Kingdom

(51) B01L 3/00
G01N 33/24
(11) EP4359127
(21) EP22731803.7
(47) 21.05.2025
(87) IB2022054922
29.12.2022
(22) 25.05.2022
(54) MICROFLUIDIC MANIFOLD AND METHOD FOR DETERMINATION OF ANALYTE CONCENTRATION FROM TEMPERATURE-COMPENSATED ABSORBANCE MEASUREMENTS
(73) Precision Planting LLC
(72) SWANSON, Todd
VACCARI, Adam
SCHAEFER, Timothy
LITWILLER, Riley
(31) 202163213319 P
(32) 22.06.2021
(33) United States of America

(51) B01L 3/00
G01N 35/10
(11) EP3990178
(21) EP19742527.5
(47) 21.05.2025
(87) EP2019066935
30.12.2020
(22) 26.06.2019
(54) CARTRIDGE, ELECTROWETTING SAMPLE PROCESSING SYSTEM AND FEEDING THEREOF
(73) TECAN Trading AG
(72) KINNEY, Patrick
IYER, Sujata
HOFFMEYER, Daniel
DHINDSA, Manjeet
NGO, Tin
DING (LAY), Tiffany
BJÖRNSON, Torleif Ove

(51) B02C 18/30
B02C 18/38
A22C 17/00
(11) EP3946743
(21) EP20718778.2
(47) 21.05.2025
(87) IB2020053012
08.10.2020
(22) 30.03.2020
(54) COMMINUTING DEVICE FOR FOODSTUFFS
(73) SEPAmatic GmbH
(72) VON DER WEIDEN, Helmut
ACHENBACH, Mark Dennis
(31) 102019002341
(32) 01.04.2019
(33) Germany

(51) B03B 4/06
B03B 7/00
B07B 4/02
B07B 4/04
B08B 5/00
B07B 7/01
B03B 9/06
B07B 9/00
B03C 1/025
(11) EP4194094
(21) EP21893920.5
(47) 21.05.2025
(87) CN2021131093
27.05.2022
(22) 17.11.2021
(54) STRONG MAGNET ACCELERATED PARTICLE MATERIAL CLEANING METHOD AND DEVICE
(73) Huachangfeng Equipment Inc.
(72) LIU, Tianbo
PENG, Huaiming
(31) 202120469952 U
202110242127
202011282871
202022651236 U
(32) 04.03.2021
04.03.2021
17.11.2020
17.11.2020
(33) China
China
China
China

(51) B05B 1/08
F15C 1/22
F15C 3/16
G10K 9/02
G10K 9/08
G10K 9/122
G10K 11/16
G10K 11/22
(11) EP3895792
(21) EP20170173.7
(47) 21.05.2025
(22) 17.04.2020
(54) OSCILLATOR FOR GENERATING TWO OR MORE PULSATING FLUID FLOWS FROM A CONSTANT FLUID FLOW AND A METHOD OF GENERATING FLUID BUBBLES IN A LIQUID
(73) Alfa Laval Rotterdam B.V.
(72) Kapteijn, Pieter Karel Anton

(51) B05B 1/30
(11) EP4178726
(21) EP21787468.4
(47) 21.05.2025
(87) EP2021077801
14.04.2022
(22) 08.10.2021
(54) PAINT NOZZLE MODULE FOR A PAINT SPRAYING DEVICE
(73) J. Wagner GmbH
(72) LUTZ, Magnus
MANGOLD, Sebastian
IBELE, Peter
(31) 102020126476
(32) 09.10.2020
(33) Germany

(51) B05B 5/04
(11) EP4309798
(21) EP23186496.8
(47) 21.05.2025
(22) 19.07.2023
(54) COATING MACHINE
(73) ABB Schweiz AG
(72) YAMAUCHI, Kuniharu
(31) 2022115766
(32) 20.07.2022
(33) Japan

(51) B05B 11/10
(11) EP3907151
(21) EP19906831.3
(47) 21.05.2025
(87) CN2019108973
09.07.2020
(22) 29.09.2019
(54) LOTION PUMP
(73) Ding, Yaowu
(72) Ding, Yaowu
(31) 201910004781
(32) 03.01.2019
(33) China

(51) B05B 13/06
B05B 13/04
B05B 15/72
B05B 1/20
B05B 3/14
(11) EP4005686
(21) EP20210720.7
(47) 21.05.2025
(22) 30.11.2020
(54) RETRACTABLE CLEANING APPARATUS AND SYSTEM
(73) Alfa Laval Corporate AB
(72) JENSEN, Bo Boye Busk

(51) B05C 5/02
B05C 11/10
(11) EP3703871
(21) EP18807759.8
(47) 21.05.2025
(87) US2018057737
09.05.2019
(22) 26.10.2018
(54) LIQUID MATERIAL DISPENSING SYSTEM HAVING A SLEEVE HEATER
(73) Nordson Corporation
(72) GANZER, Charles, P.
WOODLIEF, Robert, J.
SHIN, Sang, H.
(31) 201762579492 P
(32) 31.10.2017
(33) United States of America

(51) B05C 17/005
B65D 81/32
(11) EP4151321
(21) EP21197870.5
(47) 21.05.2025
(22) 21.09.2021
(54) SUPPORTING STRUCTURE WITH VARYING INSIDE DIAMETER FOR

PRESSURE-FREE EXTRUSION OF A MULTICOMPONENT COMPOUND FROM A COAXIAL CARTRIDGE
(73) Hilti Aktiengesellschaft
(72) Wiedemann, Michael

(51) B05D 1/26
(11) EP4109581
(21) EP21906885.5
(47) 21.05.2025
(87) KR2021016891
23.06.2022
(22) 17.11.2021
(54) ELECTRODE SLURRY COATING DEVICE AND METHOD CAPABLE OF MEASURING RESIDUAL OIL LEVEL
(73) LG Energy Solution, Ltd.
(72) LEE, Sang Myeon
KIM, Ki Tae
PAENG, Ki Hoon
MOON, Jae Won
(31) 20200177350
(32) 17.12.2020
(33) Korea (Republic)

(51) B06B 1/06
H10N 30/092
H10N 30/85
G06F 3/01
(11) EP3613514
(21) EP19178640.9
(47) 21.05.2025
(22) 06.06.2019
(54) METHOD OF MANUFACTURING A FLEXIBLE VIBRATION MODULE
(73) LG Display Co., Ltd.
(72) Shin, Sung-Eui
Kim, Taeheon
Ryu, Kyungyeol
Jang, Yonggyoon
Kim, Chiwan
Lee, YongWoo
Kho, YuSeon
(31) 20190037499
20180096924
(32) 29.03.2019
20.08.2018
(33) Korea (Republic)
Korea (Republic)

(51) B08B 7/02
B22F 10/00
B33Y 40/20
B29C 64/35
(11) EP4066950
(21) EP22166031.9
(47) 21.05.2025
(22) 31.03.2022
(54) TWO-AXIS DEPOWDERING
(73) Collins Engine Nozzles, Inc.
(72) MORGANSON, David W.
GUSTAFSON, Brendan T.
SKIBA, Tommy
(31) 202117221460
(32) 02.04.2021
(33) United States of America

(51) B08B 17/06
G02B 27/00
G02B 1/118
B82Y 40/00
(11) EP3953073
(21) EP20721067.5
(47) 21.05.2025
(87) US2020025880
15.10.2020
(22) 31.03.2020
(54) ANTI-REFLECTIVE TRANSPARENT OLEOPHOBIC SURFACES AND METHODS OF MANUFACTURING THEREOF
(73) Corning Incorporated
The Institute of Photonic Sciences
Catalan Institution for Research and Advanced Studies
(72) MAZUMDER, Prantik
PRUNERI, Valerio
ROMBAUT, Juan
(31) 201962832410 P
(32) 11.04.2019
(33) United States of America

(51) B21B 1/085
(11) EP4289522
(21) EP23460020.3
(47) 21.05.2025
(22) 22.05.2023
(54) ROLLING MILL ROLL FOR ROLLING RAILWAY AND TRAM RAILS
(73) Arcelormittal Poland S.A.
(72) ZAK, Sylwester
WOZNIAK, Dariusz
(31) 44142822
(32) 09.06.2022
(33) Poland

(51) B21C 26/00
(11) EP4385636
(21) EP23217140.5
(47) 21.05.2025
(22) 15.12.2023
(54) DUMMY BLOCK FOR EXTRUSION PRESS
(73) Exco Technologies Limited
(72) JOHNSON, Steve
ROBBINS, Paul
(31) 202218083122
(32) 16.12.2022
(33) United States of America

(51) B21D 1/05
B21B 37/48
(11) EP4005695
(21) EP21210735.3
(47) 21.05.2025
(22) 26.11.2021
(54) SET OF TENSIONING ROLLERS FOR STRAIGHTENING A STRIP, STRAIGHTENING PLANT, SKINPASS FRAME ASSEMBLY AND METHOD FOR OPERATING A STRAIGHTENING PLANT
(73) VDEh-Betriebsforschungsinstitut GmbH
(72) MÜCKE, Gert
LATHE, Roger
KREMEYER, Julian
(31) 102020007286
(32) 30.11.2020
(33) Germany

(51) B21D 5/02
B21D 43/24
B23Q 7/00
B30B 15/30
B65G 25/06
B21D 43/13
B21D 5/00
B21D 43/10
(11) EP4201544
(21) EP21858243.5
(47) 21.05.2025
(87) JP2021029704
24.02.2022
(22) 12.08.2021
(54) WORKPIECE CONVEYING WHEELED PLATFORM AND WORKING SYSTEM
(73) Amada Co., Ltd.
(72) TSURUTA, Hiroki
(31) 2020138692
(32) 19.08.2020
(33) Japan

(51) B21D 5/02
B30B 15/00
G01C 3/06
H04N 7/18
(11) EP4215292
(21) EP21869268.9
(47) 21.05.2025
(87) JP2021033070
24.03.2022
(22) 09.09.2021
(54) PRESS BRAKE AND IMAGE OUTPUT METHOD
(73) Amada Co., Ltd.
(72) KENMOTSU, Hideki
(31) 2020157478
(32) 18.09.2020
(33) Japan

(51) B21D 9/01
B29C 53/08
B29C 53/82
(11) EP3944908
(21) EP21180591.6
(47) 21.05.2025
(22) 21.06.2021
(54) DEVICE FOR BENDING PIPES
(73) KE KELIT GmbH
(72) Dannerer, Wolfgang
Hödl, Harald
(31) 506472020
(32) 30.07.2020
(33) Austria

(51) B21D 43/00
B65G 1/04
(11) EP4021658
(21) EP20767624.8
(47) 21.05.2025
(87) IT2020050208
04.03.2021
(22) 20.08.2020
(54) APPARATUS AND METHOD TO FEED BARS
(73) M.E.P. Macchine Elettroniche Piegatrici S.p.A.
(72) DEL FABRO, Giorgio
(31) 201900015168
(32) 28.08.2019
(33) Italy

(51) B21H 1/20
B21H 5/02
(11) EP4347151
(21) EP22732951.3

(47) 21.05.2025
(87) EP2022065014
08.12.2022
(22) 02.06.2022
(54) DEVICE AND METHOD FOR THE COLD-FORMING PROFILING OF WORKPIECES
(73) Ernst Grob AG
(72) DÉRIAZ, Daniel
KAPKIN, Ekrem
(31) 6542021
(32) 04.06.2021
(33) Switzerland

(51) B22D 17/22
B22D 17/32
G01N 25/72
B22D 46/00
(11) EP3898029
(21) EP19818161.2
(47) 21.05.2025
(87) EP2019085753
25.06.2020
(22) 17.12.2019
(54) THERMOGRAPHIC CHECK OF A MOLD IN A FOUNDRY
(73) Marposs Societa' Per Azioni
(72) BELLUCCO, Stefano
LANZONI, Daniele
(31) 201800020017
201800020014
(32) 18.12.2018
18.12.2018
(33) Italy
Italy

(51) B22F 3/02
B22F 3/10
B22F 3/14
B22F 7/06
B22F 7/08
B24D 5/06
B24D 7/06
B24D 18/00
B22F 5/00
B24D 5/12
B24D 99/00
B28D 1/04
B28D 1/12
(11) EP4171878
(21) EP21732008.4
(47) 21.05.2025
(87) EP2021065614
30.12.2021
(22) 10.06.2021
(54) METHOD FOR PRODUCING A GREEN COMPACT AND METHOD FOR PROCESSING THE GREEN COMPACT INTO A PROCESSING SEGMENT
(73) Hilti Aktiengesellschaft
(72) KLEIN, Thorsten
HOOP, Matthaeus
BRITT, Thomas
STRACKE, Jens
MOSELEY, Steven
SZABÓ, József
(31) 20181949
(32) 24.06.2020
(33) European Patent Office (EPO)

(51) B22F 3/11
C22C 47/14
B22F 1/05
B22F 1/062
H01J 7/18
B01D 39/20
(11) EP3706948
(21) EP18875127.5
(47) 21.05.2025
(87) US2018059025
16.05.2019
(22) 02.11.2018
(54) POROUS SINTERED METAL MATERIAL, METHOD, BLEND AND USE.
(73) Entegris, Inc.
(72) ZELLER, Robert, S.
(31) 201762583137 P
(32) 08.11.2017
(33) United States of America

(51) B22F 10/28
B22F 10/43
B22F 10/47
B29C 64/40
B22F 12/49
B22F 12/67
B33Y 70/00
(11) EP3335858
(21) EP17178987.8
(47) 21.05.2025
(22) 30.06.2017
(54) METHOD FOR THE ADDITIVE PRODUCTION OF A THREE-DIMENSIONAL OBJECT
(73) Concept Laser GmbH
(72) Hofmann, Matthias
(31) 102016124401
(32) 14.12.2016
(33) Germany

(51) B23B 31/103
B25F 3/00
A61B 17/16
(11) EP3507041
(21) EP17765334.2
(47) 21.05.2025
(87) US2017049414
08.03.2018
(22) 30.08.2017
(54) MULTIPLE CONNECTION DRIVE SHAFT
(73) Medtronic PS Medical, Inc.
(72) BARNES, Milton F.
(31) 201615252858
(32) 31.08.2016
(33) United States of America

(51) B23C 5/10
(11) EP3981530
(21) EP19931519.3
(47) 21.05.2025
(87) JP2019021992
10.12.2020
(22) 03.06.2019
(54) BALL END MILL AND CUTTING INSERT
(73) OSG Corporation
(72) FUJII Yasuhito
ENDOH Yasuyuki

(51) B23D 47/02
B27G 19/10
(11) EP3523078
(21) EP17781432.4
(47) 21.05.2025
(87) EP2017074623
12.04.2018
(22) 28.09.2017
(54) TABLE SAW AND SPLINTER PROTECTION ELEMENT
(73) Festool GmbH
(72) ENDER, Dominic Richard
(31) 102016219255
(32) 05.10.2016
(33) Germany

(51) B23K 9/04
B23K 9/23
B23K 10/02
B23K 15/00
B23K 26/00
B23K 26/342
B23K 37/04
B23K 31/00
B23K 103/14
(11) EP4341032
(21) EP21729232.5
(47) 21.05.2025
(87) EP2021063608
24.11.2022
(22) 21.05.2021
(54) PIN SUPPORT SYSTEM, AND A METHOD OF DIRECTED ENERGY DEPOSITION FOR PRODUCING A METAL WORKPIECE TO MITIGATE DISTORTION
(73) Norsk Titanium AS
(72) ALMEIDA, Pedro
GRIGORENKO, Dale
RONDEAU, Steven

(51) B23K 9/12
B23K 9/28
B23K 9/235
B23K 9/24
B23K 26/352
(11) EP4087700
(21) EP21738094.8
(47) 21.05.2025
(87) US2021012716
15.07.2021
(22) 08.01.2021
(54) WIRE GUIDE CONDUIT ADAPTED FOR ALLOWING MOVEMENT OF A CORE, AND METHOD FOR FORMING A WIRE GUIDE CONDUIT FORMING AN INTERNAL PASSAGEWAY FOR THE PASSAGE OF A CORE
(73) ELCo Enterprises, Inc.
(72) COOPER, Edward L.
KHAKHALEV, Alexander
(31) 202062959330 P
(32) 10.01.2020
(33) United States of America

(51) B23K 10/00
B23K 37/00
G09B 19/24
(11) EP4463842
(21) EP24711201.4
(47) 21.05.2025
(87) EP2024056935
26.09.2024
(22) 15.03.2024

(54) TEACHING TOOL FOR A WELDING TORCH, WELDING TORCH WITH SUCH A TEACHING TOOL AND METHOD FOR TEACHING A WELDING PATH OF A WELDING TORCH WITH SUCH A TEACHING TOOL
(73) FRONIUS INTERNATIONAL GmbH
(72) MA, Jun
(31) 23162643
(32) 17.03.2023
(33) European Patent Office (EPO)
(51) B23K 20/10
B23K 20/12
B23K 103/20
B23K 103/24
B23K 20/227
B23K 103/18
(11) EP4084924
(21) EP20910545.1
(47) 21.05.2025
(87) US2020066613
08.07.2021
(22) 22.12.2020
(54) METHOD OF JOINING DISSIMILAR METALS WITHOUT DETRIMENTAL INTERMETALLIC COMPOUNDS
(73) The Regents of The University of Michigan
(72) LIU, Fengchao
DONG, Pingsha
LU, Wei
TAUB, Alan
(31) 202017126987
202062956368 P
(32) 18.12.2020
02.01.2020
(33) United States of America
United States of America
(51) B23K 20/10
B23K 31/12
G05B 23/02
B23K 9/00
B23K 9/095
B23K 9/10
(11) EP3666442
(21) EP19203502.0
(47) 21.05.2025
(22) 16.10.2019
(54) WELDING SYSTEM AND METHOD
(73) Aptiv Technologies AG
(72) CIAPALA, Frank A.
UZARSKI, Nathan F.
(31) 201816164998
(32) 19.10.2018
(33) United States of America
(51) B23K 26/03
(11) EP3996866
(21) EP20737063.6
(47) 21.05.2025
(87) IB2020056336
14.01.2021
(22) 06.07.2020
(54) APPARATUS AND PROCESS FOR THE SURFACE PROCESSING OF CYLINDRICAL BODIES, IN PARTICULAR LAMINATION CYLINDERS
(73) Tenova S.p.A.
(72) BOSELLI, Giovanni
GABOARDI, Paolo
GARIANO, Andrea
PERASSOLO, Massimo
TREVISAN, Claudio
(31) 201900011283
(32) 09.07.2019
(33) Italy
(51) B23K 26/067
B23K 26/21
B23K 26/08
B23K 103/10
(11) EP3964320
(21) EP20817769.1
(47) 21.05.2025
(87) JP2020022583
10.12.2020
(22) 08.06.2020
(54) LASER WELDING METHOD
(73) Furukawa Electric Co., Ltd.
(72) KAYAHARA, Takashi
TANABE, Takeshi
YASUOKA, Tomomichi
SHIGEMATSU, Takashi
SATO, Tomofumi
(31) 2019106558
(32) 06.06.2019
(33) Japan
(51) B23K 26/08
B23K 26/364
B23K 26/402
C21D 9/46
C22C 38/02
C22C 38/06
C25F 3/06
H01F 1/16
C21D 8/12
B23K 101/16
B23K 101/34
B23K 103/04
B23K 103/00
C21D 6/00
(11) EP4219776
(21) EP21877187.1
(47) 21.05.2025
(87) JP2021025198
14.04.2022
(22) 02.07.2021
(54) METHOD FOR FORMING GROOVES ON METAL STRIP SURFACE AND METHOD FOR MANUFACTURING GRAIN-ORIENTED ELECTRICAL STEEL SHEET
(73) JFE Steel Corporation
(72) TAKAJO, Shigehiro
OMURA, Takeshi
(31) 2020169442
(32) 06.10.2020
(33) Japan
(51) B23K 26/14
B23K 26/34
B05B 7/14
(11) EP3600754
(21) EP18777171.2
(47) 21.05.2025
(87) AU2018050297
04.10.2018
(22) 29.03.2018
(54) NOZZLE FOR A LASER CLADDING SYTEM
(73) Laserbond Limited
(72) HOOPER, Gregory
HOOPER, Wayne
(31) 2017901140
(32) 29.03.2017
(33) Australia
(51) B23K 26/14
B23K 26/38
(11) EP3921110
(21) EP20714306.6
(47) 21.05.2025
(87) SE2020050119
13.08.2020
(22) 07.02.2020
(54) METHODS OF LASER CUTTING
(73) Väderstad Holding AB
(72) STARK, Andreas
(31) 1950144
(32) 08.02.2019
(33) Sweden
(51) B23K 35/30
B23K 9/23
B23K 9/028
B23K 35/38
C22C 19/05
F16B 5/08
B23K 9/173
B23K 9/167
B32B 15/01
B23K 35/22
B23K 9/16
(11) EP3419782
(21) EP17757087.6
(47) 21.05.2025
(87) US2017018776
31.08.2017
(22) 22.02.2017
(54) METAL CARBIDE/NITRIDE PRECIPITATION CONTROL IN FUSION WELDING
(73) BWXT Nuclear Operations Group, Inc.
(72) ARGENTINE, Frank A.
(31) 201715437901
201662298358 P
(32) 21.02.2017
22.02.2016
(33) United States of America
United States of America
(51) B23P 19/04
B23P 19/06
B23Q 3/155
B25J 9/00
B25J 9/16
B25J 11/00
B25J 15/00
B23P 19/00
(11) EP4011544
(21) EP21211239.5
(47) 21.05.2025
(22) 30.11.2021
(54) SYSTEM AND METHOD FOR INSERTING OR REMOVING MACHINING INSERTS OF A MACHINING TOOL
(73) Premium AEROTEC GmbH
(72) KIEFER, Lucas

MÄUSLE, Christian
(31) 102020131839
(32) 01.12.2020
(33) Germany

(51) B23Q 16/10
F16D 55/12
F16D 55/20
F16D 65/18
(11) EP4474103
(21) EP23177172.6
(47) 21.05.2025
(22) 05.06.2023
(54) DEVICE FOR CLAMPING AND/OR BRAKING DAMP ENVIRONMENTS
(73) HEMA Maschinen- und Apparateschutz GmbH
(72) Likus, Edmund

(51) B23Q 39/04
B23Q 1/01
B23Q 1/62
(11) EP4385653
(21) EP24174356.6
(47) 21.05.2025
(22) 18.03.2021
(54) MACHINE TOOL AND METHOD FOR OPERATING THE MACHINE TOOL
(73) Fill Gesellschaft m.b.H.
(72) DALLINGER, Friedrich
GADRINGER, Markus
(31) 20187633
(32) 24.07.2020
(33) European Patent Office (EPO)

(51) B24B 55/10
B24B 55/06
B24D 9/08
(11) EP3580011
(21) EP17895904.5
(47) 21.05.2025
(87) FI2017050079
16.08.2018
(22) 13.02.2017
(54) CONDUIT ARRANGEMENTS IN A BACKING PAD
(73) Mirka Ltd.
(72) FINNÄS, Stig
BÄCK, Simon

(51) B24D 7/16
B24B 23/02
B24B 27/00
B24B 45/00
B24B 3/54
B24D 18/00
B24D 15/08
(11) EP4210906
(21) EP21773761.8
(47) 21.05.2025
(87) EP2021074715
17.03.2022
(22) 08.09.2021
(54) ROLLING GRINDER WITH PRESS FIT BETWEEN ROLLER AND SHAFT
(73) HORL 1993 GmbH
(72) HORL, Otmar
HORL, Timo
(31) 102020123501
(32) 09.09.2020
(33) Germany

(51) B25B 5/00
B25B 11/02
B62D 65/02
B62D 65/06
B05B 13/02
E05C 21/00
B25B 27/00
(11) EP4230348
(21) EP23153944.6
(47) 21.05.2025
(22) 30.01.2023
(54) PRODUCTION MEANS AND METHOD FOR PAINTING A VEHICLE BODY
(73) LMB Kunststofftechnik GmbH
(72) Abel, Anton
(31) 22157098
(32) 16.02.2022
(33) European Patent Office (EPO)

(51) B25B 11/00
(11) EP4385660
(21) EP23155828.9
(47) 21.05.2025
(22) 09.02.2023
(54) AN ADAPTIVE MULTIFUNCTIONAL CHUCK
(73) Liu, Jianchang
(72) Liu, Jianchang
(31) 202211601747
202223343478 U
(32) 13.12.2022
13.12.2022
(33) China
China

(51) B25B 21/00
B25B 23/18
B25F 5/00
B25B 23/14
B25F 5/02
F21V 33/00
F21Y 115/10
(11) EP3695938
(21) EP20161316.3
(47) 21.05.2025
(22) 26.02.2014
(54) ELECTRIC SCREW-FASTENING TOOL
(73) Makita Corporation
(72) KIYOHARA, Takashi
SAKAMOTO, Takashi
(31) 2013135298
(32) 27.06.2013
(33) Japan

(51) B25D 11/12
B25D 17/06
(11) EP4209306
(21) EP22205691.3
(47) 21.05.2025
(22) 07.11.2022
(54) HAMMER DRILL
(73) Nanjing Chervon Industry Co., Ltd.
(72) LI, Yang
(31) 202111559700
(32) 20.12.2021
(33) China

(51) B25D 13/00
H02K 44/04
H02K 7/14
(11) EP4296006
(21) EP23179756.4
(47) 21.05.2025
(22) 16.06.2023
(54) MACHINE TOOL AND METHOD FOR OPERATING A MACHINE TOOL
(73) Robert Bosch GmbH
(72) Kocourek, Vaclav
Astner, Martin
Klein, Rico Alf
Schulz, Udo
Schmid, Hardy
(31) 102022206176
(32) 21.06.2022
(33) Germany

(51) B25F 5/00
H02K 7/14
(11) EP4230353
(21) EP22157844.6
(47) 21.05.2025
(22) 21.02.2022
(54) PORTABLE WORKING TOOL
(73) Andreas Stihl AG & Co. KG
(72) Klett, David
Diehl, Heiko
Junker, Sebastian

(51) B25F 5/02
B25F 5/00
(11) EP4221942
(21) EP21773735.2
(47) 21.05.2025
(87) EP2021074561
07.04.2022
(22) 07.09.2021
(54) HOLDING DEVICE FOR ARRANGEMENT ON A BATTERY PACK OF A MACHINE TOOL
(73) Festool GmbH
(72) STRAUB, Benjamin
(31) 102020125435
(32) 29.09.2020
(33) Germany

(51) B25J 5/00
B25J 9/00
B25J 9/02
B25J 9/10
B25J 19/02
B62D 57/02
B62D 57/024
G01M 5/00
G01R 31/34
(11) EP3655197
(21) EP18835065.6
(47) 21.05.2025
(87) US2018035329
24.01.2019
(22) 31.05.2018
(54) MODULAR CRAWLER ROBOT FOR IN SITU GAP INSPECTION
(73) General Electric Technology GmbH
(72) AKIN, Selim
BATZINGER, Thomas James
DA SILVA, Airton Rosa
ICLI, Selami Haydar
MARKMAN, Christopher Paul
DEBENEST, Paulo Cesar
GUARNIERI, Michele
HIROSE, Shigeo
(31) 201715652730
(32) 18.07.2017

(33) United States of America
(51) B25J 9/16
G05B 19/418
(11) EP3988255
(21) EP20203916.0
(47) 21.05.2025
(22) 26.10.2020
(54) METHOD AND ASSEMBLY UNIT FOR ASSEMBLING NON-ELECTRIC COMPONENTS ONTO A COMPONENT-CARRIER
(73) Siemens Aktiengesellschaft
(72) Wurm, Kai
Schmitt, Philipp Sebastian
Lomakin, Dimitri
Neubauer, Werner

(51) B25J 11/00
A61F 2/60
A61F 2/64
A61F 2/70
(11) EP3950233
(21) EP20784561.1
(47) 21.05.2025
(87) JP2020014002
08.10.2020
(22) 27.03.2020
(54) JOINT DEVICE
(73) Honda Motor Co., Ltd.
(72) ONO, Hiromi
(31) 2019067099
(32) 29.03.2019
(33) Japan

(51) B25J 15/02
B25J 19/00
(11) EP3700720
(21) EP18786311.3
(47) 21.05.2025
(87) EP2018077850
02.05.2019
(22) 12.10.2018
(54) GRIPPING OR CLAMPING DEVICE, ASSOCIATED FUNCTIONAL MECHANISM AND ASSOCIATED MODULAR SYSTEM
(73) SCHUNK SE & Co. KG Spanntechnik Greiftechnik Automatisierungstechnik
(72) FELLHAUER, Bruno
DRAB, Michael
(31) 102017124720
(32) 23.10.2017
(33) Germany

(51) B25J 19/00
(11) EP3822051
(21) EP19846193.1
(47) 21.05.2025
(87) KR2019007782
13.02.2020
(22) 27.06.2019
(54) CABLE GUIDE DEVICE OF ARTICULATED ROBOT
(73) Samsung Electronics Co., Ltd.
(72) YOO, Heejong
ROH, Kyungshik
KIM, Cheolhee
YANG, Soosang
JUNG, Sangjun
(31) 20180091210
(32) 06.08.2018
(33) Korea (Republic)

(51) B26D 1/00
B26D 1/06
B26D 1/38
(11) EP3928936
(21) EP20182610.4
(47) 21.05.2025
(22) 26.06.2020
(54) SHEARING DEVICE
(73) Albert Handtmann Maschinenfabrik GmbH & Co. KG
(72) MÜLLER, Stefan
WILLBURGER, Peter
HEIM, Michael
VOLZ, Robin

(51) B28B 3/02
B28B 3/08
B30B 11/02
B30B 15/04
(11) EP4076881
(21) EP20833762.6
(47) 21.05.2025
(87) EP2020086138
24.06.2021
(22) 15.12.2020
(54) DEVICE FOR PRODUCING CONCRETE BLOCKS
(73) KOBRA Formen GmbH
(72) STICHEL, Holger
(31) 102019135427
(32) 20.12.2019
(33) Germany

(51) B28B 7/36
B28B 11/24
B28B 23/18
B28B 21/02
(11) EP3856480
(21) EP19867902.9
(47) 21.05.2025
(87) AU2019000118
02.04.2020
(22) 25.09.2019
(54) MOULD LINER ARRANGEMENT
(73) Vertech Hume Pty. Ltd.
(72) HUME, Tamas Dale
(31) 2018903609
(32) 25.09.2018
(33) Australia

(51) B28D 1/14
B28D 1/18
F16B 25/00
(11) EP3880422
(21) EP20753310.0
(47) 21.05.2025
(87) EP2020071682
11.02.2021
(22) 31.07.2020
(54) SYSTEM AND METHOD FOR SECURING AN ANCHOR IN A MINERAL SUBSTRATE AS WELL AS A TOOL FOR GROOVING AN INTERNAL THREAD IN A BOREHOLE
(73) Ludwig Hettich Holding GmbH & Co. KG
(72) HECK, Andreas
HETTICH, Ulrich
(31) 102020108566
102019121463
(32) 27.03.2020
08.08.2019
(33) Germany
Germany

(51) B29B 11/16
B29C 70/20
(11) EP4331817
(21) EP23218384.8
(47) 21.05.2025
(22) 04.01.2021
(54) METHOD FOR FORMING COMPOSITE DEVICE WITH FIBER TOWS HAVING LONGITUDINAL FOLDS
(73) 9T Labs AG
(72) Eichenhofer, Martin
Cavolina, Giovanni
Houwink, Chester
(31) PCT/IB2020/050013
(32) 02.01.2020
(33) World Intellectual Property Office (WIPO)

(51) B29B 11/16
D03D 25/00
D03D 41/00
(11) EP3976869
(21) EP20742798.0
(47) 21.05.2025
(87) FR2020050952
10.12.2020
(22) 03.06.2020
(54) METHOD FOR MANUFACTURING A RING SECTOR
(73) Safran Ceramics
(72) TESSON, Thierry, Guy, Xavier
PHILIPPE, Eric
LEFEBVRE, Marie
PLANCKEEL, Aline
(31) 1905867
(32) 03.06.2019
(33) France

(51) B29C 33/52
B29C 33/76
B29C 70/32
B29C 70/34
B29C 70/44
(11) EP4219115
(21) EP23152132.9
(47) 21.05.2025
(22) 18.01.2023
(54) WATER-SOLUBLE SACRIFICAL MANDREL OF POLYMERIC MATERIAL FOR THE FABRICATION OF PARTS, ESPECIALLY HOLLOW/TUBULAR PARTS, AND PREFERABLY MADE OF COMPOSITE MATERIAL
(73) Di Fulvio, Matteo
(72) Di Fulvio, Matteo
(31) 202200001343
(32) 26.01.2022
(33) Italy

(51) B29C 35/02
B29C 35/08
B29C 39/26
B29D 11/00
G02B 6/10
B29C 71/02
(11) EP3867033
(21) EP19873527.6
(47) 21.05.2025
(87) US2019056519

23.04.2020
(22) 16.10.2019
(54) METHODS OF FORMING A WAVEGUIDE PART HAVING A PREDETERMINED SHAPE
(73) Magic Leap, Inc.
(72) BHAGAT, Sharad D.
CHANG, Chieh
PEROZ, Christophe
(31) 201862746414 P
(32) 16.10.2018
(33) United States of America

(51) B29C 37/00
C08F 4/80
C08G 61/08
B29K 75/00
C08L 65/00
B29C 41/00
(11) EP2970522
(21) EP14762532.1
(47) 21.05.2025
(87) US2014029130
18.09.2014
(22) 14.03.2014
(54) IN-MOLD COATING OF ROMP POLYMERS
(73) Materia, Inc.
(72) STEPHEN, Anthony R.
CRUCE, Christopher J.
TRIMMER, Mark S.
GIARDELLO, Michael A.
(31) 201361800563 P
(32) 15.03.2013
(33) United States of America

(51) B29C 44/04
B29C 44/08
B29C 44/58
B29C 31/00
B29C 33/34
B29C 45/06
B29C 45/16
(11) EP4434714
(21) EP24163187.8
(47) 21.05.2025
(22) 13.03.2024
(54) INJECTION MOLDING SYSTEM AND METHOD
(73) King Steel Machinery Co., Ltd.
(72) CHEN, Ching-Hao
LEE, Yi-Chung
(31) 202318542758
202363491529 P
(32) 17.12.2023
21.03.2023
(33) United States of America
United States of America

(51) B29C 44/42
B29K 105/04
(11) EP3852996
(21) EP19783774.3
(47) 21.05.2025
(87) US2019052282
26.03.2020
(22) 20.09.2019
(54) MOLDING SYSTEM AND METHOD
(73) NIKE Innovate C.V.
(72) BAGHDADI, Hossein A.
FAKHOURI, Sami Mohamad
MUTH, Joseph Thomas
TUTMARK, Bradley C.
HANSON, III, H. Kenneth
LUMPKIN, Danny David
RITCHIE, Robert L.
SCHNEE, Shawn J.
(31) 201862734912 P
(32) 21.09.2018
(33) United States of America

(51) B29C 45/14
A61F 6/14
B29C 45/26
B29C 33/30
B29C 45/72
B29C 45/73
B29K 83/00
B29C 45/64
B29C 45/00
B29K 105/00
B29L 31/00
(11) EP3884914
(21) EP21168108.5
(47) 21.05.2025
(22) 09.09.2014
(54) AN OVERMOULDABLE SUBSTRATE AND USES THEREOF
(73) Qpharma AB
(72) Kendrup, John Ingvar Feldtblad
Stavnshøj, Steen Alex

(51) B29C 45/73
B29C 45/56
B29C 45/17
B29C 45/18
B29C 44/58
B29C 44/42
B29C 45/53
B29C 45/27
B29K 105/00
(11) EP4282615
(21) EP23201266.6
(47) 21.05.2025
(22) 20.09.2019
(54) MOLDING SYSTEM AND METHOD
(73) NIKE Innovate C.V.
(72) BAGHDADI, Hossein A.
MUTH, Joseph Thomas
TUTMARK, Bradley C.
HANSON, III, H. Kenneth
LUMPKIN, Danny David
RITCHIE, Robert L.
SCHNEE, Shawn J.
(31) 201862734927 P
(32) 21.09.2018
(33) United States of America

(51) B29C 49/28
B29C 49/48
B29C 49/62
B29C 49/56
B29C 49/42
B29C 49/22
B67C 3/00
B29L 31/00
B29C 49/46
B29K 23/00
B29K 67/00
(11) EP4157608
(21) EP20942008.2
(47) 21.05.2025
(87) US2020038880
30.12.2021
(22) 22.06.2020
(54) SYSTEM FOR SIMULTANEOUSLY FORMING AND FILLING A POLYMERIC CONTAINER
(73) LiquiForm Group LLC
(72) CARPENTER, Gregory
HALL, Gregory T.
STEIH, Richard
DETTLING, Steven Charles
TEKIP, Theodore

(51) B29C 49/62
B29C 33/10
B29C 49/06
B29C 49/08
B29C 49/48
B29L 31/00
B29K 105/00
(11) EP3272498
(21) EP17186871.4
(47) 21.05.2025
(22) 05.09.2014
(54) BLOW MOULD, BLOW MOULDING MACHINE AND METHOD FOR FORMING PLASTIC PREFORMS INTO PLASTIC CONTAINERS WITH AIR REMOVAL
(73) Krones AG
(72) Dachs, Alexander
Hüttner, Gerald
Deyerl, Heinrich
Forsthoevel, Jochen
Grassl, Peter
Lappe, Ulrich
(31) 102013109716
(32) 05.09.2013
(33) Germany

(51) B29C 51/02
B29C 51/14
B29C 51/26
B29C 51/08
B29C 51/30
B29C 51/32
B64D 11/06
B60N 3/00
B29C 51/42
B29K 69/00
B29K 27/06
B29L 31/44
B29L 31/30
B29L 31/00
B29L 9/00
B29K 105/04
B29C 51/12
B29C 51/38
B29C 51/10
(11) EP4377063
(21) EP22753682.8
(47) 21.05.2025
(87) EP2022070322
02.02.2023
(22) 20.07.2022
(54) METHOD FOR MANUFACTURING AN AIRCRAFT SEAT PART
(73) Safran Seats
(72) CAILLETEAU, Jeremy
LOPES, Antonio

(31) 2108364
(32) 30.07.2021
(33) France

(51) B29C 59/16
B29C 59/02
B23K 26/352
B23K 26/0622
B23K 26/364
B23K 26/402
E03C 1/20
B23K 101/18
B23K 103/00
(11) EP4190482
(21) EP21850065.0
(47) 21.05.2025
(87) JP2021028159
03.02.2022
(22) 29.07.2021
(54) RESIN MOLDED ARTICLE, METHOD FOR PRODUCING RESIN MOLDED BODY, AND WET-AREA EQUIPMENT.
(73) Panasonic Intellectual Property Management Co., Ltd.
(72) MURATA, Atsushi
NAKAMURA, Akifumi
(31) 2020129948
(32) 31.07.2020
(33) Japan

(51) B29C 63/02
B29L 11/00
(11) EP4230383
(21) EP21894056.7
(47) 21.05.2025
(87) CN2021132043
27.05.2022
(22) 22.11.2021
(54) BONDING METHOD FOR FILM OF LENS
(73) Huawei Technologies Co. Ltd.
(72) ZHENG, Xiaowen
ZHANG, Chao
(31) 202011327158
(32) 23.11.2020
(33) China

(51) B29C 64/106
B29C 64/227
B29C 64/393
B33Y 10/00
B33Y 50/02
(11) EP4143006
(21) EP20731259.6
(47) 21.05.2025
(87) US2020030631
04.11.2021
(22) 30.04.2020
(54) SYSTEM FOR MANUFACTURING ROTOR BLADE COMPONENTS USING ADDITIVE MANUFACTURING AND SCANNING TECHNIQUES
(73) LM Wind Power A/S
(72) TOBIN, James Robert
DAI, Huijuan
AYYASAMY, Boobalan
SHEPPARD, Collin McKee

(51) B29C 64/118
B29C 64/259
B33Y 10/00
B33Y 30/00
(11) EP4467320
(21) EP23175317.9
(47) 21.05.2025
(22) 25.05.2023
(54) FILAMENT SPOOL DRY BOX
(73) Ting, Chung-Wu
(72) Ting, Chung-Wu

(51) B29C 64/307
B22F 10/28
B22F 10/85
B22F 12/52
B29C 64/255
B22F 12/90
B33Y 10/00
B33Y 30/00
B33Y 40/00
B29C 64/329
B65D 83/06
(11) EP4370270
(21) EP23735655.5
(47) 21.05.2025
(87) EP2023067157
18.01.2024
(22) 23.06.2023
(54) POWDER CONTAINER FOR AN ADDITIVE MANUFACTURING PROCESS
(73) Nikon SLM Solutions AG
(72) KOPSCHINSKI, Daniel
OVERBERG, Marcel
NEGENDANK, Philip
REDLICH, Randy
FEIST, Sebastian
(31) 102022117391
(32) 12.07.2022
(33) Germany

(51) B29C 64/393
B29C 64/153
B22F 12/41
(11) EP4282558
(21) EP23204441.2
(47) 21.05.2025
(22) 26.06.2018
(54) AUTOMATED CALIBRATION OF A DEVICE FOR FULLY PARALLEL ADDITIVE MANUFACTURING OF A COMPONENT WITH COMBINED WORKING AREAS
(73) Raylase GmbH
(72) LEHMANN, Wolfgang
(31) 102017114147
18150935
(32) 26.06.2017
10.01.2018
(33) Germany
European Patent Office (EPO)

(51) B29C 64/40
B29C 64/118
B33Y 70/00
C08F 293/00
B33Y 10/00
C08L 53/00
(11) EP4359203
(21) EP22743522.9
(47) 21.05.2025
(87) FR2022051148
29.12.2022
(22) 15.06.2022
(54) USE OF MULTIBLOCK COPOLYMERS AS SACRIFICIAL MATERIAL IN A 3D PRINTING PROCESS
(73) ARKEMA FRANCE
(72) BROCAS, Anne-Laure
CAZAUMAYOU, Sylvie
(31) 2110633
2106675
(32) 07.10.2021
23.06.2021
(33) France
France

(51) B29C 65/00
B29C 65/82
A61J 1/20
C08J 7/12
C08J 5/12
A61L 2/14
B29K 9/06
B29K 21/00
B29K 83/00
B29K 101/10
B29K 101/12
B29K 105/00
B29L 23/00
A61M 39/18
(11) EP3993991
(21) EP20834917.5
(47) 21.05.2025
(87) US2020040455
07.01.2021
(22) 01.07.2020
(54) PROFILE CONNECTION
(73) Saint-Gobain Performance Plastics Corporation
(72) ZHANG, Jianfeng
PYTEL, Rachel Z.
DING, Jian L.
(31) 201962936888 P
201962869234 P
(32) 18.11.2019
01.07.2019
(33) United States of America
United States of America

(51) B29C 65/00
B29C 65/82
A61J 1/20
C08J 7/12
C08J 5/12
A61L 2/14
B29K 9/06
B29K 21/00
B29K 83/00
B29K 101/10
B29K 101/12
B29K 105/00
B29L 23/00
A61M 39/18
(11) EP3994384
(21) EP20835343.3
(47) 21.05.2025
(87) US2020040454
07.01.2021
(22) 01.07.2020
(54) PROFILE CONNECTION
(73) Saint-Gobain Performance Plastics Corporation
(72) ZHANG, Jianfeng

PYTEL, Rachel Z.
DING, Jian L.
(31) 201962936888 P
201962869234 P
(32) 18.11.2019
01.07.2019
(33) United States of America
United States of America

(51) B29C 65/06
B29C 65/44
B29C 65/64
B23K 20/12
B29K 105/00
(11) EP3865284
(21) EP19871521.1
(47) 21.05.2025
(87) JP2019040022
16.04.2020
(22) 10.10.2019
(54) METAL/RESIN COMPOSITE AND PRODUCTION METHOD THEREFOR
(73) DIC Corporation
(72) NAKAMURA, Kenji
KANDA, Tomomichi
KIKUCHI, Hideaki
(31) 2018193549
(32) 12.10.2018
(33) Japan

(51) B29C 65/08
A61F 13/49
B29L 31/48
(11) EP3646830
(21) EP18823118.7
(47) 21.05.2025
(87) JP2018022518
03.01.2019
(22) 13.06.2018
(54) DEVICE AND METHOD FOR PRODUCING STRETCHABLE LAMINATE FOR WEARABLE ARTICLE
(73) Zuiko Corporation
(72) KOSHIJIMA Miwa
NAKAMURA Hideyuki
(31) 2017127603
(32) 29.06.2017
(33) Japan

(51) B29C 65/16
C08G 69/26
C08K 3/013
C08K 3/34
C08K 7/14
C08L 77/06
B29K 77/00
(11) EP3753985
(21) EP19755083.3
(47) 21.05.2025
(87) JP2019005694
22.08.2019
(22) 15.02.2019
(54) POLYAMIDE RESIN COMPOSITION, MOLDED BODY THEREOF, AND METHOD FOR MANUFACTURING LASER-WELDED BODY
(73) Mitsui Chemicals, Inc.
(72) NISHINO, Kohei
HOTANI, Yohei
WASHIO, Isao
(31) 2018026310
(32) 16.02.2018
(33) Japan

(51) B29C 65/34
B29C 65/82
F16L 55/168
B29C 73/34
B29C 73/10
B29C 65/00
F16L 47/03
(11) EP4299293
(21) EP23179373.8
(47) 21.05.2025
(22) 15.06.2023
(54) METHOD FOR REPAIRING BY LINING AND CORRESPONDING REPAIR KIT
(73) DMPLAST - DECLINAISONS DES MATIERES PLASTIQUES
(72) MOYA, Salvador
(31) 2206517
(32) 29.06.2022
(33) France

(51) B29C 65/48
B29C 65/78
F16B 11/00
G02B 6/42
(11) EP4073393
(21) EP19829438.1
(47) 21.05.2025
(87) EP2019084574
17.06.2021
(22) 11.12.2019
(54) METHOD OF JOINING A PIN TO A CAVITY AND JOINT ASSEMBLY
(73) HELLA GMBH & CO. KGAA
(72) WIECK, Christian

(51) B29C 70/38
B29C 64/209
B29C 64/165
B29B 15/12
B33Y 10/00
B33Y 30/00
B33Y 70/00
(11) EP4021709
(21) EP20775071.2
(47) 21.05.2025
(87) IB2020058033
04.03.2021
(22) 28.08.2020
(54) EQUIPMENT AND METHOD FOR THE THREE-DIMENSIONAL PRINTING OF CONTINUOUS FIBER COMPOSITE MATERIALS
(73) MOI COMPOSITES S.r.l.
(72) NATALE, Gabriele
TONIZZO, Michele
(31) 201900015297
(32) 30.08.2019
(33) Italy

(51) B29D 30/04
B60C 7/00
B60C 7/10
B29B 9/04
B29B 9/02
B29B 7/14
B29B 7/16
B29B 7/28
B29B 7/24
B29B 7/74
(11) EP4227074
(21) EP23163955.0
(47) 21.05.2025
(22) 11.08.2020
(54) SYSTEM FOR PREDICTING AUGER FAILURE IN A TIRE INJECTION FILLING MIXING MACHINE
(73) Carlisle Construction Materials, LLC
(72) LITTLE, Jeff
BISHOP, John
(31) 201962899466 P
(32) 12.09.2019
(33) United States of America

(51) B29D 30/06
(11) EP4292801
(21) EP23199939.2
(47) 21.05.2025
(22) 06.12.2021
(54) TIRE MOLD
(73) The Goodyear Tire & Rubber Company
(72) WINDESHAUSEN, Michel Jean Yves
(31) 202063127253 P
(32) 18.12.2020
(33) United States of America

(51) B30B 9/02
B30B 15/26
B30B 5/02
B30B 15/28
B30B 15/16
B30B 9/26
B30B 9/22
(11) EP4400297
(21) EP24150704.5
(47) 21.05.2025
(22) 08.01.2024
(54) PRESS FOR SEPARATING SOLID AND LIQUID PARTS FROM MATERIAL, SUCH AS GRAPE HARVEST
(73) Bucher Vaslin
(72) DUVAL, Guillaume
BLOT, Samuel
(31) 2300277
(32) 11.01.2023
(33) France

(51) B30B 9/12
C11B 1/08
(11) EP4153412
(21) EP21728817.4
(47) 21.05.2025
(87) DE2021100380
25.11.2021
(22) 27.04.2021
(54) PROCESS AND DEVICE FOR OBTAINING OIL FROM SEEDS
(73) Harburg-Freudenberger Maschinenbau GmbH
(72) IKELS, Jan
BILLE, Maik
(31) 102020113622
(32) 20.05.2020
(33) Germany

(51) B30B 11/08
B30B 15/08
B30B 15/02
(11) EP4323183
(21) EP22716981.0
(47) 21.05.2025
(87) EP2022059803

20.10.2022
(22) 12.04.2022
(54) ROTARY TABLET PRESS COMPRISING A SUPPORT ASSEMBLY
(73) GEA Process Engineering nv
(72) VERHOEST, Bart
ROBIN, Nicolas
VAN ZEGBROECK, Antonie
(31) 21167903
(32) 12.04.2021
(33) European Patent Office (EPO)

(51) B31F 1/22
(11) EP3585603
(21) EP18711406.1
(47) 21.05.2025
(87) IB2018051097
30.08.2018
(22) 22.02.2018
(54) A PROCESS FOR MAKING A CONTINUOUS WEB OF FIBROUS MATERIAL
(73) Trani, Giorgio
(72) STERNER, Marion
CARIOLARO, Federico
TRANI, Giorgio
(31) 201700020032
(32) 22.02.2017
(33) Italy

(51) B32B 5/02
B32B 27/08
B32B 27/12
B32B 27/30
B32B 27/34
B32B 27/36
(11) EP4347243
(21) EP22722904.4
(47) 21.05.2025
(87) IB2022054114
08.12.2022
(22) 04.05.2022
(54) MULTILAYER FILM FOR APPLYING LABELS ON ITEMS OF CLOTHING
(73) Framis Italia S.p.A.
(72) CARRARO, Matteo
(31) 202100014438
(32) 03.06.2021
(33) Italy

(51) B32B 9/00
B32B 3/14
C23C 28/00
C23C 14/08
C23C 14/14
C23C 14/18
C23C 14/34
C23C 14/02
(11) EP3536495
(21) EP17865289.7
(47) 21.05.2025
(87) JP2017038354
03.05.2018
(22) 24.10.2017
(54) ELECTROMAGNETIC WAVE-PERMEABLE SHINY METAL MEMBER, ARTICLE USING SAME, AND METAL THIN FILM
(73) Nitto Denko Corporation
(72) NISHIO Hajime
MACHINAGA Hironobu
CHEN Xiaolei
TSURUSAWA Toshihiro
KUROSE Manami
(31) 2016208000
(32) 24.10.2016
(33) Japan

(51) B32B 17/10
(11) EP3826839
(21) EP19740397.5
(47) 21.05.2025
(87) EP2019069628
30.01.2020
(22) 22.07.2019
(54) DECORATIVE DESIGN ELEMENT IN THE BLACK PRINT
(73) Saint-Gobain Sekurit France
(72) SCHULZ, Valentin
KOLF, Michael
SCHURSE, Sebastian
(31) 18185732
(32) 26.07.2018
(33) European Patent Office (EPO)

(51) B32B 27/00
B32B 3/26
B32B 3/30
B32B 7/10
B32B 7/12
B32B 15/18
B32B 21/02
B32B 21/08
B32B 21/14
B32B 27/08
B32B 27/30
B32B 27/32
B32B 27/36
B32B 37/12
B32B 37/22
B32B 38/00
B44C 1/10
B44C 1/24
B44C 5/04
B32B 7/05
(11) EP4039467
(21) EP20872254.6
(47) 21.05.2025
(87) JP2020037218
08.04.2021
(22) 30.09.2020
(54) METHOD FOR PRODUCING DECORATIVE MATERIAL
(73) Dai Nippon Printing Co., Ltd.
(72) NAKAJIMA, Tomomi
NETSU, Yoshiaki
KAYAHARA, Toshinaru
SUMIDA, Yosuke
WADA, Masataka
(31) 2019180478
(32) 30.09.2019
(33) Japan

(51) B32B 27/00
C09D 11/10
C09D 5/00
B32B 38/14
C09D 11/037
C09D 11/102
C09D 11/107
B32B 15/082
B32B 15/085
B32B 15/20
B32B 27/08
B32B 27/10
B32B 27/30
B32B 27/32
B32B 27/34
B32B 27/36
B32B 15/088
B32B 15/09
B32B 15/12
(11) EP3700747
(21) EP18900831.1
(47) 21.05.2025
(87) US2018014407
25.07.2019
(22) 19.01.2018
(54) FLEXIBLE PACKAGING MATERIAL
(73) Hewlett-Packard Development Company, L.P.
(72) MACHIKAWA, Hajime
BRAUN, Liora
ZIGDON, Chen

(51) B32B 27/08
B32B 7/02
B32B 7/12
B32B 27/30
B32B 27/32
B65D 65/40
(11) EP4019246
(21) EP21207168.2
(47) 21.05.2025
(22) 09.11.2021
(54) MULTILAYER POLYMER BARRIER FILM FOR FOOD PACKAGING
(73) Oerlemans Packaging B.V.
(72) Verschaeren, Patrick Corneel Mathilde
Hanegraaf, Joan Antonius Adrianus Maria
Van Huijstee, Marcus Koen Joannes Maria
(31) 2027218
(32) 24.12.2020
(33) Netherlands

(51) B32B 27/30
B29C 70/50
B29C 43/28
B29C 48/07
B32B 5/02
B32B 5/18
B32B 5/24
B32B 27/06
B32B 27/08
B32B 27/12
(11) EP3817921
(21) EP19732138.3
(47) 21.05.2025
(87) IB2019054677
09.01.2020
(22) 05.06.2019
(54) METHODS TO PROVIDE A FLOOR COVERING
(73) Unilin, BV
(72) VAN VLASSENRODE, Kristof
(31) 18181197
(32) 02.07.2018
(33) European Patent Office (EPO)

(51) B32B 27/34
B32B 1/08

B32B 27/08
B32B 27/18
B32B 27/30
B32B 27/32
B65D 88/16
C08L 77/02
(11) EP3702153
(21) EP20159754.9
(47) 21.05.2025
(22) 27.02.2020
(54) LINER FILM
(73) Flexopack S.A.
(72) GINOSATIS, Dimitris
(31) 19160331
(32) 01.03.2019
(33) European Patent Office (EPO)

(51) B32B 29/00
D21H 11/02
D21H 11/08
D21H 27/30
(11) EP4384395
(21) EP22764741.9
(47) 21.05.2025
(87) EP2022072623
16.02.2023
(22) 11.08.2022
(54) ASSYMETRIC PAPERBOARD
(73) Billerud Aktiebolag (publ)
(72) NORDSTRÖM, Fredrik
MAGNUSSON, Johan
(31) 21190815
(32) 11.08.2021
(33) European Patent Office (EPO)

(51) B32B 33/00
B32B 19/04
E04C 2/52
(11) EP4210948
(21) EP21773623.0
(47) 21.05.2025
(87) EP2021075168
17.03.2022
(22) 14.09.2021
(54) PANEL FOR AIR-CONDITIONING DUCTS
(73) SAINT-GOBAIN ISOVER
(72) PEREZ, Maria Luisa
DIEZ, Alfonso
RICO, Mariano
LOPEZ, Gregorio
(31) 2009279
(32) 14.09.2020
(33) France

(51) B32B 37/22
B32B 3/08
B32B 3/14
B32B 3/18
B32B 3/22
B65H 5/06
E04C 2/34
B27D 1/06
B27N 3/00
B65G 59/06
B27H 1/00
B27M 3/00
(11) EP3317105
(21) EP16821739.6
(47) 21.05.2025
(87) SE2016050677
12.01.2017
(22) 01.07.2016
(54) METHOD OF MAKING A SHEET UNIT
(73) Inter IKEA Systems B.V.
(72) CARLANDER, Rolf
ANDREASSON, Bengt
ANDREASSON, Tomas
(31) 1550963
(32) 03.07.2015
(33) Sweden

(51) B41C 1/10
B41M 1/06
(11) EP4039489
(21) EP20870965.9
(47) 21.05.2025
(87) JP2020032750
08.04.2021
(22) 28.08.2020
(54) PLANOGRAPHIC PRINTING PLATE ORIGINAL PLATE, METHOD FOR MANUFACTURING PLANOGRAPHIC PRINTING PLATE, AND PLANOGRAPHIC PRINTING METHOD
(73) FUJIFILM Corporation
(72) NAMBA, Yusuke
FUJITA, Akinori
(31) 2020034237
2019180621
(32) 28.02.2020
30.09.2019
(33) Japan
Japan

(51) B41F 15/08
B41F 15/44
B41F 33/00
H05K 3/12
(11) EP4351880
(21) EP22735803.3
(47) 21.05.2025
(87) EP2022065877
15.12.2022
(22) 10.06.2022
(54) PRINTING DEVICE AND METHOD FOR PRINTING ONTO SUBSTRATES
(73) Ekra Automatisierungssysteme GmbH
(72) PLACHY, Franz
SÄNGER, Lukas
VOIGT, Rainer
(31) 102021205984
(32) 11.06.2021
(33) Germany

(51) B41J 2/00
B41J 2/345
B41J 29/393
B41J 11/00
(11) EP3509846
(21) EP16915906.8
(47) 21.05.2025
(87) US2016051377
15.03.2018
(22) 12.09.2016
(54) PRINTING SYSTEM REDUCED THROUGHPUT MODE
(73) Hewlett-Packard Development Company, L.P.
(72) HOYER, Brooke
WADE, Kenneth Blaine
MAGNUSSON, Daniel James
YRACEBURU, Robert
GRIFFITH, Benjamin Whitney

(51) B41J 2/14
(11) EP3829876
(21) EP19748923.0
(47) 21.05.2025
(87) GB2019052107
30.01.2020
(22) 26.07.2019
(54) DROPLET EJECTION HEAD AND MANIFOLD COMPONENT THEREFOR
(73) Xaar Technology Limited
(72) DEGRAEVE, Sebastien Roger Gabriel
NEAL, Gareth Paul
(31) 201812273
(32) 27.07.2018
(33) United Kingdom

(51) B41J 2/14
B41J 2/16
(11) EP4371774
(21) EP23210615.3
(47) 21.05.2025
(22) 17.11.2023
(54) LIQUID EJECTING HEAD AND LIQUID EJECTING APPARATUS
(73) Seiko Epson Corporation
(72) TAKABE, Motoki
KOIKE, Harunobu
(31) 2022184624
(32) 18.11.2022
(33) Japan

(51) B41J 2/165
(11) EP4306326
(21) EP23181697.6
(47) 21.05.2025
(22) 27.06.2023
(54) DETECTION OF PRINTHEAD CONDITIONS BASED ON ISOLATION SCORING
(73) Ricoh Company, Ltd.
(72) WILKINS, Ian
(31) 202217812520
(32) 14.07.2022
(33) United States of America

(51) B41J 2/18
B41J 2/175
(11) EP3517305
(21) EP18859605.0
(47) 21.05.2025
(87) ES2018070616
28.03.2019
(22) 25.09.2018
(54) RECIRCULATION SYSTEM FOR RECIRCULATING PRINT HEADS
(73) Tecglass SL
(72) FERNÁNDEZ VÁZQUEZ, Juan Javier
BARROS LÓPEZ, José Manuel
(31) 201731165
(32) 29.09.2017
(33) Spain

(51) B41J 2/205
B41J 2/21
C09D 11/322
C09D 11/38
C09D 11/40
C09D 11/54

(11) EP4155088
(21) EP22195751.7
(47) 21.05.2025
(22) 15.09.2022
(54) PRINT APPARATUS, CONTROL METHOD OF THE SAME, AND PRINT SYSTEM
(73) Canon Kabushiki Kaisha
(72) ISHIMI, Keita
SHIMA, Takaaki
(31) 2022112573
2021154711
(32) 13.07.2022
22.09.2021
(33) Japan
Japan

(51) B41J 2/335
(11) EP4129702
(21) EP21780230.5
(47) 21.05.2025
(87) JP2021012894
07.10.2021
(22) 26.03.2021
(54) THERMAL HEAD AND THERMAL PRINTER
(73) Kyocera Corporation
(72) KATO, Kenichi
MIYAMOTO, Makoto
(31) 2020063694
(32) 31.03.2020
(33) Japan

(51) B41J 2/335
B41J 2/325
B41F 16/00
B41M 5/03
G06K 19/077
(11) EP4301604
(21) EP22705405.3
(47) 21.05.2025
(87) EP2022053795
09.09.2022
(22) 16.02.2022
(54) DEVICE AND TRANSFER PRINTING PROCEDURE OF AN IMPROVED TYPE
(73) Multi Griffe s.r.l.
Stand Up s.r.l.
(72) SCALDAFERRO, Stefano
(31) 202100004850
(32) 02.03.2021
(33) Italy

(51) B41J 3/42
B41J 1/08
B41J 1/16
B41J 2/00
B41J 2/155
B41J 2/16
B41J 2/21
B41J 2/165
B41J 25/00
(11) EP4072858
(21) EP20900422.5
(47) 21.05.2025
(87) US2020063814
17.06.2021
(22) 08.12.2020
(54) WIDE FORMAT STAGGERED SINGLE PASS PRINTING APPARATUS
(73) Electronics for Imaging, Inc.
(72) PROPERSI STERBIATI, Ernesto
SERAFINI, Marco
(31) 201916713560
(32) 13.12.2019
(33) United States of America

(51) B41J 11/00
B41F 23/04
F21S 4/28
F21V 29/67
F21V 29/76
F21V 29/83
F21Y 103/10
F21Y 115/10
(11) EP4122713
(21) EP22196570.0
(47) 21.05.2025
(22) 21.09.2018
(54) ATTACHABLE LIGHT SHIELDING CASE FOR A LIGHT SOURCE DEVICE
(73) Hamamatsu Photonics K.K.
(72) MURAYAMA, Kyoichi
UMENO, Keita
KASHIWABARA, Hiroya
MATUI, Ryotaro
(31) 2017182473
(32) 22.09.2017
(33) Japan

(51) B41J 13/00
B41J 13/12
B41J 3/38
B65H 3/00
B41J 3/407
(11) EP4188716
(21) EP21749843.5
(47) 21.05.2025
(87) EP2021071138
03.02.2022
(22) 28.07.2021
(54) PRINTER
(73) Weidmüller Interface GmbH & Co. KG
(72) DAHLMANN, Markus
BORNEFELD, Thorsten
SCHINDLER, Rico
MANKE, René
KÖSTER, Thomas
(31) 102020120256
(32) 31.07.2020
(33) Germany

(51) B42D 25/23
B42D 25/305
B42D 25/455
B42D 25/47
G06K 19/073
(11) EP4096931
(21) EP21701538.7
(47) 21.05.2025
(87) EP2021051934
05.08.2021
(22) 28.01.2021
(54) SECURITY ELEMENT, ELECTRONIC CARD, ELECTRONIC PAYMENT TERMINAL AND CORRESPONDING ASSEMBLY METHOD
(73) Banks and Acquirers International Holding
(72) LAMBERT, Xavier
DAJON-LAMARE, Bertrand
(31) 2001003
(32) 31.01.2020
(33) France

(51) B42D 25/355
B42D 25/373
B42D 25/378
(11) EP4196354
(21) EP21762450.1
(47) 21.05.2025
(87) EP2021072544
17.02.2022
(22) 12.08.2021
(54) FLAT SECURITY ELEMENT WITH OPTICAL SECURITY FEATURES
(73) Hueck Folien Gesellschaft m.b.H.
(72) MAYRHOFER, Marco
(31) 20191070
(32) 14.08.2020
(33) European Patent Office (EPO)

(51) B44C 5/04
E04F 15/10
(11) EP3119614
(21) EP15720781.2
(47) 21.05.2025
(87) IB2015051850
24.09.2015
(22) 13.03.2015
(54) FLOOR PANEL FOR FORMING A FLOOR COVERING AND METHOD FOR MANUFACTURING SUCH FLOOR PANELS
(73) Unilin, BV
(72) CLEMENT, Benjamin
(31) 201461955379 P
(32) 19.03.2014
(33) United States of America

(51) B60B 5/02
B29C 70/24
B29D 99/00
B60B 21/12
B29C 53/58
B60B 21/00
B29L 31/32
(11) EP4406754
(21) EP23153249.0
(47) 21.05.2025
(22) 25.01.2023
(54) COMPOSITE RIM
(73) Marshal Industrial Corp.
(72) Tsai, Ming-Jen
Hung, Chao-Chen
Yu, Shih-Tse

(51) B60B 27/00
(11) EP4117934
(21) EP21708110.8
(47) 21.05.2025
(87) DE2021100138
16.09.2021
(22) 12.02.2021
(54) WHEEL BEARING ASSEMBLY FOR A VEHICLE
(73) Schaeffler Technologies AG & Co. KG
(72) STAHL, Matthias
EICHELMANN, Frank
TOMASEC, Peter
DLUGAI, Darius
(31) 102020106274
(32) 09.03.2020

(33) Germany

(51) B60C 1/00
C08C 19/25
C08F 297/04
C08K 5/541
C08L 9/00
C08L 15/00
C08L 53/02
C08L 101/12
C08K 3/36
(11) EP4159475
(21) EP21812966.6
(47) 21.05.2025
(87) JP2021020510
02.12.2021
(22) 28.05.2021
(54) RUBBER COMPOSITION FOR TIRE, AND TIRE
(73) The Yokohama Rubber Co., Ltd.
(72) SATO, Masaki
SAWA, Hideaki
ITO, Keisuke
IZUNO, Kakeru
(31) 2020094620
(32) 29.05.2020
(33) Japan

(51) B60C 1/00
C08L 7/00
(11) EP4311690
(21) EP23188202.8
(47) 21.05.2025
(22) 27.07.2023
(54) RUBBER COMPOSITION FOR A TRUCK TIRE
(73) The Goodyear Tire & Rubber Company
(72) MARSAT, Jean-Noel
WASSEN, Marine Sophie Francoise
POMPEI, Manuela
ANYFANTAKI, Karmena Izabela
(31) 202217815587
(32) 28.07.2022
(33) United States of America

(51) B60C 5/14
B60C 1/00
B60C 19/00
C08L 21/00
(11) EP4275916
(21) EP22759481.9
(47) 21.05.2025
(87) JP2022006414
01.09.2022
(22) 17.02.2022
(54) TIRE
(73) Sumitomo Rubber Industries, Ltd.
(72) YOSHIZUMI, Takuma
SOFUE, Naoya
AOKI, Daichi
(31) 2021028029
(32) 25.02.2021
(33) Japan

(51) B60C 7/06
B60C 7/14
B60C 7/18
B60C 7/20
B60C 7/24
(11) EP4234270
(21) EP23156152.3
(47) 21.05.2025
(22) 10.02.2023
(54) ASSEMBLY FOR NON-PNEUMATIC SUPPORT OF A VEHICLE
(73) The Goodyear Tire & Rubber Company
(72) AGBOOLA, Babatunde Omogbolahan
LIN, Cheng-Hsiung
(31) 202217680941
(32) 25.02.2022
(33) United States of America

(51) B60C 11/03
B60C 11/12
(11) EP4360915
(21) EP23203242.5
(47) 21.05.2025
(22) 12.10.2023
(54) PNEUMATIC TYRE FOR VEHICLES
(73) Continental Reifen Deutschland GmbH
(72) Heinhaupt, Torsten
Bauer, Claudia
Fuchs, Artur
Brandau, Christian
Brockmann, Jürgen
Subramanian Sivanarutchelvi, Manickaraj
Seng, Matthias
Sissel, Patrick
(31) 102022211337
(32) 26.10.2022
(33) Germany

(51) B60C 11/12
(11) EP4234277
(21) EP23154467.7
(47) 21.05.2025
(22) 01.02.2023
(54) TYRE
(73) Sumitomo Rubber Industries, Ltd.
(72) TAHARA, Kotaro
KAWAGOE, Yoshifumi
MISHIMA, Mari
(31) 2022027772
2022027771
(32) 25.02.2022
25.02.2022
(33) Japan
Japan

(51) B60C 11/13
B60C 11/03
(11) EP4342689
(21) EP22852706.5
(47) 21.05.2025
(87) JP2022025149
09.02.2023
(22) 23.06.2022
(54) TIRE
(73) BRIDGESTONE CORPORATION
(72) YOKOYAMA Akinori
KAMITABIRA Saya
(31) 2021128531
(32) 04.08.2021
(33) Japan

(51) B60C 11/24
B60T 8/172
B60W 40/064
B60W 40/10
B60W 40/101
B60W 40/12
(11) EP4319990
(21) EP21718531.3
(47) 21.05.2025
(87) EP2021059100
13.10.2022
(22) 07.04.2021
(54) TYRE WEAR RATE ESTIMATION BASED ON A DYNAMIC TYRE MODEL
(73) VOLVO TRUCK CORPORATION
(72) LAINE, Leo
HENDERSON, Leon
STENBRATT, Ulf
ARIKERE, Adithya
SUBRAMANIAN, Chidambaram

(51) B60C 13/00
(11) EP4279297
(21) EP23163375.1
(47) 21.05.2025
(22) 22.03.2023
(54) VEHICLE TYRE HAVING A CORRUGATED SIDEWALL
(73) Continental Reifen Deutschland GmbH
(72) Kristen, Florian
Kuniak, Lubos
(31) 102022204887
(32) 17.05.2022
(33) Germany

(51) B60C 17/06
B60C 15/028
(11) EP3865316
(21) EP21156988.4
(47) 21.05.2025
(22) 12.02.2021
(54) TUBELESS TIRE INSERT
(73) Fox Factory, Inc.
(72) ALLINGER, Wesley, E.
KLAWER, Paul
CHALMERS, Douglas, A.
(31) 202117174227
202062976227 P
(32) 11.02.2021
13.02.2020
(33) United States of America
United States of America

(51) B60C 23/04
(11) EP3890997
(21) EP19832288.5
(47) 21.05.2025
(87) EP2019082666
11.06.2020
(22) 27.11.2019
(54) HOUSING FOR A TYRE PARAMETER MONITORING SYSTEM, TYRE PARAMETER MONITORING SYSTEM AND METHOD FOR MOUNTING A TYRE PARAMETER MONITORING SYSTEM TO A RIM OF A WHEEL
(73) Continental Automotive Technologies GmbH
(72) HAAS, Thomas
DRUTA, Paul
(31) 201900226
18465628
(32) 08.01.2019
05.12.2018
(33) United Kingdom
European Patent Office (EPO)

(51) B60C 23/04
(11) EP3981617
(21) EP21199206.0
(47) 21.05.2025

(22) 27.09.2021
(54) METHOD FOR SAMPLING WHEEL ACCELERATION, METHOD FOR DETERMINING ROTATION ANGULAR POSITION OF WHEEL, METHOD FOR POSITIONING TARGET WHEEL, TIRE PRESSURE MONITORING SYSTEM, AND STORAGE DEVICE
(73) Autochips Wuhan Co., Ltd.
(72) ZHANG, Tao
(31) 202011085077
(32) 12.10.2020
(33) China

(51) B60C 23/04
(11) EP4011650
(21) EP21203401.1
(47) 21.05.2025
(22) 19.10.2021
(54) APPARATUS AND METHOD FOR DETERMINING AIRCRAFT TIRE PRESSURE
(73) Airbus Operations Limited
(72) ROBERTSON, Michael
(31) 202019447
(32) 10.12.2020
(33) United Kingdom

(51) B60C 23/04
G06K 19/077
B29D 30/00
B60C 19/00
(11) EP4255742
(21) EP21831243.7
(47) 21.05.2025
(87) EP2021083961
09.06.2022
(22) 02.12.2021
(54) METHOD TO MANUFACTURE AN ELECTRONIC DEVICE FOR A RUBBER ARTICLE
(73) Bridgestone Europe NV/SA
(72) IOZIA, Francesco
SALIERI, Stefano
(31) 202000029513
(32) 02.12.2020
(33) Italy

(51) B60C 25/05
B60C 25/13
B60C 25/132
(11) EP4359232
(21) EP22736380.1
(47) 21.05.2025
(87) IB2022055772
29.12.2022
(22) 22.06.2022
(54) TYRE CHANGING MACHINE, PARTICULARLY FOR LARGE WHEELS
(73) Devel Srl
(72) BONETTI, Valentino
(31) 202100016793
(32) 25.06.2021
(33) Italy

(51) B60D 1/06
B60D 1/24
B60D 1/54
(11) EP4427951
(21) EP23160580.9
(47) 21.05.2025
(22) 07.03.2023
(54) TOW HITCH ASSEMBLY COMPRISING A ONE-WAY WRAP SPRING CLUTCH
(73) Brink Towing Systems B.V.
Oechsler AG
(72) Keijer, Maarten
Motzet, Daniel
Kleeberger, Friedrich
Schmidt, Winfried

(51) B60G 7/00
B60T 5/00
F16D 65/847
(11) EP4124478
(21) EP22185775.8
(47) 21.05.2025
(22) 19.07.2022
(54) SUSPENSION ARM OR TRIANGULAR SUSPENSION ARM AND METHOD FOR MANUFACTURING SUCH A SUSPENSION ARM OR TRIANGULAR SUSPENSION ARM
(73) Renault s.a.s
(72) EVRAT, Xavier
MATEOS, Laurent
ONILLON, Thibault
(31) 2108210
(32) 28.07.2021
(33) France

(51) B60G 15/06
B60G 17/015
B60G 17/02
F16H 25/24
F16D 41/22
(11) EP4251437
(21) EP21824025.7
(47) 21.05.2025
(87) IB2021060963
02.06.2022
(22) 25.11.2021
(54) SHOCK ABSORBER AND SPRING ASSEMBLY FOR A VEHICLE SUSPENSION, COMPRISING AN ELECTROMECHANICAL ADJUSTMENT DEVICE FOR ADJUSTING THE VERTICAL POSITION OF THE SPRING AND AN ASSOCIATED BLOCKING SYSTEM, AND METHOD FOR MOVING THE SPRING PLATE OF THE SHOCK ABSORBER
(73) Marelli Suspension Systems Italy S.p.A.
(72) DI VITTORIO, Marco
GRECO, Giordano
MARCHETTI, Simone
MONCHIERO, Piero
AMATI, Nicola
GALLUZZI, Renato
RUZIMOV, Sanjarbek
TESSARI, Federico
TONOLI, Andrea
(31) 202000028382
(32) 25.11.2020
(33) Italy

(51) B60H 1/00
B60H 1/32
F25B 5/02
F25B 13/00
F25B 25/00
F25B 40/00
F25B 41/20
(11) EP4248150
(21) EP21811270.4
(47) 21.05.2025
(87) EP2021081189
27.05.2022
(22) 10.11.2021
(54) REFRIGERATION SYSTEM HAVING A HEAT PUMP FUNCTION FOR A MOTOR VEHICLE, HAVING A SINGLE SENSOR DEVICE ON THE LOW-PRESSURE SIDE
(73) AUDI AG
(72) HAMMER, Hans
REBINGER, Christian
SCHROEDER, Dirk
(31) 102020130912
(32) 23.11.2020
(33) Germany

(51) B60H 1/00
F28D 7/16
(11) EP4360922
(21) EP22862677.6
(47) 21.05.2025
(87) CN2022089657
09.03.2023
(22) 27.04.2022
(54) INTEGRATED CHANNEL APPARATUS FOR NON-HEAT PUMP THERMAL MANAGEMENT INTEGRATED MODULE, AND ELECTRIC VEHICLE
(73) Zhejiang Geely Holding Group Co., Ltd.
Ningbo Geely Automobile Research & Development Co. Ltd.
(72) LI, Guibin
LIN, Bingrong
XU, Junbo
DAI, Haijiang
XUE, Qiang
ZHANG, Junzhe
CHEN, Liang
(31) 202111037448
(32) 06.09.2021
(33) China

(51) B60J 5/04
E05B 79/06
(11) EP4259463
(21) EP21819922.2
(47) 21.05.2025
(87) FR2021051993
23.06.2022
(22) 10.11.2021
(54) EXTERNAL OPENING CONTROL BRACKET OF A VEHICLE
(73) Stellantis Auto SAS
(72) KERMORVANT, Mael
LAMBIN, Herve
(31) 2013131
(32) 14.12.2020
(33) France

(51) B60K 1/04
B62D 25/20
(11) EP4159507
(21) EP22194542.1
(47) 21.05.2025
(22) 08.09.2022
(54) ELECTRIC-VEHICLE-BODY STRUCTURE
(73) MAZDA MOTOR CORPORATION

(72) Inami, Takuma
Nakayama, Nobuyuki
Baba, Hiroyuki
(31) 2021183238
2021161834
(32) 10.11.2021
30.09.2021
(33) Japan
Japan

(51) B60K 11/00
B60K 11/04
B60K 11/02
B60K 1/00
B60R 13/08
(11) EP4311701
(21) EP23185820.0
(47) 21.05.2025
(22) 17.07.2023
(54) COOLING MODULE FOR COOLING A TRACTION BATTERY
(73) MAN Truck & Bus SE
(72) Peteranderl, Christian
Engasser, Julius
Heuer, Stefan
(31) 102022119066
(32) 29.07.2022
(33) Germany

(51) B60K 35/10
B60K 35/21
B62J 45/20
B62J 50/21
B62J 50/22
B62K 23/02
(11) EP4140868
(21) EP22188479.4
(47) 21.05.2025
(22) 03.08.2022
(54) OPERATIONAL DEVICE FOR A SINGLE-TRACK VEHICLE
(73) Robert Bosch GmbH
(72) Brumbach, Matthias
(31) 102021209293
(32) 25.08.2021
(33) Germany

(51) B60K 35/10
B60K 35/21
G06F 3/01
G06F 3/0362
(11) EP4291436
(21) EP22700949.5
(47) 21.05.2025
(87) EP2022050941
18.08.2022
(22) 18.01.2022
(54) OPERATING DEVICE FOR A MOTOR VEHICLE, AND MOTOR VEHICLE HAVING AN OPERATING DEVICE
(73) VOLKSWAGEN AKTIENGESELLSCHAFT
(72) THIELE, Henning
HUWER, Wojciech
GRÜNEBERG, Anette
(31) 102021201185
(32) 09.02.2021
(33) Germany

(51) B60K 35/10
B60K 35/28
B60W 30/18
B60W 50/14
B60W 60/00
(11) EP3960519
(21) EP21191489.0
(47) 21.05.2025
(22) 16.08.2021
(54) DISPLAY DEVICE FOR A VEHICLE, DISPLAY METHOD AND STORAGE MEDIUM
(73) TOYOTA JIDOSHA KABUSHIKI KAISHA
(72) YOSHIDA, Yuki
OGATA, Ryo
MIYAZAKI, Junji
KIMURA, Koji
TAKABATAKE, Satoaki
MORISHITA, Tadashi
(31) 2020146393
(32) 31.08.2020
(33) Japan

(51) B60K 35/233
B60K 35/65
B60K 35/28
G02B 27/01
(11) EP4140796
(21) EP22200869.0
(47) 21.05.2025
(22) 03.02.2022
(54) VEHICLE DISPLAY DEVICE
(73) Yazaki Corporation
(72) Yoshida, Akihiro
Okamoto, Shinichi
Matsuo, Yoshiharu
Yamamoto, Sosuke
(31) 2021037890
(32) 10.03.2021
(33) Japan

(51) B60L 53/67
B60L 53/31
B60L 53/63
(11) EP4140804
(21) EP22191350.2
(47) 21.05.2025
(22) 19.08.2022
(54) CHARGING PILE, CHARGING SYSTEM, AND CHARGING METHOD
(73) Huawei Digital Power Technologies Co., Ltd.
(72) WANG, Yichang
LIU, Baoquan
REN, Zhanlin
HAN, Xinru
(31) 202110977734
(32) 24.08.2021
(33) China

(51) B60M 1/18
H01H 1/20
H01H 3/30
H01H 1/36
H01H 1/42
H01H 33/10
(11) EP4209385
(21) EP23156335.4
(47) 21.05.2025
(22) 01.08.2018
(54) ROTARY SWITCH BODY AND RESIDUAL LOAD DISCONNECTING SWITCH
(73) Walter Kraus GmbH
(72) Bülter, Olaf
(31) 202017104597 U
(32) 01.08.2017
(33) Germany

(51) B60N 2/20
B60N 2/22
(11) EP4140806
(21) EP22187173.4
(47) 21.05.2025
(22) 27.07.2022
(54) DEVICE FOR FOLDING SEAT
(73) Hyundai Transys Inc.
DAYOU A-TECH CO., LTD.
(72) YU, Sang Uk
KIM, Seok Hwan
LEE, Seon Hyeok
SUNG, Young Bok
NA, Seon Chae
LEE, Hae Won
SHIM, Ui Bo
JANG, Dae Keon
BAE, Ji Sung
(31) 20210108258
(32) 17.08.2021
(33) Korea (Republic)

(51) B60N 2/34
B60N 2/64
(11) EP4137359
(21) EP22170533.8
(47) 21.05.2025
(22) 28.04.2022
(54) A VEHICLE SEAT
(73) Thompson Aero Seating Limited
(72) Newell, Keith
(31) 202111985
(32) 20.08.2021
(33) United Kingdom

(51) B60P 3/34
(11) EP3950426
(21) EP21189786.3
(47) 21.05.2025
(22) 05.08.2021
(54) CAMPING BOX
(73) Graf, Marcel
(72) Graf, Marcel
(31) 202020004416 U
202020003416 U
(32) 21.10.2020
08.08.2020
(33) Germany
Germany

(51) B60Q 1/12
F21S 41/663
F21S 41/153
(11) EP4117964
(21) EP21709439.0
(47) 21.05.2025
(87) EP2021055873
16.09.2021
(22) 09.03.2021
(54) METHOD FOR CONTROLLING A LIGHT PATTERN AND AUTOMOTIVE LIGHTING DEVICE
(73) Valeo Vision
(72) KANJ, Ali
PRAT, Constantin
(31) 2002329
(32) 09.03.2020

(33) France

(51) B60R 1/00
B60R 11/04
(11) EP3787930
(21) EP18725416.4
(47) 21.05.2025
(87) EP2018061396
07.11.2019
(22) 03.05.2018
(54) VEHICLE COMPRISING A DRIVER CAB AND A MONITORING DEVICE FOR MONITORING A FRONT DEAD ANGLE AREA AND MONITORING DEVICE FOR SUCH VEHICLE
(73) VOLVO TRUCK CORPORATION
(72) BERNE, Nicolas
BUFALO, Kevin

(51) B60R 1/24
B60R 1/30
G01S 17/10
G01S 17/894
G01S 7/4865
H04N 23/56
H04N 23/63
(11) EP3471399
(21) EP17813569.5
(47) 21.05.2025
(87) KR2017006157
21.12.2017
(22) 13.06.2017
(54) NIGHT VISION DISPLAY DEVICE
(73) LG Electronics Inc.
(72) KIM, Kwanhyung
KIM, Hyunjoon
OH, Sangguel
LEE, Dongryeol
JI, Salkmann
HONG, Samnyol
(31) 201662349134 P
(32) 13.06.2016
(33) United States of America

(51) B60R 5/04
B60P 1/00
B60P 1/54
B66C 23/44
B66D 3/18
(11) EP4171998
(21) EP21755725.5
(47) 21.05.2025
(87) EP2021071475
10.03.2022
(22) 30.07.2021
(54) MOTOR VEHICLE WITH AT LEAST ONE LIFTING DEVICE INTEGRATED IN THE TAILGATE
(73) Bontinta Systems Engineering Services GmbH
(72) BENTA, Daniel
(31) 102021101477
102020005485
(32) 25.01.2021
07.09.2020
(33) Germany
Germany

(51) B60R 9/06
(11) EP4321384
(21) EP23183989.5
(47) 21.05.2025
(22) 06.07.2023
(54) LOAD CARRIER FOR A MOTOR VEHICLE
(73) Renault s.a.s
(72) GIRAULT, Edouard
Edouard, Rodolphe
(31) 2208219
(32) 10.08.2022
(33) France

(51) B60R 11/02
(11) EP4344957
(21) EP22198456.0
(47) 21.05.2025
(22) 28.09.2022
(54) MODULAR DISPLAY ATTACHMENT
(73) VOLVO TRUCK CORPORATION
(72) Wilson, Andreas
Vasiloski, Zoran
Larsson, Linus

(51) B60R 16/03
(11) EP4124512
(21) EP21187918.4
(47) 21.05.2025
(22) 27.07.2021
(54) ENERGY SUPPLY MODULE AND ENERGY SUPPLY MANAGEMENT SYSTEM
(73) KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH
(72) KISS, David
TOTH, Zoltan
DERZSI, Andras
LINDNER, Peter
NEMETH, Huba

(51) B60R 21/231
(11) EP4107037
(21) EP21706915.2
(47) 21.05.2025
(87) EP2021054019
26.08.2021
(22) 18.02.2021
(54) AIRBAG SYSTEM FOR A VEHICLE
(73) Jaguar Land Rover Limited
(72) GLYN-DAVIES, Philip
ALLAN, Graham
BROWN, Richard
MABEY, Jonathan
(31) 202002205
(32) 18.02.2020
(33) United Kingdom

(51) B60R 21/231
(11) EP4360963
(21) EP23199500.2
(47) 21.05.2025
(22) 25.09.2023
(54) VEHICLE OCCUPANT RESTRAINT DEVICE
(73) TOYOTA JIDOSHA KABUSHIKI KAISHA
(72) HAYASHI, Shigeki
(31) 2022175009
(32) 31.10.2022
(33) Japan

(51) B60R 25/24
B60R 25/40
(11) EP3529112
(21) EP17793611.9
(47) 21.05.2025
(87) EP2017076670
26.04.2018
(22) 19.10.2017
(54) LOCKING SYSTEM, IN PARTICULAR FOR A MOTOR VEHICLE
(73) Marquardt GmbH
(72) BECHER, Andreas
(31) 102016012559
(32) 21.10.2016
(33) Germany

(51) B60T 1/00
F16D 63/00
(11) EP3787939
(21) EP19714558.4
(47) 21.05.2025
(87) EP2019056831
07.11.2019
(22) 19.03.2019
(54) VEHICLE PARK BRAKE CONTROL DEVICE AND METHOD
(73) Robert Bosch GmbH
(72) DREWE, Ingo
KAISERAUER, Thomas
(31) 102018206824
(32) 03.05.2018
(33) Germany

(51) B60T 7/12
B62D 6/00
B60T 8/17
B60T 8/1755
B60W 10/20
B60W 10/18
B60W 30/02
(11) EP4082844
(21) EP20905312.3
(47) 21.05.2025
(87) JP2020047634
01.07.2021
(22) 21.12.2020
(54) VEHICLE MOTION CONTROL DEVICE, VEHICLE MOTION CONTROL METHOD, AND VEHICLE MOTION CONTROL SYSTEM
(73) Hitachi Astemo, Ltd.
(72) ARIMA, Hidetoshi
KASHIWAMURA, Satoshi
(31) 2019234314
(32) 25.12.2019
(33) Japan

(51) B60T 8/17
B60T 7/22
B60T 8/1766
(11) EP4378769
(21) EP22755308.8
(47) 21.05.2025
(87) IB2022056999
02.02.2023
(22) 28.07.2022
(54) CONTROLLER FOR A SADDLED VEHICLE AND CONTROL METHOD FOR MANEUVERING A SADDLED VEHICLE
(73) Robert Bosch GmbH
(72) SATO, Akira
(31) 2021123778
(32) 29.07.2021
(33) Japan

(51) B60T 8/17

B60T 8/1755
B60T 8/88
(11) EP4175858
(21) EP21737627.6
(47) 21.05.2025
(87) EP2021067791
06.01.2022
(22) 29.06.2021
(54) VEHICLE SYSTEM HAVING AN ESC-FAULT-TOLERANT BRAKING SYSTEM
(73) ZF CV Systems Global GmbH
(72) DIECKMANN, Thomas
LÜLFING, Ralph-Carsten
MICHAELSEN, Arne
MUNKO, Tobias
OTREMBA, Robert
VAN THIEL, Julian
(31) 102020117322
(32) 01.07.2020
(33) Germany

(51) B60T 8/1755
B60T 8/172
B60T 8/32
B60T 13/74
(11) EP4247677
(21) EP21811378.5
(47) 21.05.2025
(87) EP2021082566
27.05.2022
(22) 22.11.2021
(54) IMPROVED METHOD FOR CONTROLLING THE TIGHTENING TORQUE OF AN ELECTROMECHANICAL BRAKE
(73) Hitachi Astemo France
(72) RAMDANE, Abdessamed
DELMEIRE, Dimitri
AUGUSTE, Antony
(31) 2012030
(32) 23.11.2020
(33) France

(51) B60T 13/66
B60T 13/08
(11) EP4281340
(21) EP21824675.9
(47) 21.05.2025
(87) IB2021061303
28.07.2022
(22) 03.12.2021
(54) TRAILER BRAKE CONTROL SYSTEM
(73) AGCO International GmbH
(72) KIRMAIER, Philipp
STREIBER, Simon
(31) 202111426
202100651
(32) 09.08.2021
19.01.2021
(33) United Kingdom
United Kingdom

(51) B60T 15/04
B60T 17/00
B60T 17/04
B60T 17/08
F16K 24/00
F16K 24/04
B60T 15/02
B60T 15/24
B60T 15/54
B60T 17/22
(11) EP4382377
(21) EP22211576.8
(47) 21.05.2025
(22) 06.12.2022
(54) PNEUMATIC VALVE WITH VENTING GUIDE AND TILT PROTECTION
(73) ZF CV Systems Europe BV
(72) ADAMSKI, Krzysztof
DREYER, Werner
RENGASAMY, Kabilan

(51) B60T 17/22
(11) EP3619083
(21) EP18720761.8
(47) 21.05.2025
(87) EP2018059801
08.11.2018
(22) 17.04.2018
(54) DEVICE FOR DETERMINE AND MEASURING BRAKE DUST
(73) HORIBA Europe GmbH
(72) LUGOVYY, Dmytro
KURZE, Tobias
WANINGER, Robert
GRAMSTAT, Sebastian
(31) 102017109356
(32) 02.05.2017
(33) Germany

(51) B60W 10/184
B60T 7/12
B60T 8/17
B60W 10/20
B60W 50/08
B64C 19/00
B64C 25/42
B64C 25/46
(11) EP3817958
(21) EP19830336.4
(47) 21.05.2025
(87) CA2019050927
09.01.2020
(22) 04.07.2019
(54) ADAPTIVE BRAKING AND DIRECTIONAL CONTROL SYSTEM (ABADCS)
(73) Eagle Aerospace, Ltd.
(72) MCKEOWN, Stephen Lyle
SHATTUCK, Ty
CUDMORE, Paul Edward
(31) 201862694719 P
(32) 06.07.2018
(33) United States of America

(51) B60W 30/14
B60K 6/445
B60W 30/17
B60W 30/18
B60W 40/04
B60W 50/10
(11) EP4206053
(21) EP20951505.5
(47) 21.05.2025
(87) JP2020032588
03.03.2022
(22) 28.08.2020
(54) DRIVING SUPPORT METHOD AND DRIVING SUPPORT DEVICE
(73) NISSAN MOTOR CO., LTD.
(72) ASHIZAWA Hiroyuki
KOBAYASHI Masahiro

(51) B60W 30/14
B60W 30/18
B60W 50/00
(11) EP3802256
(21) EP19748611.1
(47) 21.05.2025
(87) US2019036634
19.12.2019
(22) 11.06.2019
(54) AUTOMATED CRUISE CONTROL SYSTEM TO AUTOMATICALLY DECREASE AN OVERALL GROUND VEHICLE ENERGY CONSUMPTION
(73) Traxen, Inc.
(72) MALEKI, Ali
MAKOWSKI, Michael
ALI, Syed
DHANSRI, Naren Reddy
KARIMI, Mahmood
HIRZALLAH, Nabil H K
TUZI, Gerti
ZAMANZAD GAVIDEL, Saeed
(31) 201916355641
201916355657
201916289638
201916289635
201816212108
201862683188 P
(32) 15.03.2019
15.03.2019
28.02.2019
28.02.2019
06.12.2018
11.06.2018
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) B60W 30/14
B60W 50/10
(11) EP4273009
(21) EP22171191.4
(47) 21.05.2025
(22) 02.05.2022
(54) A METHOD FOR OF ACTIVATING CRUISE CONTROL FOR A VEHICLE IN MOTION
(73) VOLVO TRUCK CORPORATION
(72) CHAVRIER, Philemon
LAPERRIERE, Renaud

(51) B60W 30/16
B60W 60/00
G06N 20/00
G06V 10/764
G06V 10/82
G06V 20/58
G06V 20/59
(11) EP3885976
(21) EP20205118.1
(47) 21.05.2025
(22) 02.11.2020
(54) METHODS AND DEVICES FOR TRIGGERING VEHICULAR ACTIONS BASED ON PASSENGER ACTIONS
(73) Mobileye Vision Technologies Ltd.

(72) CHAO, Min-An
KOSE CIHANGIR, Neslihan
ROSALES, Rafael
(31) 202016830312
(32) 26.03.2020
(33) United States of America

(51) B60W 30/165
B60W 30/16
B60W 30/09
B60W 30/095
B60W 60/00
B60W 30/14
(11) EP4201771
(21) EP21865926.6
(47) 21.05.2025
(87) CN2021116422
17.03.2022
(22) 03.09.2021
(54) AUTONOMOUS DRIVING METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) ZHANG, Weize
GAO, Zhiwei
WANG, Xinyu
(31) 202010947784
(32) 10.09.2020
(33) China

(51) B60W 30/18
G05D 1/00
G08G 1/01
G08G 1/052
G08G 1/056
G08G 1/16
(11) EP4209854
(21) EP22809634.3
(47) 21.05.2025
(87) CN2022122699
01.06.2023
(22) 29.09.2022
(54) OVERTAKING PLANNING METHOD AND APPARATUS, AND STORAGE MEDIUM
(73) Guangzhou Xiaopeng Autopilot Technology Co., Ltd.
(72) HUANG, Yiwen
ZHANG, Huikang
ZHAO, Yongzheng
LI, Liyun
(31) 202111421424
(32) 26.11.2021
(33) China

(51) B60W 30/18
G08G 1/00
G05D 1/00
G01C 21/32
G01C 21/34
B60W 50/00
B60W 30/14
B60W 40/10
G01C 21/00
(11) EP3649025
(21) EP18849103.9
(47) 21.05.2025
(87) US2018047206
28.02.2019
(22) 21.08.2018
(54) ESTIMATING TIME TO PICK UP AND DROP OFF PASSENGERS FOR IMPROVED STOPPING ANALYSIS IN AUTONOMOUS VEHICLES
(73) Waymo LLC
(72) DYER, John, Wesley
TORRES, Luis
CHEN, Yu-Hsin
EPSTEIN, Michael
(31) 201715682754
(32) 22.08.2017
(33) United States of America

(51) B60W 40/06
B60W 30/18
B60W 30/10
B60W 30/14
B60W 60/00
(11) EP4309969
(21) EP21930612.3
(47) 21.05.2025
(87) JP2021010900
22.09.2022
(22) 17.03.2021
(54) TRAVEL CONTROL METHOD AND TRAVEL CONTROL DEVICE FOR VEHICLE
(73) NISSAN MOTOR CO., LTD.
(72) TSUJI, Masafumi
GOTO, Akinobu

(51) B60W 50/02
B60W 50/023
G06F 11/20
B60W 60/00
B60W 50/029
(11) EP4360979
(21) EP22897619.7
(47) 21.05.2025
(87) CN2022131083
01.06.2023
(22) 10.11.2022
(54) AUTONOMOUS DRIVING CONTROL SYSTEM AND VEHICLE
(73) Yutong Bus Co., Ltd.
(72) CAO, Qiang
ZHU, Min
CHEN, Xin
BU, Yushuai
(31) 202111423748
(32) 26.11.2021
(33) China

(51) B60W 60/00
(11) EP4056443
(21) EP22161356.5
(47) 21.05.2025
(22) 10.03.2022
(54) DRIVING ASSISTANCE DEVICE, CORRESPONDING METHOD AND COMPUTER READABLE MEDIUM
(73) Volvo Car Corporation
(72) WANG, Wei
(31) 202110270446
(32) 12.03.2021
(33) China

(51) B61D 13/00
B61F 19/06
(11) EP4227186
(21) EP23155735.6
(47) 21.05.2025
(22) 09.02.2023
(54) VEHICLE ASSEMBLY COMPRISING A PROTECTION DEVICE AND VEHICLE COMPRISING SUCH AN ASSEMBLY
(73) ALSTOM Holdings
(72) PEUCAT, Cyril
(31) 2201207
(32) 11.02.2022
(33) France

(51) B61D 15/00
(11) EP4351948
(21) EP22729302.4
(47) 21.05.2025
(87) IB2022054998
15.12.2022
(22) 27.05.2022
(54) MULTI-PURPOSE SELF-PROPELLED RAILWAY VEHICLE
(73) Elen Machines S.r.l.
(72) DE ROSSI, Alessandro
(31) 202100015068
(32) 09.06.2021
(33) Italy

(51) B61F 15/20
B60B 37/04
(11) EP4457125
(21) EP23744729.7
(47) 21.05.2025
(87) EP2023069903
08.02.2024
(22) 18.07.2023
(54) WHEEL SET WITH PRESS-FIT CONNECTION FOR RAIL VEHICLES
(73) Gutehoffnungshütte Radsatz GmbH
(72) GERLACH, Thomas Georg
LEHNERT, Torben Felix
JENNE, Sven
(31) 202022104384 U
(32) 02.08.2022
(33) Germany

(51) B62B 3/10
B62B 5/06
F17C 13/08
(11) EP4159585
(21) EP22193523.2
(47) 21.05.2025
(22) 01.09.2022
(54) HOSPITAL TROLLEY FOR TRANSPORTING A GAS CYLINDER, IN PARTICULAR A MEDICAL NO
(73) Inosystems
(72) MARCHAL, Frédéric
TIRILLY, Nicolas
(31) 2110265
(32) 29.09.2021
(33) France

(51) B62B 3/18
B62B 5/00
B62B 3/00
(11) EP3774492
(21) EP19721663.3
(47) 21.05.2025
(87) GB2019000055
03.10.2019
(22) 28.03.2019
(54) TROLLEY
(73) Rollapole Limited
(72) TURNER, Andrew
(31) 201805112

(32) 28.03.2018
(33) United Kingdom

(51) B62D 3/12
B62D 1/20
F16D 41/08
F16J 15/10
F16J 15/3232
B62D 5/04
B62D 5/00
F16C 19/54
F16D 41/067
F16J 15/3204
(11) EP4001053
(21) EP20840143.0
(47) 21.05.2025
(87) JP2020027498
21.01.2021
(22) 15.07.2020
(54) ROTATION TRANSMISSION DEVICE AND STEERING DEVICE FOR A VEHICLE
(73) NTN Corporation
(72) SATO, Koji
(31) 2019132762
(32) 18.07.2019
(33) Japan

(51) B62D 5/07
B62D 5/30
(11) EP4015349
(21) EP21205935.6
(47) 21.05.2025
(22) 02.11.2021
(54) PRESSURISED FLUID SUPPLY SYSTEM FOR AN AGRICULTURAL VEHICLE
(73) AGCO International GmbH
(72) REITEMANN, Gabriel
(31) 202019738
(32) 15.12.2020
(33) United Kingdom

(51) B62D 7/02
B62D 7/15
B66F 9/22
B62D 5/12
(11) EP3762275
(21) EP19701325.3
(47) 21.05.2025
(87) EP2019051235
12.09.2019
(22) 18.01.2019
(54) HYDRAULIC STEERING SYSTEMS FOR VEHICLE WHEELS
(73) Combilift
(72) MCVICAR, Martin
MOFFETT, Robert
WHYTE, Mark
(31) 201803601
(32) 06.03.2018
(33) United Kingdom

(51) B62D 9/00
B62D 5/04
B62D 15/00
(11) EP4087770
(21) EP21700248.4
(47) 21.05.2025
(87) EP2021050047
15.07.2021
(22) 05.01.2021
(54) MOTOR VEHICLE STEERING SYSTEM, MOTOR VEHICLE AND METHOD FOR CONTROLLING A MOTOR VEHICLE STEERING SYSTEM
(73) thyssenkrupp AG
thyssenkrupp Presta Aktiengesellschaft
(72) LAPIS, Leonard
MIANO, Carlo Mario
POLMANS, Kristof
(31) 102020100449
(32) 10.01.2020
(33) Germany

(51) B62D 15/02
(11) EP4417490
(21) EP23157317.1
(47) 21.05.2025
(22) 17.02.2023
(54) METHOD FOR SYNCHRONIZING A ROTATORY STEERING WHEEL POSITION OF A STEERING WHEEL TO AN ANGULAR ROAD WHEEL POSITION OF A ROAD WHEEL, METHOD FOR STARTING A VEHICLE, DATA PROCESSING APPARATUS, COMPUTER PROGRAM, COMPUTER-READABLE STORAGE MEDIUM, AND STEERING SYSTEM
(73) Volvo Car Corporation
(72) HANSSON, Anders

(51) B62D 15/02
G06N 7/00
G05D 1/00
B60W 50/00
B60W 30/09
B62D 6/00
(11) EP3919353
(21) EP20769654.3
(47) 21.05.2025
(87) JP2020008898
17.09.2020
(22) 03.03.2020
(54) ARITHMETIC OPERATION SYSTEM FOR VEHICLE
(73) MAZDA MOTOR CORPORATION
(72) HORIGOME, Daisuke
SAKASHITA, Shinsuke
ISHIBASHI, Masato
HOJIN, Eiichi
MITANI, Akihiro
TSUCHIYAMA, Kiyoyuki
(31) 2019043108
(32) 08.03.2019
(33) Japan

(51) B62D 23/00
F41H 7/00
F41H 7/04
B62D 31/00
B62D 27/06
B62D 63/02
(11) EP4056943
(21) EP21162397.0
(47) 21.05.2025
(22) 12.03.2021
(54) MODULAR STRUCTURE FOR VEHICLE
(73) ACS Armoured Car Systems GmbH
(72) MÜLLER, Alexander
BÖSER, Nico
KOPPOLD, Stefan
SCHAUBECK, Sebastian

(51) B62D 25/00
B62D 29/00
(11) EP3490876
(21) EP17746330.4
(47) 21.05.2025
(87) US2017043252
01.02.2018
(22) 21.07.2017
(54) MULTIPLE STAGE DEFORMATION REINFORCEMENT STRUCTURE FOR IMPACT ABSORPTION
(73) Zephyros, Inc.
(72) LI, Liwen
RICHARDSON, Henry, E.
(31) 201662395676 P
201662367907 P
(32) 16.09.2016
28.07.2016
(33) United States of America
United States of America

(51) B62D 27/02
B60K 1/04
B62D 25/20
B60H 1/00
B60K 17/354
B60K 17/356
(11) EP4159598
(21) EP22194534.8
(47) 21.05.2025
(22) 08.09.2022
(54) VEHICLE-BODY STRUCTURE
(73) MAZDA MOTOR CORPORATION
(72) Inami, Takuma
Nakayama, Nobuyuki
Baba, Hiroyuki
Hirakawa, Takashi
Hoshuyama, Hideaki
Shimanaka, Tsuneki
(31) 2021183330
2021161834
(32) 10.11.2021
30.09.2021
(33) Japan
Japan

(51) B62D 55/065
B62D 55/116
E01C 21/00
E01C 23/088
(11) EP4368481
(21) EP23165258.7
(47) 21.05.2025
(22) 29.03.2023
(54) GROUND MILLING MACHINE, METHOD OF DRIVING A GROUND MILLING MACHINE AND METHOD OF POSITIONING A GROUND MILLING MACHINE
(73) BOMAG GmbH
(72) PONSTEIN, Joachim
(31) 102022211804
(32) 08.11.2022
(33) Germany

(51) B62D 55/10
B62D 7/02
B62D 55/116
B60G 3/14
B60G 5/00

B62D 21/18
B62D 33/02
B62D 53/00
B62D 59/02
(11) EP3849886
(21) EP19860413.4
(47) 21.05.2025
(87) SE2019050834
19.03.2020
(22) 05.09.2019
(54) LOAD-CARRYING VEHICLE PART AND A WHEELED VEHICLE EQUIPPED WITH SUCH VEHICLE PART
(73) Komatsu Forest AB
(72) PETTERSSON, Henry
(31) 1851090
(32) 14.09.2018
(33) Sweden

(51) B62J 11/00
B62K 21/18
(11) EP4144624
(21) EP22184256.0
(47) 21.05.2025
(22) 12.07.2022
(54) SYSTEM FOR ATTACHING AN ACCESSORY TO THE FRONT OF A BICYCLE
(73) MPR GmbH & Co. KG
(72) Pürner, Marcus
(31) 102021123120
(32) 07.09.2021
(33) Germany

(51) B62M 1/12
B62M 1/16
B62M 1/32
A61G 5/02
(11) EP3960608
(21) EP21191799.2
(47) 21.05.2025
(22) 17.08.2021
(54) RACK-DRIVEN HUMAN POWERED VEHICLE
(73) Thompkins, Torek
(72) Thompkins, Torek
(31) 202017007671
(32) 31.08.2020
(33) United States of America

(51) B63B 21/00
E02B 3/26
B63B 59/02
(11) EP4065456
(21) EP20894757.2
(47) 21.05.2025
(87) IB2020061199
03.06.2021
(22) 27.11.2020
(54) MOORING ROBOT
(73) Ipalco BV
(72) BROWNE, Patrick
WORLEY, Peter
TOPLISS, Stephen
(31) 2019904497
(32) 28.11.2019
(33) Australia

(51) B63B 35/44
F03D 9/25
F03D 13/10
F03D 13/25
(11) EP4157709
(21) EP21814204.0
(47) 21.05.2025
(87) NO2021050132
02.12.2021
(22) 25.05.2021
(54) SYSTEM FOR AVOIDING DAMAGE TO POWER CABLES TO AND FROM AND WITHIN A FLOATING
(73) APL Norway AS
(72) HOVDE, Geir Olav
(31) 20200641
(32) 29.05.2020
(33) Norway

(51) B63B 79/10
B63B 79/20
B63B 79/30
(11) EP4144631
(21) EP21894357.9
(47) 21.05.2025
(87) JP2021037224
27.05.2022
(22) 07.10.2021
(54) ESTIMATION DEVICE, ESTIMATION METHOD, AND PROGRAM
(73) Mitsubishi Shipbuilding Co., Ltd.
(72) SUGIMURA Tadashi
MATSUMOTO Shunsaku
INOUE Soichiro
TERADA Shin
MIYAZAKI Satoshi
(31) 2020191656
(32) 18.11.2020
(33) Japan

(51) B63G 8/14
B63G 8/26
B63G 8/00
(11) EP4363306
(21) EP22744291.0
(47) 21.05.2025
(87) FR2022051275
05.01.2023
(22) 28.06.2022
(54) UPRIGHTING DEVICE FOR AN UNDERWATER VEHICLE
(73) Exail Robotics
(72) KERMORGANT, Hervé
(31) 2106967
(32) 29.06.2021
(33) France

(51) B63H 20/12
B63H 25/02
(11) EP3971081
(21) EP21196288.1
(47) 21.05.2025
(22) 13.09.2021
(54) MARINE VESSEL MANEUVERING SYSTEM AND CONTROL METHOD OF MARINE VESSEL
(73) Yamaha Hatsudoki Kabushiki Kaisha
(72) Nanjo, Morihiko
Oba, Noriyuki
Ikegaya, Yuji
(31) 2020154645
(32) 15.09.2020
(33) Japan

(51) B63H 23/24
B63H 23/32
(11) EP4219292
(21) EP22153993.5
(47) 21.05.2025
(22) 28.01.2022
(54) INTEGRATED PROPULSION AND STEERING SYSTEM
(73) JOST Group GmbH & Co KG
(72) Jost, Michael
Jost, Mike
Jost, Marc
Michau, Leigh

(51) B64C 11/38
B64C 11/44
F01D 7/00
F04D 29/32
F04D 25/02
F04D 25/06
(11) EP4408738
(21) EP22792857.9
(47) 21.05.2025
(87) FR2022051800
06.04.2023
(22) 26.09.2022
(54) MODULE FOR AN AIRCRAFT TURBINE ENGINE
(73) SAFRAN AIRCRAFT ENGINES
(72) FRANTZ, Caroline Marie
VERDIER, Bastien Pierre
RODA, Jean Charles Olivier
(31) 2110275
(32) 29.09.2021
(33) France

(51) B64C 21/10
B64C 23/04
H05H 1/24
F03D 80/00
(11) EP3950493
(21) EP20782464.0
(47) 21.05.2025
(87) JP2020015207
08.10.2020
(22) 02.04.2020
(54) FLOW CONTROL METHOD AND ROTARY WING UNIT
(73) Kawasaki Jukogyo Kabushiki Kaisha
Tohoku University
(72) YASUDA, Hidemasa
OCHI, Akio
HAYAMA, Kenji
TSUJIUCHI, Tomoka
NAKAKITA, Kazuyuki
NONOMURA, Taku
KOMURO, Atsushi
TAKASHIMA, Keisuke
(31) 2019070570
(32) 02.04.2019
(33) Japan

(51) B64C 25/06
B64C 25/34
B64C 25/62
(11) EP4382415
(21) EP22315307.3
(47) 21.05.2025
(22) 06.12.2022
(54) A ROTORCRAFT WITH A NON-RETRACTABLE WHEEL-TYPE LANDING GEAR

(73) AIRBUS HELICOPTERS DEUTSCHLAND GmbH
Airbus Helicopters
(72) Fink, Axel
Achard, Aurélien
Bertin, Didier

(51) B64C 29/00
(11) EP3873801
(21) EP19879843.1
(47) 21.05.2025
(87) AU2019000138
07.05.2020
(22) 01.11.2019
(54) TECHNIQUES FOR STORING, TRANSPORTING, AND OPERATING A UAV
(73) Textron Systems Australia Pty Ltd
(72) CRACKNELL, Steven N.
GLENK, Andrew R.
KERNEBONE, Peter A.
GARTH, James E.
BUGGELN, Martin F.
BAKER, Emily K.
KORMAS, Jack
(31) 2018904170
(32) 02.11.2018
(33) Australia

(51) B64C 29/00
F02K 1/36
B64D 33/04
B64D 27/14
F02K 1/00
F02K 1/28
B64C 15/02
B64C 15/12
(11) EP3877258
(21) EP19883153.9
(47) 21.05.2025
(87) US2019060786
14.05.2020
(22) 11.11.2019
(54) ADAPTIVE VERTICAL TAKE-OFF AND LANDING PROPULSION SYSTEM
(73) Jetoptera, Inc.
(72) EVULET, Andrei
SMALLWOOD, Tyler
(31) 201962839541 P
201962817448 P
201862758441 P
(32) 26.04.2019
12.03.2019
09.11.2018
(33) United States of America
United States of America
United States of America

(51) B64D 13/06
(11) EP4219310
(21) EP23153795.2
(47) 21.05.2025
(22) 27.01.2023
(54) ENVIRONMENTAL CONTROL SYSTEM INCLUDING HUMIDITY SENSOR
(73) Hamilton Sundstrand Corporation
(72) ARMY, Donald E.
MALJANIAN, JR., John M.
(31) 202217585791
(32) 27.01.2022
(33) United States of America

(51) B64D 13/06
B64D 27/24
B64D 27/02
(11) EP4230526
(21) EP23157612.5
(47) 21.05.2025
(22) 20.02.2023
(54) ENVIRONMENTAL CONTROL SYSTEMS
(73) RTX Corporation
(72) RETERSDORF, Alan F.
(31) 202217675191
(32) 18.02.2022
(33) United States of America

(51) B64D 25/00
F02K 9/40
B64D 17/72
B64D 1/16
B64C 15/14
B64D 17/80
F02K 9/00
(11) EP4063273
(21) EP22170940.5
(47) 21.05.2025
(22) 19.10.2018
(54) EMERGENCY LANDING OF AIRCRAFT
(73) Active Vtol Crash Prevention Limited
(72) SLOMAN, Roger Mark
(31) 201805159
201717267
(32) 29.03.2018
20.10.2017
(33) United Kingdom
United Kingdom

(51) B64D 25/14
B64C 1/14
(11) EP4255808
(21) EP21819457.9
(47) 21.05.2025
(87) EP2021083153
09.06.2022
(22) 26.11.2021
(54) AIRCRAFT DOOR ARCHITECTURE COMPRISING AN EMERGENCY ENERGY SOURCE
(73) Latecoere
(72) DEVILLEZ, Sébastien
(31) 2012739
(32) 05.12.2020
(33) France

(51) B64D 27/30
B64D 27/357
H01M 10/613
H01M 10/62
H02K 9/00
H02K 9/19
B64D 33/08
B64D 33/10
(11) EP4147977
(21) EP22195471.2
(47) 21.05.2025
(22) 13.09.2022
(54) THERMAL MANAGEMENT SYSTEM WITH DUAL CONDENSERS
(73) Eaton Intelligent Power Limited
(72) MAKHE, Sunil Madhukar
GUMASTE, Parag Ashok
MAITY, Parimal
GOKHALE, Manoj Prakash
JAIN, Rishabh Kumar
(31) 202111041292
(32) 14.09.2021
(33) India

(51) B64D 27/40
(11) EP4442577
(21) EP24162133.3
(47) 21.05.2025
(22) 07.03.2024
(54) JET ENGINE PYLON FOR ATTACHING AN AIRCRAFT ENGINE
(73) Airbus Operations (S.A.S.)
(72) COMBES, Pierre-Antoine
DE NICOLA, Marc
VIGNES, Jean-Baptiste
BERJOT, Michael
(31) 2303417
(32) 06.04.2023
(33) France

(51) B64D 45/00
B64C 9/16
B64C 9/22
(11) EP3995399
(21) EP21198831.6
(47) 21.05.2025
(22) 24.09.2021
(54) FLIGHT CONTROL SURFACE ACTUATION SYSTEMS INCLUDING SKEW DETECTION SYSTEMS AND ASSOCIATED METHODS
(73) The Boeing Company
(72) MITCHELL, Ira III
(31) 202063112070 P
(32) 10.11.2020
(33) United States of America

(51) B64D 47/02
F21V 7/06
(11) EP4230530
(21) EP22157469.2
(47) 21.05.2025
(22) 18.02.2022
(54) AIRCRAFT LIGHT AND AIRCRAFT COMPRISING THE SAME
(73) Goodrich Lighting Systems GmbH & Co. KG
(72) EBBERS, Thomas
SCHRÖDER, Lars Christian
KATZENMAYER, Markus

(51) B64G 1/64
B64G 1/24
(11) EP4276020
(21) EP23173170.4
(47) 21.05.2025
(22) 12.05.2023
(54) STACKED SPACECRAFT LAUNCH AND ORBIT RAISING
(73) Maxar Space LLC
(72) WU, Gordon Chun Kong
MARLOW, David
BALDWIN, Jeff Aaron
(31) 202318302754
202263341353 P
(32) 18.04.2023
12.05.2022
(33) United States of America
United States of America

(51) B65B 1/30
G07F 17/00
G07F 9/02
B65B 57/20
B65B 5/10
(11) EP4180340
(21) EP21885677.1
(47) 21.05.2025
(87) JP2021031580
05.05.2022
(22) 27.08.2021
(54) CHEMICAL AGENT SUPPLY DEVICE AND CHEMICAL AGENT SUPPLY METHOD
(73) PHC Holdings Corporation
(72) KONDO, Akira
HAMA, Hiroshi
(31) 2020179599
(32) 27.10.2020
(33) Japan

(51) B65B 9/22
B65B 9/20
B65B 5/10
(11) EP4400434
(21) EP23151531.3
(47) 21.05.2025
(22) 13.01.2023
(54) FILLING TUBE INSERTION DEVICE SYSTEM, METHOD FOR FASTENING A FILLING TUBE AND USE OF AN INSERTION DEVICE
(73) Becton Dickinson Rowa Germany GmbH
(72) Horten, Thomas

(51) B65C 9/18
B26D 1/00
B26D 1/45
B26D 5/08
B26D 7/00
B26D 7/26
(11) EP3825242
(21) EP20209039.5
(47) 21.05.2025
(22) 20.11.2020
(54) LABEL CUTTER
(73) Illinois Tool Works INC.
(72) CARTWRIGHT, Kevin
TAYLOR, Ian
CONNELL, Hugh
(31) 202009063
201916969
(32) 15.06.2020
21.11.2019
(33) United Kingdom
United Kingdom

(51) B65C 9/40
B65C 1/04
B65C 9/44
B65B 7/28
B65B 19/28
(11) EP3704029
(21) EP18796018.2
(47) 21.05.2025
(87) EP2018079755
09.05.2019
(22) 30.10.2018
(54) METHOD AND DEVICE FOR APPLYING LABELS TO CIGARETTE PACKS
(73) Focke & Co. (GmbH & Co. KG)
(72) ROESLER, Burkard
GERKEN, Tobias
BERGMANN-KRAMER, Jost
(31) 102017010642
102017010112
(32) 17.11.2017
02.11.2017
(33) Germany
Germany

(51) B65D 1/02
B29B 17/00
(11) EP4469360
(21) EP22844213.3
(47) 21.05.2025
(87) EP2022087896
12.10.2023
(22) 27.12.2022
(54) FLEXIBLE MATERIAL BOTTLE WITH A FOLDABLE PART AND FASTENING ELEMENT
(73) Paupers, Andrejs
(72) Paupers, Andrejs
(31) 220027
(32) 08.04.2022
(33) Latvia

(51) B65D 1/02
B65D 41/04
(11) EP3643632
(21) EP18821620.4
(47) 21.05.2025
(87) JP2018021755
27.12.2018
(22) 06.06.2018
(54) CONTAINER MOUTH, RESIN CONTAINER PROVIDED WITH CONTAINER MOUTH, AND PREFORM PROVIDED WITH CONTAINER MOUTH
(73) Suntory Holdings Limited
(72) SAKURAI Takuya
KATO Takuto
KOBAYASHI Toshiya
(31) 2017123442
(32) 23.06.2017
(33) Japan

(51) B65D 5/30
B65D 5/68
B65D 43/02
(11) EP4326631
(21) EP22724699.8
(47) 21.05.2025
(87) EP2022060647
27.10.2022
(22) 22.04.2022
(54) RAPID LID
(73) DS Smith Packaging Deutschland Stiftung & Co. KG
(72) KORTHALS, Daniel
(31) 102021110432
(32) 23.04.2021
(33) Germany

(51) B65D 25/04
B65D 43/02
(11) EP4335773
(21) EP23195760.6
(47) 21.05.2025
(22) 06.09.2023
(54) TRANSPORT CONTAINER FOR PREPARED FOOD
(73) Demir, Faruk
Gölge, Bahattin
Schuster-Engineering GmbH
(72) GÖLGE, Bahattin
(31) 202022105042 U
102022122727
(32) 07.09.2022
07.09.2022
(33) Germany
Germany

(51) B65D 41/48
B65D 47/08
B65D 55/16
(11) EP4188823
(21) EP21746754.7
(47) 21.05.2025
(87) EP2021070735
03.02.2022
(22) 23.07.2021
(54) CONTAINER CLOSURE HAVING A HINGE AND A GRIP PROJECTION
(73) BERICAP Holding GmbH
(72) KRAUTKRÄMER, Günter
(31) 102020119665
(32) 25.07.2020
(33) Germany

(51) B65D 47/20
B65D 77/06
(11) EP4436893
(21) EP22818256.4
(47) 21.05.2025
(87) EP2022081870
01.06.2023
(22) 15.11.2022
(54) CAP WITH VALVE FOR CARTRIDGE
(73) Unilever IP Holdings B.V.
(72) CHEN, Hao
ZHANG, Lixiao
(31) PCT/CN2021/132349
21215242
(32) 23.11.2021
16.12.2021
(33) World Intellectual Property Office (WIPO)
European Patent Office (EPO)

(51) B65D 71/46
B65D 71/00
B65D 71/42
(11) EP3666682
(21) EP19180439.2
(47) 21.05.2025
(22) 17.06.2019
(54) CARRIER FOR CONTAINERS
(73) Graphic Packaging International, LLC
(72) Smalley, Brian
(31) 201916426066
201962841449 P
201962817120 P
201962814412 P
201962810015 P
201962797585 P
201962796830 P
201862783752 P
201862779689 P
(32) 30.05.2019
01.05.2019
12.03.2019
06.03.2019
25.02.2019

28.01.2019
25.01.2019
21.12.2018
14.12.2018
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) B65D 77/04
B65D 85/10
B65D 5/62
(11) EP4377224
(21) EP22754429.3
(47) 21.05.2025
(87) EP2022071288
02.02.2023
(22) 28.07.2022
(54) METHOD TO MAKE A CONTAINER FOR CONSUMER GOODS AND CONTAINER FOR CONSUMER GOODS
(73) Philip Morris Products S.A.
(72) ANDROSENKO, Alexander
LORENZETTI, Cesare
(31) 21188237
(32) 28.07.2021
(33) European Patent Office (EPO)

(51) B65D 81/02
(11) EP3858757
(21) EP21153945.7
(47) 21.05.2025
(22) 28.01.2021
(54) DEVICE FOR WEDGING AN OBJECT MADE OF CELLULAR CARDBOARD AND CORRUGATED CARDBOARD AND CORRESPONDING PACKAGING BOX
(73) Smurfit Westrock France
(72) SANTOS, Eric
PUISSANT, Sabrina
(31) 2000823
(32) 28.01.2020
(33) France

(51) B65D 83/08
(11) EP4351990
(21) EP22732152.8
(47) 21.05.2025
(87) EP2022065282
15.12.2022
(22) 03.06.2022
(54) MENSTRUAL PRODUCT REFILLS
(73) Marguerite & Cie
(72) LE NOANE, Gaële
(31) 2102146
(32) 10.06.2021
(33) France

(51) B65D 83/14
A61B 17/12
A61M 5/178
A61J 1/20
A61M 39/22
A61M 5/31
(11) EP3419915
(21) EP17714287.4
(47) 21.05.2025
(87) IB2017051137
31.08.2017
(22) 27.02.2017
(54) DEVICE AND METHOD FOR DISPENSING FOAM
(73) Boston Scientific Medical Device Limited
(72) WRIGHT, David Dakin Iorwerth
FAULKNER, David, Ian
(31) 201603397
(32) 26.02.2016
(33) United Kingdom

(51) B65D 88/02
B65D 90/00
(11) EP3838798
(21) EP20211436.9
(47) 21.05.2025
(22) 03.12.2020
(54) CONTAINER, METHOD OF FORMING AN AGGLOMERATED CONTAINER
(73) The Boeing Company
(72) Grip, Robert Erik
(31) 201916720148
(32) 19.12.2019
(33) United States of America

(51) B65D 88/12
E04H 5/02
E04H 9/04
E04H 1/12
E04B 1/348
(11) EP3480135
(21) EP17200189.3
(47) 21.05.2025
(22) 06.11.2017
(54) MOBILE CONTAINER BUILDING FOR MILITARY, HUMANITARIAN AND/OR EXPEDITION-LIKE USE
(73) Kärcher Futuretech GmbH
(72) Andersen, S Harald Vige Teie
Popp, Thomas

(51) B65G 1/00
H05K 13/00
H05K 13/02
H05K 13/08
(11) EP4032834
(21) EP19945875.3
(47) 21.05.2025
(87) JP2019037123
25.03.2021
(22) 20.09.2019
(54) STORAGE
(73) Fuji Corporation
(72) MATSUMOTO Masanari
TANAKA Katsuaki
OKI Hideaki
KAWAGUCHI Masanori

(51) B65G 1/04
(11) EP4126709
(21) EP21713647.2
(47) 21.05.2025
(87) EP2021056997
07.10.2021
(22) 18.03.2021
(54) CONTAINER HANDLING VEHICLE
(73) Autostore Technology AS
(72) AUSTRHEIM, Trond
DJUVE, HEGGEBØ, Jørgen
(31) 20200380
(32) 30.03.2020
(33) Norway

(51) B65G 1/04
(11) EP4144670
(21) EP22192945.8
(47) 21.05.2025
(22) 30.08.2022
(54) ITEM MANIPULATOR
(73) Label Elettronica S.R.L.
(72) RAMI, Enrico
RAMI, Margherita
(31) 202100022739
(32) 02.09.2021
(33) Italy

(51) B65G 1/04
B65G 57/30
(11) EP4238898
(21) EP22159997.0
(47) 21.05.2025
(22) 03.03.2022
(54) BLOCK STORAGE ASSEMBLY
(73) Jungheinrich Aktiengesellschaft
(72) Becker, Michael
Cavelius, Jörg
Morawietz, Timm
Liebhaber, Markus

(51) B65G 1/04
B65G 57/30
B65G 60/00
(11) EP4337574
(21) EP23744392.4
(47) 21.05.2025
(87) EP2023069317
30.11.2023
(22) 12.07.2023
(54) SORTING DEVICE
(73) MARTISTEL INNOVATION FZCO
(72) SULTANOV, Oleg
RAZUMOV, Sergey
(31) 22184647
(32) 13.07.2022
(33) European Patent Office (EPO)

(51) B65G 1/137
(11) EP3865429
(21) EP21156483.6
(47) 21.05.2025
(22) 11.02.2021
(54) PICKING FACILITY
(73) Daifuku Co., Ltd.
(72) KIYOKAWA, Wataru
MINOO, Atsushi
KUSUBE, Hiroyuki
(31) 2020021777
(32) 12.02.2020
(33) Japan

(51) B65G 1/137
G07F 11/00
G07F 9/02
G07F 11/16
(11) EP4132869
(21) EP21717365.7
(47) 21.05.2025
(87) EP2021058503
14.10.2021
(22) 31.03.2021
(54) AUTOMATIC WAREHOUSE FOR STORING OBJECTS AND METHOD

FOR CONTROLLING AN AUTOMATIC WAREHOUSE
(73) Gebr. Willach GmbH
(72) WILLACH, Jens
(31) 102020109868
(32) 08.04.2020
(33) Germany

(51) B65G 13/00
B65G 47/74
H01M 10/04
(11) EP4269285
(21) EP22848301.2
(47) 21.05.2025
(87) CN2022106094
02.02.2023
(22) 15.07.2022
(54) FEEDING DEVICE AND BATTERY PRODUCTION APPARATUS
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) DAI, Liangzhen
XIE, Zhi
LI, Keqiang
HU, Jun
NI, Dajun
WEN, Zhihua
(31) 202110876177
(32) 30.07.2021
(33) China

(51) B65G 13/11
B65G 39/00
B65G 39/12
B65G 13/00
B65G 13/07
B65G 21/06
B65G 23/44
(11) EP4163234
(21) EP21382894.0
(47) 21.05.2025
(22) 05.10.2021
(54) METHOD FOR ASSEMBLING A ROLLER CONVEYOR, AND USE OF A TENSIONING DEVICE IN SUCH A METHOD
(73) Vanderlande Industries B.V.
(72) Pascual Pinedo, Eduardo
Schneeberger, Christian
Sanz Juárez, Victor
Serrano González, Iván
Feliu Sánchez, Jaume

(51) B65G 17/34
B65G 43/02
B65G 43/06
B65G 23/16
(11) EP3956247
(21) EP21715774.2
(47) 21.05.2025
(87) DE2021200030
10.09.2021
(22) 04.03.2021
(54) DRIVE DEVICE FOR A CONVEYING CARRIAGE OF A DISTRIBUTING CONVEYOR
(73) Gebhardt Fördertechnik GmbH
Körber Supply Chain GmbH
(72) GEBHARDT, Marco
DEMIR, Halit
(31) 102020202924
(32) 06.03.2020
(33) Germany

(51) B65G 17/38
A01D 46/24
(11) EP4053049
(21) EP21178535.7
(47) 21.05.2025
(22) 09.06.2021
(54) FRUIT OR VEGETABLE TRANSPORT SYSTEM
(73) Rad-Hub S.r.l.
(72) TOSI, Fabrizio
(31) 202100004976
(32) 03.03.2021
(33) Italy

(51) B65G 21/18
B65G 23/14
C23C 8/36
F16G 13/06
F27B 9/24
C23C 8/32
C23C 8/26
C21D 1/06
C21D 1/74
C21D 9/00
(11) EP3620408
(21) EP19194507.0
(47) 21.05.2025
(22) 30.08.2019
(54) HARDENED COMPONENTS IN A CONVEYOR DRIVE SYSTEM
(73) John Bean Technologies Corporation
(72) Morey, Owen Eugene
Stang, Scott E.
(31) 201862726039 P
(32) 31.08.2018
(33) United States of America

(51) B65G 21/20
(11) EP4470950
(21) EP24173129.8
(47) 21.05.2025
(22) 29.04.2024
(54) SEALING HOUSING ELEMENT FOR THE MAGNETS OF A SUPPORT AND GUIDE MAGNETIC STRUCTURE FOR CONVEYORS WITH ARTICULATED LINKS
(73) Movex S.p.A.
(72) MARSETTI, Sergio
MARSETTI, Matteo
(31) 202300011184
(32) 01.06.2023
(33) Italy

(51) B65G 27/02
B65G 27/24
B65G 43/02
G05B 23/02
(11) EP4139233
(21) EP21704169.8
(47) 21.05.2025
(87) CH2021050002
28.10.2021
(22) 28.01.2021
(54) DRIVE DEVICE FOR A VIBRATORY CONVEYOR, USE OF THE DRIVE DEVICE IN A VIBRATORY CONVEYOR AND METHOD FOR CHECKING THE FUNCTIONALITY OF A CORRESPONDING VIBRATORY CONVEYOR
(73) Krämer AG
(72) RÜTTI, Mario
FRECH, Tobias
FISCHER, Horst
(31) 4662020
(32) 21.04.2020
(33) Switzerland

(51) B65G 43/02
B65G 39/00
(11) EP3704043
(21) EP18873288.7
(47) 21.05.2025
(87) US2018058302
09.05.2019
(22) 30.10.2018
(54) CONVEYOR IDLER MONITORING APPARATUS, SYSTEMS, AND METHODS
(73) Superior Industries, Inc.
(72) BAGGIO, Osvaldo
MARTINELLI, Eduardo
(31) 201762579026 P
(32) 30.10.2017
(33) United States of America

(51) B65G 45/16
B08B 1/16
(11) EP3313758
(21) EP16818444.8
(47) 21.05.2025
(87) US2016037507
05.01.2017
(22) 15.06.2016
(54) SELF-BIASING SCRAPER FOR A CONVEYOR BELT
(73) Laitram, L.L.C.
(72) MA, Ruizhe
(31) 201562185845 P
(32) 29.06.2015
(33) United States of America

(51) B65G 45/18
B65G 45/22
B65G 45/26
B65G 17/08
(11) EP3921254
(21) EP20751951.3
(47) 21.05.2025
(87) SE2020050114
13.08.2020
(22) 06.02.2020
(54) CHAIN CLEANING MODULE, CONVEYOR COMPRISING SUCH A CHAIN CLEANING MODULE AND METHOD FOR CLEANING A CONVEYOR CHAIN
(73) FlexLink AB
(72) FERLINI, Gianluca
(31) 1950143
(32) 07.02.2019
(33) Sweden

(51) B65G 47/244
B65C 9/04
B65G 54/02
(11) EP4126718
(21) EP21712910.5
(47) 21.05.2025
(87) IB2021052279

30.09.2021
(22) 18.03.2021
(54) CONVEYING SYSTEM AND METHOD OF CONVEYING A PLURALITY OF PRODUCTS
(73) Fuji Seal International, Inc.
(72) ZANETTI, Stefano
ASNICAR, Pietro
SABBADINI, Andrea
(31) 101702
(32) 25.03.2020
(33) Luxembourg

(51) B65G 47/68
B65G 47/70
(11) EP4118016
(21) EP21710633.5
(47) 21.05.2025
(87) NL2021050156
16.09.2021
(22) 08.03.2021
(54) FLOW CONTROL OF PRODUCT TRANSPORT
(73) Rexnord FlatTop Europe B.V.
(72) MENKE, Cornelis Hendrik Mijndert
(31) 2025084
(32) 09.03.2020
(33) Netherlands

(51) B65G 47/90
B65G 51/28
B25J 9/04
B25J 15/08
B25J 21/00
(11) EP4121254
(21) EP21713637.3
(47) 21.05.2025
(87) EP2021056930
23.09.2021
(22) 18.03.2021
(54) METHOD FOR AUTOMATICALLY FILLING A TRANSPORT BOX AND MANIPULATOR DEVICE
(73) Swisslog Healthcare GmbH
(72) HARTMANN, Yanneck
(31) 102020203554
(32) 19.03.2020
(33) Germany

(51) B65G 53/50
B65G 53/04
B65G 47/19
B65G 69/06
B65G 53/46
(11) EP4049951
(21) EP21721383.4
(47) 21.05.2025
(87) CN2021072074
21.07.2022
(22) 15.01.2021
(54) FEEDING MACHINE CAPABLE OF STABILIZING FLOW
(73) Henan Fengbo Automation Co., Ltd.
(72) YANG, Dezhu
CHEN, Lixin
LIU, Wenfei

(51) B65G 54/02
(11) EP4180371
(21) EP22207110.2
(47) 21.05.2025
(22) 14.11.2022
(54) TRANSPORT OF ARTICLES OF DIFFERENT FORMATS
(73) KRONES AG
(72) NEUBAUER, Michael
(31) 102021129702
(32) 15.11.2021
(33) Germany

(51) B65G 57/03
B65G 1/137
(11) EP4053054
(21) EP22154783.9
(47) 21.05.2025
(22) 02.02.2022
(54) DEVICE AND METHOD FOR PICKING LOADED MATERIAL
(73) Winkel GmbH
(72) Loupas, Athanasios
Weisser, Alexander
Bernhart, Jörg
(31) 102021202004
(32) 02.03.2021
(33) Germany

(51) B65H 3/68
B65H 3/48
(11) EP4067273
(21) EP22163234.2
(47) 21.05.2025
(22) 21.03.2022
(54) SHEET FEEDING APPARATUS AND IMAGE FORMING APPARATUS
(73) Ricoh Company, Ltd.
(72) HASHIMOTO, Masato
(31) 2021060759
(32) 31.03.2021
(33) Japan

(51) B65H 20/00
F26B 25/00
B05B 3/02
H01M 4/04
F26B 25/02
F26B 13/00
F27B 9/24
(11) EP4257525
(21) EP22902473.2
(47) 21.05.2025
(87) CN2022131126
31.08.2023
(22) 10.11.2022
(54) BELT THREADING DEVICE AND BAKING APPARATUS
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) WU, Zhiyang
JIN, Peng
LI, Lijun
LIU, Chaonan
(31) 202220424505 U
(32) 28.02.2022
(33) China

(51) B65H 27/00
H01M 4/04
H01M 10/04
H01M 50/531
(11) EP4254531
(21) EP22865033.9
(47) 21.05.2025
(87) KR2022013005
09.03.2023
(22) 31.08.2022
(54) ELECTRODE DRIVING ROLLER AND NOTCHING APPARATUS COMPRISING SAME
(73) LG Energy Solution, Ltd.
(72) LEE, Younghak
KIM, Jun Wan
LEE, Hak Sik
(31) 20220109300
20210115349
(32) 30.08.2022
31.08.2021
(33) Korea (Republic)
Korea (Republic)

(51) B65H 29/04
B26D 7/06
(11) EP4079669
(21) EP22020180.0
(47) 21.05.2025
(22) 19.04.2022
(54) APPARATUS FOR HANDLING SINGLE-FACED CORRUGATED CARDBOARD SHEETS
(73) Bellucci, Maurizio
(72) Bellucci, Maurizio
(31) 202100009782
(32) 19.04.2021
(33) Italy

(51) B65H 54/28
(11) EP4153518
(21) EP21732461.5
(47) 21.05.2025
(87) FR2021050848
25.11.2021
(22) 17.05.2021
(54) METHOD AND SYSTEM FOR DETECTING A TRAVERSING DEFECT
(73) Conductix Wampfler France
(72) CENNI, Hugues
(31) 2005125
(32) 19.05.2020
(33) France

(51) B65H 67/06
D01H 9/18
(11) EP4011814
(21) EP21211387.2
(47) 21.05.2025
(22) 30.11.2021
(54) APPARATUS FOR MOVING BOBBINS AND TUBES FOR A TEXTILE PLANT, AND A TEXTILE PLANT COMPRISING SUCH APPARATUS
(73) Savio Macchine Tessili S.p.A.
(72) MORO, Mauro
MORINI, Giuseppe
BARBARITO, Carmine
(31) 202000030203
(32) 09.12.2020
(33) Italy

(51) B66B 1/34
(11) EP4452810
(21) EP22840122.0
(47) 21.05.2025
(87) EP2022086641
29.06.2023
(22) 19.12.2022

(54) LANDING FLOOR POSITION DETECTION DEVICE OF AN ELEVATOR SYSTEM
(73) INVENTIO AG
(72) BIRRER, Eric
(31) 21217251
(32) 23.12.2021
(33) European Patent Office (EPO)

(51) B66B 1/46
B66B 1/24
B66B 1/34
(11) EP3882199
(21) EP20215733.5
(47) 21.05.2025
(22) 18.12.2020
(54) SPECIALIZED, PERSONALIZED AND ENHANCED ELEVATOR CALLING FOR ROBOTS & CO-BOTS
(73) Otis Elevator Company
(72) NICHOLS, Stephen Richard
KEENAN, JR., Michael P.
SORRELS, James
WONG, Sam
GEER, Kayla
(31) 202016819233
(32) 16.03.2020
(33) United States of America

(51) B66B 5/00
(11) EP3628626
(21) EP19206785.8
(47) 21.05.2025
(22) 06.07.2018
(54) ELEVATOR SYSTEM
(73) OTIS Elevator Company
(72) TRCKA, Nikola
SUDI, Sandeep
LIASKAS, Peter
LOVETT, Teems E.
BRAUNWART, Paul R.
KOUSHIK, Surdarshan N.
(31) 201762529792 P
(32) 07.07.2017
(33) United States of America

(51) B66B 5/00
B66D 5/30
B66D 5/14
(11) EP3964469
(21) EP20194620.9
(47) 21.05.2025
(22) 04.09.2020
(54) ELEVATOR INSTALLATION AND METHOD FOR MONITORING A BRAKE OF AN ELEVATOR INSTALLATION, AND BRAKE OF A DRIVE OF AN ELEVATOR INSTALLATION
(73) INVENTIO AG
(72) AMMON, Urs

(51) B66B 5/02
B66B 5/18
(11) EP3819245
(21) EP19208023.2
(47) 21.05.2025
(22) 08.11.2019
(54) ELEVATOR
(73) KONE Corporation
(72) Kattainen, Ari

(51) B66B 11/02
(11) EP4422997
(21) EP23732214.4
(47) 21.05.2025
(87) IB2023055520
11.04.2024
(22) 30.05.2023
(54) ELEVATOR CAR AND METHOD FOR MOUNTING A PLURALITY OF PANELS ON A PLATFORM OF AN ELEVATOR CAR
(73) Wittur Holding GmbH
(72) MORANDUZZO, Alexandro
VATANSEVER, Murat
KARACA, Omer
(31) 202200020706
(32) 07.10.2022
(33) Italy

(51) B66B 13/22
(11) EP4324780
(21) EP22190417.0
(47) 21.05.2025
(22) 15.08.2022
(54) ELEVATOR SAFETY DEVICES
(73) Otis Elevator Company
(72) RUHNKE, Jan

(51) B66B 19/00
B66B 7/02
(11) EP4429992
(21) EP22821307.0
(47) 21.05.2025
(87) EP2022079748
19.05.2023
(22) 25.10.2022
(54) RAIL SYSTEM FOR A LIFT SYSTEM AND METHOD FOR THE PRODUCTION OF SAME
(73) INVENTIO AG
(72) WEBER, Stefan
WEIBEL, André
HESS, Stephan
(31) 21207947
(32) 12.11.2021
(33) European Patent Office (EPO)

(51) B66C 13/06
B66C 1/10
(11) EP4021838
(21) EP20760888.6
(47) 21.05.2025
(87) EP2020074108
04.03.2021
(22) 28.08.2020
(54) METHOD FOR LIFTING AN OBJECT FROM A VESSEL DECK
(73) DEME Offshore BE NV
(72) STEMPINSKI, Florian Uwe
BAERT, Benjamin Ward
VANNIEUWENHUYSE, Kenneth Gerard
(31) 201905565
(32) 29.08.2019
(33) Belgium

(51) B66C 19/00
B63C 3/06
(11) EP4273084
(21) EP23170889.2
(47) 21.05.2025
(22) 29.04.2023
(54) MOBILE BOAT HOIST EQUIPPED WITH RETRACTABLE SIDE MEMBERS
(73) Step Technology s.r.l.
(72) Bonamin, Stefano
Pavan, Andrea
(31) 202200008852
(32) 02.05.2022
(33) Italy

(51) B66C 19/00
B66C 15/00
H02G 13/00
(11) EP4414313
(21) EP23167667.7
(47) 21.05.2025
(22) 13.04.2023
(54) GANTRY CRANE COMPRISING LIGHTNING PROTECTION DEVICE, MACHINE AND USE METHOD THEREOF
(73) China Three Gorges Corporation
China Three Gorges Construction Engineering Corporation
(72) TAN, Zhiguo
GAO, Peng
ZHOU, Shaowu
DU, Jianguo
CHEN, Xiang
MA, Yukui
DING, Xilin
XIAO, Xinming
CAI, Weijie
(31) 202310104279
(32) 07.02.2023
(33) China

(51) B66C 23/52
B66C 23/62
B66C 23/66
B66C 23/82
(11) EP4313838
(21) EP22717080.0
(47) 21.05.2025
(87) EP2022057219
29.09.2022
(22) 18.03.2022
(54) OFFSHORE CRANE VESSEL AND METHOD FOR OPERATING THE OFFSHORE CRANE VESSEL
(73) Itrec B.V.
(72) ROODENBURG, Joop
NOUWENS, Ronny Lambertus Waltherus
(31) 2027839
(32) 25.03.2021
(33) Netherlands

(51) B66D 1/74
(11) EP4347475
(21) EP22715796.3
(47) 21.05.2025
(87) SE2022050328
01.12.2022
(22) 01.04.2022
(54) A CRANK ARRANGEMENT
(73) Seldén Mast AB
(72) LINDSTRÖM, Mathias
ADIELS, Björn
HOLT, William
(31) 2150687
(32) 28.05.2021
(33) Sweden

(51) B66F 9/06
(11) EP3620422

(21) EP19184898.5
(47) 21.05.2025
(22) 08.07.2019
(54) DRIVERLESS TRANSPORTER
(73) Liebherr-Verzahntechnik GmbH
(72) Mattern, Thomas
(31) 102018121743
(32) 06.09.2018
(33) Germany

(51) B66F 9/075
(11) EP4137441
(21) EP22188527.0
(47) 21.05.2025
(22) 03.08.2022
(54) INDUSTRIAL TRUCK WITH LOAD WHEEL UNIT
(73) Jungheinrich Aktiengesellschaft
(72) Schüler, Michael
Lohmann, Helmut
Brunckhorst, Holger
Krenzin, Marcel
(31) 102021121221
(32) 16.08.2021
(33) Germany

(51) B66F 11/04
F16N 31/00
E05B 15/00
E05B 65/46
E05C 3/04
E05B 63/00
(11) EP4114785
(21) EP21714753.7
(47) 21.05.2025
(87) US2021021212
10.09.2021
(22) 05.03.2021
(54) A LEAK CONTAINMENT SYSTEM FOR A LIFT AND A LIFT WITH SUCH A SYSTEM
(73) Oshkosh Corporation
(72) LIANG, Bin
ABRAMS, Robert
WANG, Wencai
ROSENCRANCE, Devin
STOUFFER, Michael
(31) 202062986004 P
(32) 06.03.2020
(33) United States of America

(51) B66F 13/00
F16M 11/10
F16M 11/22
F16M 11/28
B60S 9/22
(11) EP3617131
(21) EP19193867.9
(47) 21.05.2025
(22) 27.08.2019
(54) YOKE, SYSTEM FOR LIFTING AND SETTING DOWN COMPRISING SUCH A YOKE AND METHOD FOR LIFTING AND SETTING DOWN OF A VEHICLE
(73) Arquus
(72) HANNA, Charbel
HERUBEL, Laurent
(31) 1857706
(32) 28.08.2018
(33) France

(51) B66F 17/00
(11) EP4180380
(21) EP21208514.6
(47) 21.05.2025
(22) 16.11.2021
(54) METHOD FOR HANDLING OBSTACLES IN AN INDUSTRIAL TRUCK AND INDUSTRIAL TRUCK
(73) Jungheinrich Aktiengesellschaft
(72) ALTMANN, Tony
ROCKEL, Sebastian
HEISE, Sven-Ole
QUICKERT, Steffen
FISCHER, Christian

(51) B67C 3/00
(11) EP4046959
(21) EP22154880.3
(47) 21.05.2025
(22) 03.02.2022
(54) CONTAINER TREATMENT SYSTEM AND METHOD FOR ITS OPERATION
(73) KRONES AG
(72) ZIEGLER, Manfred
BOCK, Tobias
HERRMANN, Florian
(31) 102021103744
(32) 17.02.2021
(33) Germany

(51) B67C 3/26
(11) EP4335811
(21) EP23196707.6
(47) 21.05.2025
(22) 12.09.2023
(54) FILLING VALVE GROUP FOR A FILLING MACHINE
(73) Gruppo Bertolaso S.p.A.
(72) MAZZON, Giovanni
RIGONI, Lorenzo
STELLA, Gianluca
GALIMBERTI, Enrico
(31) 202200018600
(32) 12.09.2022
(33) Italy

(51) B67D 1/04
A47J 31/46
B65D 77/06
B67D 1/08
B67D 1/00
(11) EP3400192
(21) EP17736241.5
(47) 21.05.2025
(87) US2017012159
13.07.2017
(22) 04.01.2017
(54) SELF-PRESSURIZED CONCENTRATE SOURCE FOR POST-MIX EQUIPMENT
(73) Pepsico, Inc.
(72) NACHAWATI, Maher
RODRIGUEZ, Maximiliano
(31) 201614990543
(32) 07.01.2016
(33) United States of America

(51) B67D 3/04
(11) EP4405292
(21) EP22765237.7
(47) 21.05.2025
(87) IT2022050224
30.03.2023
(22) 08.08.2022
(54) ANTI-TAMPERING LIQUID DISPENSING TAP BY OPENING AN INTEGRATED AND MANUALLY BOUND ANTI-COUNTERFEIT SEAL
(73) Vitop Moulding S.R.L.
(72) NINI, Diego
(31) 202100024128
(32) 21.09.2021
(33) Italy

(51) B67D 7/00
B67D 7/04
B67D 7/06
B67D 7/08
G06Q 20/18
G06Q 20/20
G07F 13/00
G07F 15/00
G06Q 30/06
G06Q 40/00
G07F 13/02
(11) EP3490927
(21) EP17835264.7
(47) 21.05.2025
(87) US2017044165
01.02.2018
(22) 27.07.2017
(54) FUEL DISPENSING ENVIRONMENT UTILIZING FUELING POSITION AVAILABILITY INDICATOR SYSTEM
(73) Gilbarco Inc.
(72) CARAPELLI, Giovanni
LIEBAL, Michael Charles
PEARCE, Andrew
MCNINCH, Wayne
(31) 201715660370
201762481639 P
201662368063 P
(32) 26.07.2017
04.04.2017
28.07.2016
(33) United States of America
United States of America
United States of America

(51) B81B 3/00
(11) EP3620429
(21) EP18193066.0
(47) 21.05.2025
(22) 06.09.2018
(54) MEMS MEMBRANE TRANSDUCER AND METHOD FOR PRODUCING SAME
(73) Infineon Technologies AG
(72) Klein, Wolfgang
Meyer, Markus
Zogal, Karolina

(51) B81B 3/00
(11) EP3770111
(21) EP19212914.6
(47) 21.05.2025
(22) 02.12.2019
(54) PIEZOELECTRIC MEMS DEVICE WITH CANTILEVER STRUCTURES
(73) ROSEMOUNT AEROSPACE INC.
(72) DOSEV, Dosi
POTASEK, David P.
CHILDRESS, Marcus Allen
(31) 201916517944
(32) 22.07.2019

(33) United States of America

(51) C01B 3/34
F22B 1/18
F24H 1/14
F28D 7/02
F28D 7/08
F28D 21/00
F28F 9/22
F24H 3/08
H01M 8/04014
H01M 8/04007
H01M 8/0612
H01M 8/0662
F24D 101/30
F24D 103/13
(11) EP3787082
(21) EP19793142.1
(47) 21.05.2025
(87) KR2019005006
31.10.2019
(22) 25.04.2019
(54) FUEL CELL SYSTEM
(73) MICO POWER LTD
(72) CHOI, Song Ho
LEE, Jun Woo
(31) 20180048765
(32) 26.04.2018
(33) Korea (Republic)

(51) C01B 25/45
H01M 4/36
H01M 4/58
(11) EP3279137
(21) EP16772447.5
(47) 21.05.2025
(87) JP2016058975
06.10.2016
(22) 22.03.2016
(54) LITHIUM MANGANESE PHOSPHATE NANOPARTICLES AND METHOD FOR MANUFACTURING SAME, CARBON-COATED LITHIUM MANGANESE PHOSPHATE NANOPARTICLES, CARBON-COATED LITHIUM MANGANESE PHOSPHATE NANOPARTICLE GRANULATED BODY, AND LITHIUM ION CELL
(73) Toray Industries, Inc.
(72) TSUJI, Hironobu
KUBOTA, Yasuo
KAWAMURA, Hiroaki
TAMAKI, Eiichiro
TABAYASHI, Miyuki
(31) 2015072332
(32) 31.03.2015
(33) Japan

(51) C01B 33/037
(11) EP3921282
(21) EP19714411.6
(47) 21.05.2025
(87) EP2019057772
01.10.2020
(22) 27.03.2019
(54) METHOD FOR PRODUCING TECHNICAL SILICON
(73) Wacker Chemie AG
(72) RIMBÖCK, Karl-Heinz
MAUTNER, Konrad

(51) C01B 33/113
C04B 28/00
C04B 111/28
(11) EP4201882
(21) EP22215437.9
(47) 21.05.2025
(22) 21.12.2022
(54) MONOLITHIC SILICA ARTICLE AND ITS PRODUCTION
(73) LST Luft-, Sanitar- und Klimatechnik GmbH
(72) Pfau, Hartmut
(31) 102021134244
(32) 22.12.2021
(33) Germany

(51) C01F 11/46
C01F 11/18
C01C 1/04
(11) EP3558873
(21) EP17817055.1
(47) 21.05.2025
(87) GB2017053697
14.06.2018
(22) 08.12.2017
(54) RELEASING IMPURITIES FROM A CALCIUM-BASED MINERAL
(73) Carbon Cycle Limited
(72) MIRZA, Waqas
FLORENCE, Stephen
THAXTER, Ian
SEVIER, David
(31) 201714927
201621017
(32) 15.09.2017
09.12.2016
(33) United Kingdom
United Kingdom

(51) C01G 9/02
A61K 8/27
A61Q 1/00
A61Q 17/04
(11) EP3640214
(21) EP18816985.8
(47) 21.05.2025
(87) JP2018022073
20.12.2018
(22) 08.06.2018
(54) METHOD FOR PRODUCING HEXAGONAL PLATE-SHAPED ZINC OXIDE
(73) Sakai Chemical Industry Co., Ltd.
(72) YOSHIDA, Ryohei
HASHIMOTO, Mitsuo
MURAI, Kazutaka
(31) 2017115411
(32) 12.06.2017
(33) Japan

(51) C01G 19/02
B01J 37/02
C01B 33/14
C01G 23/053
C01G 25/02
C08B 31/00
C08J 5/00
C09D 7/62
C09D 7/40
D21H 17/28
C08J 3/20
C08J 3/21
C08L 3/08
C08L 5/08
C09D 1/00
C09D 5/00
D21H 19/54
(11) EP4003915
(21) EP20747465.1
(47) 21.05.2025
(87) GB2020051783
04.02.2021
(22) 24.07.2020
(54) SOLS, MULTIFUNCTIONAL APPLICATIONS OF SOLS, AND ASSOCIATED PRODUCTS
(73) Green Sol-gel Ltd
(72) ISMAIL, Fanya
(31) 202001928
201910748
201910744
PCT/GB2020/050325
(32) 12.02.2020
26.07.2019
26.07.2019
12.02.2020
(33) United Kingdom
United Kingdom
United Kingdom
World Intellectual Property Office (WIPO)

(51) C01G 33/00
H01M 4/485
(11) EP4368576
(21) EP23151436.5
(47) 21.05.2025
(22) 13.01.2023
(54) CORE-SHELL PARTICLE AND LITHIUM ION BATTERY
(73) Industrial Technology Research Institute
(72) KO, Kuan-Yu
TSENG, Chun-Chi
LIU, Chia-Erh
(31) 111143108
(32) 11.11.2022
(33) Taiwan, Chinese Taipei

(51) C01G 45/02
H01M 4/36
H01M 4/505
B82Y 30/00
(11) EP4059893
(21) EP20887728.2
(47) 21.05.2025
(87) JP2020041704
20.05.2021
(22) 09.11.2020
(54) WURTZITE-TYPE MANGANESE OXIDE PARTICLES AND METHOD FOR PRODUCING SAME
(73) STANLEY ELECTRIC CO., LTD.
(72) KAZAMA, Takuya
TAMURA, Wataru
MIYAKE, Yasuyuki
MORIYAMA, Kenji
MURAMATSU, Atsushi
KANIE, Kiyoshi
(31) 2019205644
(32) 13.11.2019
(33) Japan

(51) C02F 1/44
B01D 61/36

C10L 3/10
C02F 101/38
C02F 101/10
C02F 103/18
(11) EP3983341
(21) EP20740391.6
(47) 21.05.2025
(87) IB2020055655
24.12.2020
(22) 17.06.2020
(54) PROCESS FOR CONCENTRATING AMINE WATER
(73) ENI S.p.A.
(72) TAGLIABUE, Marco
CATTANEO, Claudia
COMITE, Antonio
(31) 201900009207
(32) 17.06.2019
(33) Italy

(51) C02F 1/52
C02F 103/00
C02F 103/28
C02F 1/66
(11) EP3752465
(21) EP19751666.9
(47) 21.05.2025
(87) SE2019050118
15.08.2019
(22) 12.02.2019
(54) METHOD OF OPTIMIZING THE CHEMICAL PRECIPITATION PROCESS IN WATER TREATMENT PLANTS AND WASTE WATER TREATMENT PLANTS
(73) Ulmert, Hans David Staffan
(72) Ulmert, Hans David Staffan
(31) 1800035
(32) 12.02.2018
(33) Sweden

(51) C02F 1/70
C02F 3/34
C02F 103/06
C02F 101/36
C02F 1/44
C02F 3/28
(11) EP2640667
(21) EP11841259.2
(47) 21.05.2025
(87) US2011060785
24.05.2012
(22) 15.11.2011
(54) COMPOSITIONS FOR CONVERTING CONTAMINANTS
(73) Archer Daniels Midland Company
Jrw Bioremediation, Llc
(72) BASEETH, Shireen
SEBREE, Bruce
SMITH, Donovan
ISENHOUR, Gwyn
(31) 413761 P
(32) 15.11.2010
(33) United States of America

(51) C02F 1/72
B01J 23/24
B01J 23/28
B01J 23/881
C02F 1/32
C02F 101/30
C02F 101/32
C02F 103/14
C02F 103/30
C02F 103/34
C02F 103/36
(11) EP3691999
(21) EP18773783.8
(47) 21.05.2025
(87) EP2018076551
11.04.2019
(22) 29.09.2018
(54) USE OF KEPLERATE TYPE POLYOXYMOLYBDATES FOR DECONTAMINATING AQUATIC ENVIRONMENTS
(73) Technische Universität Berlin
(72) DRIESS, Matthias
SCHOMÄCKER, Reinhard
SOMENATH, Garai
GROSS, Martin
ACHARJYA, Amitava
SCHWARZE, Michael
MENEZES, Prashant
(31) 17195084
(32) 05.10.2017
(33) European Patent Office (EPO)

(51) C02F 3/12
C02F 3/28
C02F 3/34
C02F 3/00
(11) EP3549916
(21) EP19171994.7
(47) 21.05.2025
(22) 15.03.2011
(54) USE OF A TREATMENT BATCH COMPRISING MICROBES TO IMPROVE SLUDGE REMOVAL AND MAINTAIN EFFLUENT QUALITY IN A WASTEWATER TREATMENT PROCESS
(73) Whiteman, G. Robert
(72) Whiteman, G. Robert
(31) 69691910
(32) 29.01.2010
(33) United States of America

(51) C02F 9/00
C02F 103/02
C02F 103/16
C21D 8/00
C02F 1/00
C02F 1/40
C02F 1/48
B22D 11/22
F27D 9/00
(11) EP4479351
(21) EP23710462.5
(47) 21.05.2025
(87) IB2023051836
07.09.2023
(22) 28.02.2023
(54) STEEL PLANT WITH DIRECT COOLING WATER TREATMENT CIRCUIT AND RELATED PROCESS
(73) DANIELI & C. OFFICINE MECCANICHE S.P.A.
(72) NARDELLA, Antonio
FABIANI, Massimo
(31) 202200003797
(32) 01.03.2022
(33) Italy

(51) C03B 20/00
C03B 33/08
B23K 26/38
B23K 26/402
B23K 103/16
B23K 103/00
(11) EP4039659
(21) EP20871500.3
(47) 21.05.2025
(87) JP2020035379
08.04.2021
(22) 18.09.2020
(54) HEAT-REFLECTING MEMBER, AND METHOD FOR MANUFACTURING GLASS MEMBER HAVING HEAT-REFLECTING LAYER INCLUDED THEREIN
(73) Shin-Etsu Quartz Products Co., Ltd.
Heraeus Quarzglas GmbH & Co. KG
(72) YAMAGUCHI, Kazuhiro
FUJITA, Daiki
HARADA, Yoshihiro
SEGAWA, Toru
WATANABE, Tomonori
(31) 2019179740
(32) 30.09.2019
(33) Japan

(51) C03B 37/027
C03B 37/029
C03B 37/03
(11) EP4253336
(21) EP23000048.1
(47) 21.05.2025
(22) 27.03.2023
(54) IN-TOWER OPTICAL FIBER BENDING AND ASSOCIATED APPARATUS
(73) Sterlite Technologies Limited
(72) Badri, Gomatam
(31) 202211019367
(32) 31.03.2022
(33) India

(51) C03C 3/064
C03C 3/12
C03C 8/02
C03C 8/24
C03C 27/04
E06B 3/66
(11) EP4412965
(21) EP23809920.4
(47) 21.05.2025
(87) US2023077851
30.05.2024
(22) 26.10.2023
(54) VACUUM INSULATED PANEL WITH TELLURIUM OXIDE AND/OR VANADIUM OXIDE INCLUSIVE SEAL
(73) Luxwall, Inc.
(72) THOMSEN, Scott V.
(31) 202318376483
202363540729 P
202263427670 P
202263427661 P
202263427657 P
202263427645 P
(32) 04.10.2023
27.09.2023
23.11.2022

23.11.2022
23.11.2022
23.11.2022
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America
(51) C03C 3/083
C03C 3/085
C03C 11/00
C04B 14/24
C04B 26/02
C04B 28/00
C04B 28/02
C04B 28/14
C09K 8/473
(11) EP3670459
(21) EP20150082.4
(47) 21.05.2025
(22) 20.12.2016
(54) CHEMICAL COMPOSITION FOR PRODUCTION OF HOLLOW SPHERICAL GLASS PARTICLES WITH HIGH COMPRESSIVE STRENGTH
(73) Omya International AG
(72) Isaev, Alexander
(31) 15201520
(32) 21.12.2015
(33) European Patent Office (EPO)

(51) C03C 8/16
C03C 14/00
C03C 17/36
C03C 27/10
(11) EP4416112
(21) EP22802063.2
(47) 21.05.2025
(87) EP2022078075
20.04.2023
(22) 10.10.2022
(54) METHOD FOR OBTAINING CURVED LAMINATED GLAZING
(73) Saint-Gobain Sekurit France
(72) TAN, Jun
JAMART, Juliette
FLAMARY-MESPOULIE, Florian
MA, Jun
(31) 2110796
(32) 12.10.2021
(33) France

(51) C03C 23/00
C03C 4/00
C03C 3/076
C03C 3/089
C03C 3/115
(11) EP3256429
(21) EP16708813.7
(47) 21.05.2025
(87) US2016017230
18.08.2016
(22) 10.02.2016
(54) ULTRALOW EXPANSION TITANIA-SILICA GLASS
(73) Corning Incorporated
(72) ANNAMALAI, Sezhian
DURAN, Carlos Alberto
HRDINA, Kenneth Edward
ROSCH, William Rogers
(31) 201562115767 P
(32) 13.02.2015
(33) United States of America

(51) C04B 14/28
C04B 28/04
E01C 3/00
E02B 3/06
(11) EP4408812
(21) EP22793464.3
(47) 21.05.2025
(87) IB2022059288
06.04.2023
(22) 29.09.2022
(54) METHOD FOR THE STABILIZATION OF MARINE CLAYS
(73) Politecnico di Bari
Eth Zurich Institute Of Geotechnical Engineering
(72) PUZRIN, Alexander
VITONE, Claudia
PETTI, Rossella
PLÖTZE, Michael
MARCHI, Maurizio Iler
(31) 202100025103
(32) 30.09.2021
(33) Italy

(51) C04B 37/02
H05K 3/38
H05K 1/02
H05K 1/03
(11) EP4079712
(21) EP21779538.4
(47) 21.05.2025
(87) JP2021013392
07.10.2021
(22) 29.03.2021
(54) CIRCUIT BOARD, JOINED BODY, AND METHODS FOR PRODUCING SAME
(73) Denka Company Limited
(72) YUASA, Akimasa
NAKAMURA, Takahiro
ESHIMA, Yoshiyuki
KOBASHI, Seiji
NISHIMURA, Koji
(31) 2020060861
(32) 30.03.2020
(33) Japan

(51) C04B 41/89
C04B 41/86
C03C 8/14
C03C 8/04
(11) EP4155283
(21) EP20936867.9
(47) 21.05.2025
(87) CN2020138630
25.11.2021
(22) 23.12.2020
(54) HIGH-WEAR-RESISTANCE FAR-INFRARED CERAMIC POLISHED GLAZED TILE AND PREPARATION METHOD THEREFOR
(73) Monalisa Group Co., Ltd.
(72) LIU, Yijun
YANG, Yuandong
ZHANG, Kelin
WANG, Xianchao
HUANG, Lingyan
(31) 202010422883
(32) 19.05.2020
(33) China

(51) C05G 3/40
C05D 9/02
C05F 11/04
C05G 1/00
(11) EP3740463
(21) EP19740745.5
(47) 21.05.2025
(87) US2019014254
25.07.2019
(22) 18.01.2019
(54) MULTI-SOURCE MICRONUTRIENT COMPOSITION AND METHODS OF TREATING SOIL WITH THE SAME
(73) Koch Agronomic Services, LLC
(72) BABU, Tapasya
MARTIN, Elliott
GEIGER, Robert A.
GAIGE, Andres Reyes
(31) 201862619663 P
(32) 19.01.2018
(33) United States of America

(51) C07C 29/132
C07C 33/22
C07C 29/141
B01J 37/18
B01J 19/10
B01J 23/755
B01J 19/00
B01J 37/02
B01J 37/00
(11) EP3567023
(21) EP17889831.8
(47) 21.05.2025
(87) CN2017076663
12.07.2018
(22) 14.03.2017
(54) REACTION SYSTEM AND METHOD FOR PREPARING BETA-PHENYLETHANOL
(73) Wanhua Chemical Group Co., Ltd.
(72) ZENG, Wei
CHEN, Changsheng
LI, Yuan
YANG, Zaigang
YANG, Hengdong
HU, Jianglin
LIU, Yunhai
DING, Ke
BAO, Yuanye
(31) 201710000984
(32) 03.01.2017
(33) China

(51) C07C 29/76
C07C 29/80
C07C 31/20
(11) EP4308533
(21) EP22715599.1
(47) 21.05.2025
(87) EP2022056849
22.09.2022
(22) 16.03.2022
(54) RECOVERY OF DIOLS FROM A MIXTURE
(73) Novamont S.p.A.
(72) COTTI COMETTINI, Marco

(31) 202100006419
(32) 17.03.2021
(33) Italy

(51) C07C 41/03
C08G 18/10
C08G 59/02
C07C 43/11
C07C 67/08
C07C 69/75
C07C 41/16
C07C 67/03
C07C 69/675
C07C 67/26
C07C 69/63
(11) EP3635022
(21) EP18802065.5
(47) 21.05.2025
(87) US2018033753
22.11.2018
(22) 21.05.2018
(54) METHODS FOR MAKING FUNCTIONALIZED FLUORINATED MONOMERS, FLUORINATED MONOMERS, AND COMPOSITIONS FOR MAKING THE SAME
(73) Etna-Tec, Ltd
(72) GREUEL, Michael P.
(31) 201762560641 P
201762508835 P
(32) 19.09.2017
19.05.2017
(33) United States of America
United States of America

(51) C07C 41/09
C07C 43/06
C07C 43/04
(11) EP3927682
(21) EP20703778.9
(47) 21.05.2025
(87) EP2020053868
27.08.2020
(22) 14.02.2020
(54) PROCESS FOR THE DEHYDRATION OF C2+ ALCOHOLS TO ETHER PRODUCTS
(73) BP P.L.C.
(72) DENNIS-SMITHERS, Benjamin, James
SUNLEY, John, Glenn
JACKSON, Fiona
(31) 19158741
(32) 22.02.2019
(33) European Patent Office (EPO)

(51) C07C 45/50
B01J 31/02
C07B 61/00
C07C 47/02
B01J 31/20
(11) EP4219438
(21) EP21900668.1
(47) 21.05.2025
(87) JP2021044289
09.06.2022
(22) 02.12.2021
(54) METHOD FOR PRODUCING ALDEHYDE
(73) KH Neochem Co., Ltd.
(72) KISHIMOTO, Shigehisa
OHGATA, Yusuke
KANEDA, Youichi
KITABATAKE, Kouji
(31) 2020201432
(32) 04.12.2020
(33) Japan

(51) C07C 67/08
C07C 69/54
B01J 8/02
B01J 8/04
B01J 8/06
B01J 10/00
B01J 31/08
(11) EP3778545
(21) EP19777801.2
(47) 21.05.2025
(87) JP2019013011
03.10.2019
(22) 26.03.2019
(54) METHOD FOR PRODUCING UNSATURATED CARBOXYLIC ESTER
(73) Mitsubishi Chemical Corporation
(72) OGAWA, Yasushi
KATAYAMA, Risa
(31) 2018061728
(32) 28.03.2018
(33) Japan

(51) C07C 205/23
C07C 237/04
A61P 31/04
(11) EP4067336
(21) EP21020218.0
(47) 21.05.2025
(22) 19.04.2021
(54) COMPOUND FOR TREATMENT OF BACTERIAL INFECTIONS OF DIFFERENT ETIOLOGY IN HUMANS
(73) Tesla Bioscience ad Banja Luka
(72) Dusan, Ninkov
(31) 202163169695 P
(32) 01.04.2021
(33) United States of America

(51) C07C 209/48
C07C 209/84
C07C 211/36
C07C 209/52
(11) EP4347552
(21) EP22730769.1
(47) 21.05.2025
(87) EP2022063866
08.12.2022
(22) 23.05.2022
(54) METHOD FOR MANUFACTURE OF ISOPHORONEDIAMINE
(73) BASF SE
(72) SCHLODERER, Martin
KRAUSE, Alfred
HERRMANN, Andreas Edgar
GOUVERNEUR, Hannes Ferdinand
(31) 21177453
(32) 02.06.2021
(33) European Patent Office (EPO)

(51) C07C 215/54
C07D 275/06
C07D 291/06
A61K 31/137
C07D 239/545
C07C 59/255
C07C 65/11
C07C 55/08
C07C 55/20
C07C 57/15
C07C 63/08
C07C 63/36
A61P 25/04
C07C 53/08
C07C 53/126
C07C 55/06
C07C 55/10
C07C 69/78
C07C 65/03
C07C 63/06
(11) EP3636629
(21) EP19206638.9
(47) 21.05.2025
(22) 22.07.2011
(54) SALTS OR CO-CRYSTALS OF 3-(3-DIMETHYLAMINO-1-ETHYL-2-METHYL-PROPYL)-PHENOL
(73) Grünenthal GmbH
(72) GRUSS, Michael
KRASZEWSKI, Magda
(31) 10007672
(32) 23.07.2010
(33) European Patent Office (EPO)

(51) C07C 225/22
C07D 221/02
C07C 309/69
C07C 323/25
C07C 229/18
C07C 237/08
C07C 239/14
C07C 243/22
C07C 251/24
C07C 251/56
A61K 41/00
A61K 31/122
A61K 31/135
A61K 31/473
A61P 35/00
(11) EP3366669
(21) EP16856928.3
(47) 21.05.2025
(87) CN2016102832
27.04.2017
(22) 21.10.2016
(54) MONOSUBSTITUTED OR POLYSUBSTITUTED AMPHIPHILIC HYPOCRELLIN DERIVATIVE, PREPARATION METHOD THEREFOR, AND USES THEREOF
(73) Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences
(72) WANG, Pengfei
WU, Jiasheng
LIU, Weimin
GU, Ying
GE, Jiechao
ZHENG, Xiuli
ZHANG, Hongyan
(31) 201610894400
201610894129
201610880613
201510689088
(32) 13.10.2016
13.10.2016

09.10.2016
21.10.2015
(33) China
China
China
China

(51) C07C 233/07
C07D 207/16
C07D 209/40
C07D 209/44
C07D 213/40
C07D 403/12
A61K 31/404
A61P 25/08
C07C 233/44
C07C 237/20
C07C 311/14
C07C 311/21
(11) EP3917907
(21) EP20702775.6
(47) 21.05.2025
(87) EP2020052156
06.08.2020
(22) 29.01.2020
(54) MODULATORS OF POTASSIUM ION CHANNELS AND USES THEREOF
(73) Universitá Degli Studi Di Salerno
(72) AMBROSINO, Paolo
BERTAMINO, Alessia
CAMPIGLIA, Pietro
CORRIVETTI, Giulio
FERRIELLO, Anna Bella
GOMEZ MONTERREY, Isabel Maria
IRACI, Nunzio
MICELI, Francesco
NOVELLINO, Ettore
OSTACOLO, Carmine
SOLDOVIERI, Maria Virginia
TAGLIALATELA, Maurizio
(31) PCT/EP2019/052067
(32) 29.01.2019
(33) World Intellectual Property Office (WIPO)

(51) C07C 233/11
C07D 295/185
C08K 5/20
(11) EP4112596
(21) EP21760229.1
(47) 21.05.2025
(87) JP2021006717
02.09.2021
(22) 24.02.2021
(54) FLUORENE DERIVATIVE, AND PRODUCTION METHOD AND USE FOR SAME
(73) Osaka Gas Chemicals Co., Ltd.
(72) OUCHI, Yuki
(31) 2020034018
(32) 28.02.2020
(33) Japan

(51) C07C 235/06
C07C 235/08
A61P 25/24
C07C 235/40
A61P 25/14
A61P 25/22
A61P 25/28
A61P 25/18
A61K 31/165
(11) EP4241843
(21) EP23176632.0
(47) 21.05.2025
(22) 20.02.2018
(54) ALCOHOL DERIVATIVES AS KV7 POTASSIUM CHANNEL OPENERS
(73) H. Lundbeck A/S
(72) ROTTLÄNDER, Mario
SAMS, Anette, Graven
WANG, Xiaofang
DAS, Debasis
HONG, Jian
CHEN, Shu Hui

(51) C07D 207/14
C07C 63/08
A61P 35/00
A61P 35/02
A61K 31/40
(11) EP4058151
(21) EP20886261.5
(47) 21.05.2025
(87) JP2020042383
20.05.2021
(22) 13.11.2020
(54) NOVEL SALT OF TERPHENYL COMPOUND
(73) Taiho Pharmaceutical Co., Ltd.
(72) NAKAMURA, Hiroyuki
(31) 201962934923 P
(32) 13.11.2019
(33) United States of America

(51) C07D 211/22
A61K 47/22
A61K 48/00
C07D 405/14
C07C 323/25
(11) EP3778572
(21) EP19778026.5
(47) 21.05.2025
(87) JP2019012302
03.10.2019
(22) 25.03.2019
(54) NOVEL CATIONIC LIPID EXHIBITING IMPROVED INTRACELLULAR DYNAMICS
(73) NOF Corporation
National University Corporation Chiba University
(72) NAKAI, Yuta
TANGE, Kota
YOSHIOKA, Hiroki
TAMAGAWA, Shinya
AKITA, Hidetaka
TANAKA, Hiroki
TAKATA, Nae
KONISHI, Manami
TAKAHASHI, Tatsunari
(31) 2018060764
(32) 27.03.2018
(33) Japan

(51) C07D 213/73
C07D 471/04
A61K 31/4375
A61P 9/00
(11) EP3935045
(21) EP20706521.0
(47) 21.05.2025
(87) EP2020055292
10.09.2020
(22) 28.02.2020
(54) SYNTHESIS OF 4-AMINO-5-METHYL-1H-PYRIDIN-2(1H)-ONE (INTERMEDIATE IN THE SYNTHESIS OF THE MR ANTAGONIST FINERENONE) FROM 2-CHLORO-5-METHYL-4-PYRIDINAMINE VIA THE INTERMEDIATE 2-CHLORO-5-METHYL-4-PYRIDINEAMINE
(73) Bayer Aktiengesellschaft
Bayer Pharma Aktiengesellschaft
(72) PLATZEK, Johannes
LOVIS, Kai
(31) 19160904
(32) 05.03.2019
(33) European Patent Office (EPO)

(51) C07D 213/82
C07D 237/24
C07D 401/12
C07D 403/12
C07D 405/14
C07D 417/14
C07D 413/12
C07B 59/00
A61K 31/44
A61K 31/50
A61K 31/501
(11) EP3917912
(21) EP20710338.3
(47) 21.05.2025
(87) US2020015291
06.08.2020
(22) 28.01.2020
(54) AMIDE-DISUBSTITUTED PYRIDINE OR PYRIDAZINE COMPOUNDS
(73) Bristol-Myers Squibb Company
(72) SHERWOOD, Trevor C.
YANG, Michael G.
GILMORE, John L.
ZHANG, Yanlei
XIAO, Zili
LIU, Qingjie
(31) 201962798566 P
(32) 30.01.2019
(33) United States of America

(51) C07D 221/20
A61P 31/18
A61P 43/00
A61K 31/4468
A61K 39/395
(11) EP4052726
(21) EP20882661.0
(47) 21.05.2025
(87) JP2020040611
06.05.2021
(22) 29.10.2020
(54) CD4 MIMIC COMPOUND WITH ANTI-HIV ACTIVITY
(73) National University Corporation Kumamoto University
Institute of Science Tokyo
(72) MATSUSHITA Shuzo
YOSHIMURA Kazuhisa
TAMAMURA Hirokazu
MASUDA Ami
TAKAHASHI Kohei
KOBAYAKAWA Takuya

HARADA Shigeyoshi
MIURA Tomoyuki
(31) 2019195967
(32) 29.10.2019
(33) Japan

(51) C07D 231/12
C07D 333/20
C07D 239/26
C07D 413/12
C07D 209/08
C07D 211/70
C07D 211/26
C07D 213/38
C07D 213/80
C07D 213/82
C07D 231/38
C07D 233/34
C07D 239/42
C07D 295/135
C07D 261/08
C07D 401/12
C07D 333/38
C07D 403/12
C07D 405/12
C07D 213/803
(11) EP3590920
(21) EP18760913.6
(47) 21.05.2025
(87) CN2018077795
07.09.2018
(22) 01.03.2018
(54) 2-(SUBSTITUTED BENZENE MATRIX) AROMATIC FORMATE FTO INHIBITOR, PREPARATION METHOD THEREFOR, AND APPLICATIONS THEREOF
(73) Shanghai Institute of Materia Medica, Chinese Academy of Sciences
(72) YANG, Caiguang
HUANG, Yue
DONG, Ze
ZHANG, Tao
XU, Hongjiao
(31) 201710121318
(32) 02.03.2017
(33) China

(51) C07D 233/86
C07C 237/00
C07C 231/12
C07C 237/30
(11) EP4363405
(21) EP22738634.9
(47) 21.05.2025
(87) EP2022067799
05.01.2023
(22) 28.06.2022
(54) PROCESSES FOR THE PREPARATION OF NON-STEROIDAL ANTIANDROGENS
(73) Química Sintética, S.A.
(72) BARRECA, Giuseppe
LIMING, Huang
(31) 21382571
(32) 29.06.2021
(33) European Patent Office (EPO)

(51) C07D 239/48
A61K 31/505
A61K 31/506
C07D 401/12
C07D 403/12
A61P 35/00
(11) EP4074697
(21) EP20895884.3
(47) 21.05.2025
(87) IB2020061350
10.06.2021
(22) 02.12.2020
(54) NOVEL ADAMANTANE DERIVATIVES AS INHIBITORS OF FOCAL ADHESION KINASE
(73) Samjin Pharmaceutical Co., Ltd.
Incheon National University Research & Business Foundation
BAMICHEM CO., LTD
(72) KI, Min Hyo
KWON, Ho Seok
LEE, Young Hun
SONG, Eunsun
PARK, Yong Bin
LEE, Kug Hwa
CHO, Hyoung Min
AHN, Soon Kil
HONG, Sung Pyo
KIM, Sung Hye
(31) 20190159011
(32) 03.12.2019
(33) Korea (Republic)

(51) C07D 251/24
C07D 239/26
C07D 213/06
C07D 401/10
C07D 403/10
C07D 405/10
C07D 471/04
C07F 9/58
C07F 9/6512
C07F 9/6521
C07D 213/16
H10K 85/60
(11) EP4050001
(21) EP20878659.0
(47) 21.05.2025
(87) KR2020014308
29.04.2021
(22) 20.10.2020
(54) HETEROCYCLIC COMPOUND AND ORGANIC LIGHT-EMITTING DEVICE COMPRISING SAME
(73) LT Materials Co., Ltd.
(72) LEE, Gi-Back
HEO, Yu-Jin
JEONG, Won-Jang
(31) 20190133975
(32) 25.10.2019
(33) Korea (Republic)

(51) C07D 401/04
C07D 401/14
A01N 43/56
A01P 7/00
(11) EP3902792
(21) EP19902245.0
(47) 21.05.2025
(87) IB2019060508
02.07.2020
(22) 06.12.2019
(54) PROCESS FOR PREPARATION OF ANTHRANILAMIDES
(73) UPL Ltd
(72) PANCHAL, Digish Manubhai
DESAI, Jigar Kantilal
SHROFF, Jaidev, Rajnikant
SHROFF, Vikram, Rajnikant
(31) 201831048884
(32) 24.12.2018
(33) India

(51) C07D 401/12
C07D 401/14
A61K 31/551
A61P 7/02
A61P 9/10
A61P 9/08
A61P 27/06
A61P 9/12
(11) EP3988544
(21) EP20827811.9
(47) 21.05.2025
(87) CN2020097503
24.12.2020
(22) 22.06.2020
(54) ISOQUINOLINONE DERIVATIVES SERVING AS ROCK PROTEIN KINASE INHIBITORS AND USE THEREOF
(73) Guangzhou Ocusun Ophthalmic Biotechnology Co., Ltd.
(72) LIU, Yizhi
WANG, Yandong
WU, Lingyun
YOU, Xu
XIAO, Zheming
CHEN, Shuhui
(31) 201911078066
201910544202
(32) 06.11.2019
21.06.2019
(33) China
China

(51) C07D 401/14
C07D 403/04
C07D 403/14
C07D 405/14
C07D 409/14
C07D 413/14
C07D 417/04
C07D 519/00
A61P 35/00
A61K 31/497
(11) EP4373817
(21) EP22754791.6
(47) 21.05.2025
(87) EP2022070137
26.01.2023
(22) 19.07.2022
(54) SUBSTITUTED PYRAZINE-2-CARBOXAMIDES AS HPK1 INHIBITORS FOR THE TREATMENT OF CANCER
(73) Astrazeneca AB
(72) NILSSON LILL, Sten
GIBLIN, Kathryn
KETTLE, Jason Grant
GOLDBERG, Frederick Woolf
GRIMSTER, Neil Patrick
MORRILL, Lucas
ESCOBAR, Randolph
METRANO, Anthony

SONG, Kun
SHEPPECK, James
ZIEGLER, Robert Evans
WU, Ye
SHA, Li
WU, Dedong
GREBE, Tyler
MFUH, Adelphe
BALAZS, Amber
SHIELDS, Jason
(31) 202163223633 P
(32) 20.07.2021
(33) United States of America

(51) C07D 401/14
C07D 405/14
C07D 413/14
C07D 401/12
C07D 409/14
C07D 417/14
C07D 471/04
C07D 495/04
A61K 31/4709
A61P 29/00
A61P 35/00
(11) EP3896064
(21) EP21162393.9
(47) 21.05.2025
(22) 30.06.2016
(54) 4,6-DIAMINO-QUINOLINE-3-CARBONITRILE DERIVATIVES AS CANCER OSAKA THYROID (COT) MODULATORS FOR TREATING CROHN'S DISEASE AND ULCERATIVE COLITIS
(73) Gilead Sciences, Inc.
(72) BACON, Elizabeth, M.
BALAN, Gayatri
CHOU, Chien-Hung
CLARK, Christopher, T.
COTTELL, Jeromy, J.
KIM, Musong
KIRSCHBERG, Thorsten, A.
LINK, John, O.
PHILLIPS, Gary
SCHROEDER, Scott, D.
SQUIRES, Neil, H.
STEVENS, Kirk, L.
TAYLOR, James, G.
WATKINS, William, J.
WRIGHT, Nathan, E.
ZIPFEL, Sheila, M.
(31) 201562269060 P
201562189158 P
(32) 17.12.2015
06.07.2015
(33) United States of America
United States of America

(51) C07D 401/14
C07D 405/14
C07D 413/14
C07D 403/14
C07D 417/14
C07D 498/04
A61P 35/00
A61K 31/444
(11) EP3947366
(21) EP20711972.8
(47) 21.05.2025
(87) EP2020058081
01.10.2020
(22) 24.03.2020
(54) HPK1 INHIBITORS
(73) Janssen Pharmaceutica NV
(72) MEVELLEC, Laurence, Anne
VIALARD, Jorge, Eduardo
COUPA, Sophie
ADELINET, Christophe, Denis, Pascal
WROBLOWSKI, Berthold
EDWARDS, James, Patrick
(31) 201962823708 P
19167820
(32) 26.03.2019
08.04.2019
(33) United States of America
European Patent Office (EPO)

(51) C07D 403/14
C07D 403/06
C07D 401/06
C07D 409/14
C07D 417/14
C07D 405/14
A61K 31/496
A61K 31/5377
A61P 35/00
(11) EP4273143
(21) EP21914730.3
(47) 21.05.2025
(87) CN2021143913
07.07.2022
(22) 31.12.2021
(54) DERIVATIVE OF 2,5-DIKETOPIPERAZINE COMPOUND, AND PREPARATION METHOD THEREFOR, PHARMACEUTICAL COMPOSITION THEREOF AND USE THEREOF
(73) Dalian WZ Probiotics AD Health Co., Ltd
(72) LI, Wenbao William
DING, Zhongpeng
LI, Feifei
XIE, Lianghui
XU, Yun
WANG, Xinwen
(31) 202011624889
(32) 31.12.2020
(33) China

(51) C07D 405/14
C07D 409/14
C07F 7/08
C07D 405/04
H10K 85/60
C09K 11/06
H10K 50/11
(11) EP4043454
(21) EP20875561.1
(47) 21.05.2025
(87) KR2020013665
15.04.2021
(22) 07.10.2020
(54) HETEROCYCLIC COMPOUND, ORGANIC LIGHT-EMITTING DIODE COMPRISING SAME, COMPOSITION FOR ORGANIC LAYER OF ORGANIC LIGHT-EMITTING DIODE, AND METHOD FOR MANUFACTURING ORGANIC LIGHT-EMITTING DIODE
(73) LT Materials Co., Ltd.
(72) KIM, Su-Yeon
YANG, Seung-Gyu
NO, Young-Seok
PARK, Geon-Yu
KIM, Dong-Jun
(31) 20190124521
(32) 08.10.2019
(33) Korea (Republic)

(51) C07D 407/14
C07D 307/42
C08G 59/04
C08G 59/22
C08G 59/26
C08G 59/50
C09D 163/00
(11) EP3997077
(21) EP20837542.8
(47) 21.05.2025
(87) US2020040918
14.01.2021
(22) 06.07.2020
(54) NOVEL BIO-BASED DIOLS FROM SUSTAINABLE RAW MATERIALS, USES THEREOF TO MAKE DIGLYCIDYL ETHERS, AND THEIR COATINGS
(73) NDSU Research Foundation
(72) WEBSTER, Dean, C.
SIBI, Mukund, P.
SUTTON, Catherine, A.
KALITA, Deep, J.
SERUM, Eric, M.
(31) 201962871387 P
(32) 08.07.2019
(33) United States of America

(51) C07D 471/04
A61P 35/00
A61K 31/4709
C07D 401/06
C07D 401/14
(11) EP4126862
(21) EP21721273.7
(47) 21.05.2025
(87) US2021025118
07.10.2021
(22) 31.03.2021
(54) PROCESS FOR PREPARING A COT INHIBITOR COMPOUND
(73) GILEAD SCIENCES, INC.
(72) ALLAN, Kevin M.
CHAN, Lina
CHTCHEMELININE, Andrei
DEIGNAN, Jeffrey T.
DEMPAH, Kassibla E.
EBERLE, Kelly J.
ELFGREN, Danielle M.
ELFORD, Timothy G.
HAGGERTY, Kevin D.
LI, Jesse W.
NIU, Tianmin
STEVENS, Andrew C.
VOICA, Ana F.
WILLIAMSON, Kevin S.
XU, Boran
YU, Guojun
(31) 202063004254 P
(32) 02.04.2020

(33) United States of America

(51) C07D 471/04
C07D 471/08
C07D 487/08
C07D 451/02
C07D 451/04
A61K 31/4439
A61P 1/16
A61P 1/18
A61P 13/12
A61P 11/00
(11) EP4200298
(21) EP21769261.5
(47) 21.05.2025
(87) US2021046434
24.02.2022
(22) 18.08.2021
(54) 1H-PYRROLO[3,2-C]PYRIDINE AND 1H-PYRROLO[2,3-C]PYRIDINE DERIVATIVES AS TLR9 INHIBITORS FOR THE TREATMENT OF FIBROSIS
(73) Bristol-Myers Squibb Company
(72) LIU, Chunjian
REGUEIRO-REN, Alicia
(31) 202063067465 P
(32) 19.08.2020
(33) United States of America

(51) C07D 471/10
C07D 471/20
A61K 31/444
A61P 5/38
(11) EP4081525
(21) EP20907039.0
(47) 21.05.2025
(87) US2020064252
01.07.2021
(22) 10.12.2020
(54) SPIROCYCLIC PIPERIDINE MELANOCORTIN SUBTYPE-2 RECEPTOR (MC2R) ANTAGONISTS AND USES THEREOF
(73) Crinetics Pharmaceuticals, Inc.
(72) HAN, Sangdon
KIM, Sun Hee
ZHU, Yunfei
(31) 201962953001 P
(32) 23.12.2019
(33) United States of America

(51) C07D 487/04
A61K 9/48
A61K 31/5025
A61K 31/506
A61K 31/519
A61K 45/06
A61P 35/00
(11) EP3924351
(21) EP20756718.1
(47) 21.05.2025
(87) US2020017981
20.08.2020
(22) 12.02.2020
(54) CRYSTALLINE FORM OF THE HYDROCHLORIDE SALT OF 2-((1R,4R)-4-((3-(3-(TRIFLUOROMETHYL)PHENYL) IMIDAZO[1,2-B]PYRIDAZIN-6-YL)AMINO)CYCLOHEXYL)PROPAN-2-OL
(73) Sumitomo Pharma America, Inc.
(72) WARNER, Steven L.
SIDDIQUI-JAIN, Adam
FLYNN, Paul
(31) 202062962833 P
201962925153 P
201962804556 P
(32) 17.01.2020
23.10.2019
12.02.2019
(33) United States of America
United States of America
United States of America

(51) C07D 487/04
A61P 11/00
A61K 31/5025
(11) EP4143195
(21) EP21729078.2
(47) 21.05.2025
(87) US2021029641
04.11.2021
(22) 28.04.2021
(54) IMIDAZOPYRIDAZINES AS MODULATORS OF IL-17
(73) Janssen Pharmaceutica NV
(72) BEHENNA, Douglas
DECKHUT, Charlotte
ROVIRA, Alexander
GOLDBERG, Steven
KUMMER, David
KEITH, John
WOODS, Craig
RHORER, Timothy
TANIS, Virginia
MARTIN, Connor
MEDUNA, Steven
MCCARVER, Stefan
VALDES, Alexander
LOSKOT, Steven
XUE, Xiaohua
(31) 202063017682 P
(32) 30.04.2020
(33) United States of America

(51) C07D 487/04
A61P 35/00
A61K 31/4162
(11) EP4003996
(21) EP20753619.4
(47) 21.05.2025
(87) US2020042903
28.01.2021
(22) 21.07.2020
(54) ESTROGEN RECEPTOR-MODULATING COMPOUNDS
(73) Radius Pharmaceuticals, Inc.
(72) MILLER, Chris P.
(31) 201962876963 P
(32) 22.07.2019
(33) United States of America

(51) C07D 487/14
A61K 31/5025
A61P 35/00
A61P 35/02
(11) EP4161935
(21) EP21736890.1
(47) 21.05.2025
(87) US2021036664
16.12.2021
(22) 09.06.2021
(54) BRM TARGETING COMPOUNDS AND ASSOCIATED METHODS OF USE
(73) Prelude Therapeutics Incorporated
(72) COMBS, Andrew, Paul
LIN, Hong
PITIS, Philip
LU, Liang
(31) 202063036811 P
(32) 09.06.2020
(33) United States of America

(51) C07D 498/08
A61K 31/553
A61P 35/00
(11) EP3668878
(21) EP18769537.4
(47) 21.05.2025
(87) US2018046859
21.02.2019
(22) 17.08.2018
(54) COMPOUNDS THAT INHIBIT MCL-1 PROTEIN
(73) Amgen Inc.
(72) BROWN, Sean P.
LANMAN, Brian Alan
LI, Kexue
LI, Yunxiao
REED, Anthony B.
(31) 201762547589 P
(32) 18.08.2017
(33) United States of America

(51) C07D 498/18
A61P 29/00
A61P 35/00
A61K 31/4995
A61K 31/506
(11) EP4223368
(21) EP20956215.6
(47) 21.05.2025
(87) JP2020037046
07.04.2022
(22) 30.09.2020
(54) MACROCYCLIC COMPOUNDS INCORPORATING PIPERIDINE AND QUINOLINE OR QUNAXOLINE AS IRAK-4 INHIBITORS FOR THE TREATMENT OF INFLAMMATORY CONDITIONS
(73) Asahi Kasei Pharma Corporation
Vernalis (R&D) Limited
(72) ITO, Takahiko
TAKASHIMA, Misato
ATOBE, Masakazu
ARAI, Koichiro
TOYAMA, Tomohisa
YOSHII, Yu
POTTER, Andrew John
MADDOX, Daniel Paul
RAY, Stuart
FOLOPPE, Nicolas

(51) C07F 9/30
C07F 9/32
C07C 231/12
C07C 235/12
B01J 27/10
B01J 27/24
C07D 307/33
C07C 231/00

(11) EP3909962
(21) EP19908870.9
(47) 21.05.2025
(87) KR2019016789
16.07.2020
(22) 29.11.2019
(54) METHOD OF PRODUCING L-GLUFOSINATE
(73) CJ CheilJedang Corporation
(72) JEON, Jinwoo
LEE, Joo Young
LEE, Changsuk
KIM, Hyunjin
MOON, Jun Ok
OH, In Seok
(31) 20190005405
20190005404
20190005283
20190005282
20190004164
(32) 15.01.2019
15.01.2019
15.01.2019
15.01.2019
11.01.2019
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) C07F 9/50
B01J 31/24
B01J 31/14
C07C 2/32
C07C 11/02
C07C 11/04
C07F 11/00
C07C 2/36
(11) EP3760634
(21) EP18907972.6
(47) 21.05.2025
(87) KR2018012025
06.09.2019
(22) 12.10.2018
(54) LIGAND, OLIGOMERIZATION CATALYST COMPRISING SAME, AND METHOD FOR PRODUCING ETHYLENE OLIGOMER BY USING OLIGOMERIZATION CATALYST
(73) SK Innovation Co., Ltd.
SK Geo Centric Co., Ltd.
(72) LEE, Hoseong
JOE, Yongnam
(31) 20180119906
20180023819
(32) 08.10.2018
27.02.2018
(33) Korea (Republic)
Korea (Republic)

(51) C07F 9/6574
C07C 45/50
C07C 47/02
(11) EP4403563
(21) EP23152178.2
(47) 21.05.2025
(22) 18.01.2023
(54) DIPHOSPHITE WITH A ME-WING COMPONENT AND A TBU-WING COMPONENT
(73) Evonik Oxeno GmbH & Co. KG
(72) SALE, Anna Chiara
FRANKE, Robert
FRIDAG, Dirk
KUCMIERCZYK, Peter
MARKOVIC, Ana

(51) C07J 9/00
C07J 41/00
C07J 51/00
(11) EP3943502
(21) EP20773082.1
(47) 21.05.2025
(87) CN2020080244
24.09.2020
(22) 19.03.2020
(54) METHOD FOR PREPARING CHENODEOXYCHOLIC ACID DERIVATIVE
(73) Suzhou Zelgen Biopharmaceutical Co., Ltd.
(72) LV, Binhua
LI, Chengwei
GUO, Chao
(31) 201910210103
(32) 19.03.2019
(33) China

(51) C07K 1/16
C12N 15/10
G01N 30/46
G01N 30/34
C07K 1/34
B01D 61/14
(11) EP3752520
(21) EP19705809.2
(47) 21.05.2025
(87) GB2019050351
22.08.2019
(22) 11.02.2019
(54) APPARATUS FOR PROCESSING A LIQUID COMPRISING A TARGET SUBSTANCE
(73) Fujifilm Diosynth Biotechnologies UK Limited
(72) HEISE, Charles
HAIGH, Jonathan
NAGY, Tibor
PULLEN, James
TOPPING, Andrew
(31) 201802593
(32) 16.02.2018
(33) United Kingdom

(51) C07K 5/06
(11) EP4347615
(21) EP22732086.8
(47) 21.05.2025
(87) EP2022064901
08.12.2022
(22) 01.06.2022
(54) PROCESS FOR MAKING MELFLUFEN OR A SALT THEREOF
(73) Synthon B.V.
(72) BARTOS, Petr
CASTULIK, Jakub
(31) 21177148
(32) 01.06.2021
(33) European Patent Office (EPO)

(51) C07K 7/06
C07K 7/08
A01N 37/46
A01N 47/44
A01P 7/04
(11) EP4361168
(21) EP23205099.7
(47) 21.05.2025
(22) 23.10.2023
(54) INSECT NEUROPEPTIDES
(73) Solasta Bio Limited
(72) DOW, Julian A. T.
DAVIES, Shireen A.
ABUL-HAIJA, Yousef
ARCHIBALD, Lewis
(31) 202215797
(32) 25.10.2022
(33) United Kingdom

(51) C07K 14/47
(11) EP3976636
(21) EP20727322.8
(47) 21.05.2025
(87) EP2020064651
03.12.2020
(22) 27.05.2020
(54) METHOD FOR PREPARING IRON-DEPLETED FERRITIN AND USE THEREOF
(73) PreviPharma Consulting GmbH
(72) KIESSIG, Stephan T.
MANDAGO, Maurice
(31) 19177012
(32) 28.05.2019
(33) European Patent Office (EPO)

(51) C07K 16/18
A61K 39/00
(11) EP3655431
(21) EP18738361.7
(47) 21.05.2025
(87) EP2018069404
24.01.2019
(22) 17.07.2018
(54) ANTI- ISOASP7 AMYLOID BETA (ABETA) ANTIBODIES AND USES THEREOF
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) PIECHOTTA, Anke
GNOTH, Kathrin
CYNIS, Holger
RAHFELD, Jens-Ulrich
SCHILLING, Stephan
DEMUTH, Hans-Ulrich
(31) 17182167
(32) 19.07.2017
(33) European Patent Office (EPO)

(51) C07K 16/28
C07K 16/46
A61P 35/02
(11) EP3548516
(21) EP17822159.4
(47) 21.05.2025
(87) EP2017081150
07.06.2018
(22) 01.12.2017
(54) A CD33-, CD16- AND CD123-SPECIFIC SINGLE CHAIN TRIPLEBODY

(73) Friedrich-Alexander-Universität Erlangen-Nürnberg
(72) FEY, Georg H.
BRACIAK, Todd
ROSKOPF, Claudia Christina
SCHUBERT, Ingo
HOPFNER, Karl-Peter
FENN, Nadja
WILDENHEIN, Sarah
JACOB, Uwe
(31) 16202026
(32) 02.12.2016
(33) European Patent Office (EPO)

(51) C07K 19/00
A61K 48/00
A61P 35/00
(11) EP3816190
(21) EP19823745.5
(47) 21.05.2025
(87) CN2019077922
26.12.2019
(22) 13.03.2019
(54) CHIMERIC ANTIGEN RECEPTOR COMPRISING CO-STIMULATORY RECEPTOR AND APPLICATION THEREOF
(73) Shanghai Longyao Biotechnology Inc., Ltd
(72) YANG, Xuanming
FU, Yangxin
WANG, Xin
YE, Shengqin
LI, Fanlin
ZHANG, Huihui
(31) 201810636409
(32) 20.06.2018
(33) China

(51) C07K 19/00
C07K 14/705
C07K 16/46
C12N 5/0783
A61K 35/17
A61K 38/16
A61K 39/395
A61P 35/00
A61K 38/00
C07K 14/725
C07K 14/735
C07K 16/18
A61K 39/00
(11) EP4074735
(21) EP22164162.4
(47) 21.05.2025
(22) 27.08.2015
(54) CONDITIONALLY ACTIVE CHIMERIC ANTIGEN RECEPTORS FOR MODIFIED T-CELLS
(73) BioAtla, Inc.
(72) Short, Jay M.
(31) 201462043067 P
(32) 28.08.2014
(33) United States of America

(51) C08B 30/20
C08B 31/16
C09D 103/14
C08L 3/00
(11) EP3589664
(21) EP18705157.8
(47) 21.05.2025
(87) EP2018054113
07.09.2018
(22) 20.02.2018
(54) ACYLATED STARCH DERIVATIVES AND USE THEREOF
(73) Cerdia International GmbH
(72) LUBKOLL, Jana
(31) 17162614
17158413
(32) 23.03.2017
28.02.2017
(33) European Patent Office (EPO)
European Patent Office (EPO)

(51) C08F 8/04
C08F 236/12
C08L 9/02
C08F 220/42
C08F 236/04
C08L 15/00
(11) EP3305818
(21) EP16799920.0
(47) 21.05.2025
(87) JP2016064876
01.12.2016
(22) 19.05.2016
(54) NITRILE GROUP CONTAINING, HIGHLY SATURATED COPOLYMER RUBBER
(73) Zeon Corporation
(72) SHIONO, Atsuhiro
(31) 2015106186
(32) 26.05.2015
(33) Japan

(51) C08F 210/02
C08F 210/06
C08F 232/04
C08F 4/659
C08F 232/08
(11) EP4196507
(21) EP21766728.6
(47) 21.05.2025
(87) US2021043331
17.02.2022
(22) 27.07.2021
(54) CYCLIC CONTAINING POLYMER COMPOSITIONS OBTAINED USING TRANSITION METAL BIS(PHENOLATE) CATALYST COMPLEXES AND PROCESS FOR PRODUCTION THEREOF
(73) ExxonMobil Chemical Patents Inc.
(72) CANICH, Jo Ann M.
LAMBIC, Nikola S.
CULCU, Gursu
JIANG, Peijun
HAGADORN, John R.
MATTLER, Sarah J.
(31) 202063065344 P
(32) 13.08.2020
(33) United States of America

(51) C08F 210/10
C08F 10/10
C08F 212/08
C08F 236/00
C08F 2/01
C08F 4/52
C09J 123/22
C08L 23/22
C08L 67/06
C08L 63/00
(11) EP3694894
(21) EP18866182.1
(47) 21.05.2025
(87) US2018055617
18.04.2019
(22) 12.10.2018
(54) ISOBUTYLENE COPOLYMERS, METHOD FOR MAKING ISOBUTYLENE COPOLYMERS AND ISOBUTYLENE COPOLYMER PRODUCTS
(73) TPC Group LLC
(72) KUMAR, Rajeev
GOBIN, Andre, M.
PAPPAS, George
HOPSON, James, A.
NUTT, Michael, O.
MACATANGAY, Peggy, J.
REDD, Randall, V.
(31) 201762572440 P
(32) 14.10.2017
(33) United States of America

(51) C08F 210/16
C08F 4/6592
C08F 4/659
C08J 5/18
(11) EP3692082
(21) EP18786541.5
(47) 21.05.2025
(87) US2018052509
11.04.2019
(22) 25.09.2018
(54) DUAL CATALYST SYSTEM FOR PRODUCING LLDPE COPOLYMERS WITH IMPROVED PROCESSABILITY
(73) Chevron Phillips Chemical Company LP
(72) DING, Errun
TSO, Chung Ching
MUNINGER, Randall
YANG, Qing
YU, Youlu
INN, Yongwoo
(31) 201715723225
(32) 03.10.2017
(33) United States of America

(51) C08F 210/16
C08F 295/00
C08L 53/00
C08L 23/10
C08L 23/08
C08F 10/00
C08F 297/00
C08F 297/08
C08J 9/00
C08F 4/659
C08J 9/10
C08L 23/0807
(11) EP3390475
(21) EP16829346.2
(47) 21.05.2025
(87) US2016066332
22.06.2017
(22) 13.12.2016
(54) CROSS-LINKED FOAMS MADE FROM INTERPOLYMERS OF ETHYLENE/ALPHA-OLEFINS

(73) Dow Global Technologies LLC
(72) KUMMER, Kyle G.
MUNRO, Jeffrey C.
MADENJIAN, Lisa S.
(31) 201562267381 P
(32) 15.12.2015
(33) United States of America

(51) C08F 220/38
C08F 220/60
C08F 230/02
C08F 2/48
C09D 133/14
C09D 133/26
C09D 143/02
(11) EP3898733
(21) EP19832999.7
(47) 21.05.2025
(87) IB2019060670
25.06.2020
(22) 11.12.2019
(54) ZWITTERIONIC COPOLYMERS, COATING COMPOSITIONS, ARTICLES, AND COATING METHODS
(73) Solventum Intellectual Properties Company
(72) SGOLASTRA, Federica
COLAK ATAN, Semra
GRIESGRABER, George W.
MALMBERG, Zachary J.
(31) 201862781954 P
(32) 19.12.2018
(33) United States of America

(51) C08F 230/08
C07F 7/18
C09D 143/04
(11) EP4043504
(21) EP22166984.9
(47) 21.05.2025
(22) 09.04.2013
(54) SILICON-CONTAINING (METH)ACRYLATE COMPOUNDS
(73) ARKEMA FRANCE
(72) HORGAN, James
KLANG, Jeffrey
HE, Yuhong
GOODRICH, James
(31) 201261622240 P
(32) 10.04.2012
(33) United States of America

(51) C08F 279/04
C08F 2/38
C08L 55/02
C08L 25/12
(11) EP4029889
(21) EP21836797.7
(47) 21.05.2025
(87) KR2021008557
13.01.2022
(22) 06.07.2021
(54) GRAFT COPOLYMER PREPARATION METHOD AND GRAFT COPOLYMER PREPARED BY PREPARATION METHOD
(73) LG Chem, Ltd.
(72) JEON, Tae Young
CHAI, Joo Byung
JUNG, Yu Sung
KIM, Jong Beom
KIM, In Seok
(31) 20210087924
20200084052
(32) 05.07.2021
08.07.2020
(33) Korea (Republic)
Korea (Republic)

(51) C08F 299/08
C08J 3/16
C08G 77/46
C08L 83/04
C08L 83/12
(11) EP4071189
(21) EP20897557.3
(47) 21.05.2025
(87) JP2020039919
10.06.2021
(22) 23.10.2020
(54) SILICONE PARTICLE AND METHOD FOR PRODUCING SAME
(73) Shin-Etsu Chemical Co., Ltd.
(72) HAGIWARA, Mamoru
TAKEWAKI, Kazuyuki
(31) 2019220564
(32) 05.12.2019
(33) Japan

(51) C08G 18/18
C08G 18/76
C08G 18/48
C08G 18/66
C08G 18/32
C08J 9/08
C08G 101/00
(11) EP3827039
(21) EP19740380.1
(47) 21.05.2025
(87) EP2019069181
30.01.2020
(22) 17.07.2019
(54) SILICON-FREE FOAM STABILISERS FOR PRODUCING POLYURETHANE FOAMS
(73) BASF SE
(72) TOMOVIC, Zeljko
KRONIG, Sabrina
MOELLER, Klaus
HAGEN, Christian
SUSOFF, Markus
(31) 18185412
(32) 25.07.2018
(33) European Patent Office (EPO)

(51) C08G 18/42
C08G 18/48
C08G 18/50
C08G 18/40
C08G 18/76
C08G 18/36
B32B 15/04
B32B 5/02
B32B 5/24
B32B 15/12
B32B 15/18
B32B 15/20
B32B 21/02
B32B 29/00
B32B 21/04
B32B 27/06
(11) EP4200350
(21) EP21759295.5
(47) 21.05.2025
(87) EP2021072587
24.02.2022
(22) 13.08.2021
(54) POLYOL FORMULATIONS AND A METHOD FOR THE PREPARATION OF PUR/PIR FOAMS BASED ON THESE POLYOL FORMULATIONS
(73) Covestro Deutschland AG
(72) WELSCH, Nicole
OFORI, Philip
ABELS, Rene
DIPPE, Sabine
SOBIK, Heinrich-Peter
LOEVENICH, Catherine
(31) 20191871
(32) 20.08.2020
(33) European Patent Office (EPO)

(51) C08G 61/02
C08G 61/12
C08G 65/48
C09D 165/02
C09D 171/12
C08L 65/00
C08L 71/00
H01L 21/311
(11) EP3916035
(21) EP21187153.8
(47) 21.05.2025
(22) 21.10.2013
(54) METHOD FOR CONTROLLING CROSS-LINKING REACTION RATE AND OF A CROSS-LINKING COMPOUND
(73) Delsper LP
(72) Drake, Kerry A.
Nordquist, Andrew F.
Das, Sudipto
Burgoyne, William F. Jr.
Song, Le
Williams, Shawn P.
Boland, Rodger K.
(31) 201361833351 P
201261716800 P
(32) 10.06.2013
22.10.2012
(33) United States of America
United States of America

(51) C08G 61/12
B01J 13/18
C08L 65/00
C09C 3/10
C09K 11/06
(11) EP4192899
(21) EP21763278.5
(47) 21.05.2025
(87) EP2021072276
17.02.2022
(22) 10.08.2021
(54) METHOD FOR PRODUCING CONDUCTIVE PEDOT:PSS PARTICLES
(73) Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen
(72) RAUER, Sebastian Bernhard
BELL, Daniel Josef
WESSLING, Matthias
(31) 102020121036
(32) 10.08.2020

(33) Germany

(51) C08G 65/337
C07C 69/96
C08G 64/02
C08G 64/16
C08G 64/18
(11) EP3762445
(21) EP19763307.6
(47) 21.05.2025
(87) CA2019050281
12.09.2019
(22) 07.03.2019
(54) CARBONATE-LINKED SURFACE MODIFYING MACROMOLECULES
(73) Evonik Canada Inc.
(72) SANTERRE, J. Paul
MULLICK, Sanjoy
(31) 201862640839 P
(32) 09.03.2018
(33) United States of America

(51) C08G 65/40
B29C 67/00
C08L 71/00
D02G 3/00
(11) EP4165106
(21) EP21728942.0
(47) 21.05.2025
(87) EP2021064960
16.12.2021
(22) 04.06.2021
(54) BLENDS OF POLY(ETHERKETONEKETONE) POLYMERS
(73) Solvay Specialty Polymers USA, LLC.
(72) LOUIS, Chantal
EL-HIBRI, Mohammad Jamal
(31) 202063038100 P
20194026
(32) 11.06.2020
02.09.2020
(33) United States of America
European Patent Office (EPO)

(51) C08G 75/02
C08G 75/0204
C08G 75/0227
C08G 75/0259
(11) EP4045568
(21) EP20790259.4
(47) 21.05.2025
(87) EP2020078544
22.04.2021
(22) 12.10.2020
(54) POLY(ARYLENE SULFIDE) POLYMERS AND CORRESPONDING POLYMER COMPOSITIONS AND ARTICLES
(73) Solvay Specialty Polymers USA, LLC.
(72) NIELSEN, Matthew
JEOL, Stéphane
(31) 201962915150 P
19206822
(32) 15.10.2019
04.11.2019
(33) United States of America
European Patent Office (EPO)

(51) C08G 77/02
(11) EP4353769
(21) EP22820538.1
(47) 21.05.2025
(87) KR2022008033
15.12.2022
(22) 07.06.2022
(54) METHOD FOR PREPARING PREHYDROLYZED POLYSILICATE
(73) Lg Chem, Ltd.
(72) LEE, Kyu Reon
OH, Kyoung Shil
(31) 20210074291
(32) 08.06.2021
(33) Korea (Republic)

(51) C08G 77/458
C08L 83/10
(11) EP3898783
(21) EP19823826.3
(47) 21.05.2025
(87) NL2019050837
25.06.2020
(22) 16.12.2019
(54) PROCESS TO PREPARE AQUEOUS POLYURETHANE DISPERSIONS IN WHICH THE POLYURETHANE INCLUDES POLYSILOXANE AS SIDE CHAIN
(73) Stahl International B.V.
(72) DERKSEN, Andries Johannes
(31) 2022219
(32) 17.12.2018
(33) Netherlands

(51) C08J 11/04
B01J 20/26
B01J 20/28
B01J 20/34
C08L 101/14
(11) EP3733750
(21) EP19748325.8
(47) 21.05.2025
(87) JP2019004116
08.08.2019
(22) 05.02.2019
(54) METHOD FOR REGENERATING HIGHLY WATER-ABSORBING POLYMER, METHOD FOR PRODUCING HIGHLY WATER-ABSORBING RECYCLED POLYMER, AND USE OF ALKALI METAL ION SOURCE
(73) Unicharm Corporation
(72) ITO, Ryusei
ONODERA, Haruna
FUNAMIZU, Naoyuki
KONISHI, Takayoshi
YAMAKI, Kouichi
(31) 2018154170
2018018664
(32) 20.08.2018
05.02.2018
(33) Japan
Japan

(51) C08J 11/24
(11) EP3786225
(21) EP20758088.7
(47) 21.05.2025
(87) CN2020076451
14.01.2021
(22) 24.02.2020
(54) CONTINUOUS ALCOHOLYSIS RECOVERY METHOD FOR WASTE POLYESTER
(73) Avantgarde (Shanghai) Environmental Technology Co., Ltd.
(72) FANG, Huayu
LI, Tian Yuan
ZHU, Enbin
WANG, Dubin
YU, Guoqing
CHEN, Jincheng
WU, Jiantong
CHEN, Jianhua
LIN, Shengyao
(31) 201910617806
(32) 10.07.2019
(33) China

(51) C08J 11/24
C07C 67/03
C08J 11/16
C07C 69/82
C08L 67/02
(11) EP3792301
(21) EP20758087.9
(47) 21.05.2025
(87) CN2020076452
14.01.2021
(22) 24.02.2020
(54) METHOD FOR RECYCLING WASTE POLYESTER MATERIAL
(73) Avantgarde (Shanghai) Environmental Technology Co., Ltd.
(72) FANG, Huayu
ZHU, Enbin
WANG, Dubin
YU, Guoqing
CHEN, Jinchen
LI, Tianyuan
WU, Jiantong
CHEN, Jianhua
LIN, Shengyao
(31) 201910617915
(32) 10.07.2019
(33) China

(51) C08K 5/132
C09D 133/08
C09D 7/48
C08J 7/04
(11) EP4031613
(21) EP20785637.8
(47) 21.05.2025
(87) US2020051147
25.03.2021
(22) 17.09.2020
(54) CURABLE COMPOSITION COMPRISING UV STABILIZER
(73) Momentive Performance Materials Inc.
(72) FURUTA, Paul
HAEUSELER, Andreas
HOFFMÜLLER, Gunnar
(31) 201916577493
(32) 20.09.2019
(33) United States of America

(51) C08K 5/151
C08K 5/29
C08L 67/02
C08L 79/08
(11) EP3431539

(21) EP18178041.2
(47) 21.05.2025
(22) 15.06.2018
(54) COMPOSITIONS CONTAINING POLYMERIC CARBODIIMIDE, EPOXIDE AND POLYESTER-BASED POLYMERS, THEIR PREPARATION AND USE
(73) LANXESS Deutschland GmbH
(72) LAUFER, Wilhelm
NEUWALD, Boris
BIENMÜLLER, Matthias
(31) 17181680
(32) 17.07.2017
(33) European Patent Office (EPO)

(51) C08L 5/10
C08L 89/00
C08L 99/00
(11) EP4490233
(21) EP23708519.6
(47) 21.05.2025
(87) EP2023055750
14.09.2023
(22) 07.03.2023
(54) HEPARIN AND MIXTURES OF NATIVE PROTEINS AND PEPTIDES FROM WASTE TISSUE OF SLAUGHTERED ANIMALS
(73) Horizon IP, S.L.
(72) ESCAICH FERRER, José
RAMIREZ RUBIO, Pablo
CARLINO, Stefano
CHETRIT RUSSO, Carlos
SALVATELLA SUREDA, Pau
DALMAU PUIG, Pilar
PUIGSEGUR SARABIA, Judith
MONTERO PARDILLO, Marc
(31) 22382214
(32) 08.03.2022
(33) European Patent Office (EPO)

(51) C08L 23/04
C08L 23/06
C09D 123/06
(11) EP4004104
(21) EP20754539.3
(47) 21.05.2025
(87) US2020043485
04.02.2021
(22) 24.07.2020
(54) NECK-IN SUPPRESSION FOR TUBULAR LDPE BASED POLYMERS FOR EXTRUSION COATING AT MEDIUM AND HIGH LINE SPEED
(73) Dow Global Technologies LLC
(72) KUPSCH, Eva-Maria
DONG, Yifan
VERVOORT, Sylvie
(31) 201962880832 P
(32) 31.07.2019
(33) United States of America

(51) C08L 23/06
(11) EP4288486
(21) EP22711111.9
(47) 21.05.2025
(87) US2022013882
11.08.2022
(22) 26.01.2022
(54) LOW COEFFICIENT OF FRICTION POLYMERIC COMPOSITIONS
(73) Dow Global Technologies LLC
(72) BRIGANDI, Paul J.
ESSEGHIR, Mohamed
SABA, Stacey A.
CHAUDHARY, Amit K.
(31) 202163144548 P
(32) 02.02.2021
(33) United States of America

(51) C08L 23/08
H01B 7/04
(11) EP3924422
(21) EP20705562.5
(47) 21.05.2025
(87) US2020013879
20.08.2020
(22) 16.01.2020
(54) POLYMERIC COMPOSITIONS FOR CABLE JACKETS
(73) Dow Global Technologies LLC
(72) SAUNDERS, Madelaine E.
BRIGANDI, Paul J.
(31) 201962804468 P
(32) 12.02.2019
(33) United States of America

(51) C08L 23/14
C08L 23/16
C08L 23/08
C08F 210/06
C08F 2/00
C08F 4/649
C08F 4/654
(11) EP3850042
(21) EP19762998.3
(47) 21.05.2025
(87) EP2019074023
19.03.2020
(22) 10.09.2019
(54) POLYPROPYLENE COMPOSITION WITH EXCELLENT STIFFNESS AND IMPACT STRENGTH
(73) Abu Dhabi Polymers Co. Ltd (Borouge) - Sole Proprietorship L.L.C.
Borealis AG
(72) KLIMKE, Katja
VAN CAUWENBERGHE, Hans Jozef Francois
(31) 18193940
(32) 12.09.2018
(33) European Patent Office (EPO)

(51) C08L 23/16
C08F 210/06
C09J 123/16
C08L 9/06
(11) EP4010421
(21) EP20765388.2
(47) 21.05.2025
(87) US2020044406
11.02.2021
(22) 31.07.2020
(54) PROPYLENE-ALPHA-OLEFIN-DIENE TERPOLYMER ADDITIVE FOR IMPROVING RUBBER TACK
(73) ExxonMobil Chemical Patents Inc.
(72) JOSHI, Milind, B.
PENG, Xiao Bo
GALLEZ, Vincent, B.
BAI, Zhifeng
KOLB, Rainer
LOYD, Scott, H.
(31) 201962882629 P
(32) 05.08.2019
(33) United States of America

(51) C08L 77/00
C08L 77/06
C08L 77/10
B05D 1/26
B32B 27/08
B32B 27/34
C08G 69/26
C08G 69/36
C08L 23/04
C08L 23/08
C09K 5/04
F25B 13/00
F28F 21/06
(11) EP3838988
(21) EP19306714.7
(47) 21.05.2025
(22) 20.12.2019
(54) THERMOPLASTIC COMPOSITION FOR MONOLAYER TUBE, AIR-CONDITIONING CIRCUIT AND METHOD FOR PREPARING THE COMPOSITION
(73) HUTCHINSON
(72) LIU, Xin
HANOY, Boris

(51) C08L 95/00
C09K 23/00
C08L 5/00
(11) EP4347715
(21) EP22734662.4
(47) 21.05.2025
(87) FR2022051047
08.12.2022
(22) 02.06.2022
(54) USE OF FERMENTED MOLASSES AS AN EMULSIFIER
(73) Lesaffre et Compagnie
(72) LEBRUN, Xavier
(31) 2105874
(32) 03.06.2021
(33) France

(51) C08L 101/00
C01B 21/064
C08G 59/62
C08K 3/38
C08L 63/00
C09K 5/14
H01L 23/36
(11) EP4036174
(21) EP20867567.8
(47) 21.05.2025
(87) JP2020031419
01.04.2021
(22) 20.08.2020
(54) COMPOSITION FOR FORMING HEAT-CONDUCTING MATERIAL, HEAT-CONDUCTING MATERIAL, HEAT-CONDUCTING SHEET, AND DEVICE WITH HEAT-CONDUCTING LAYER
(73) FUJIFILM Corporation
(72) KITAMURA Takuya
KITAGAWA Hirotaka
(31) 2019176932
(32) 27.09.2019

(33) Japan

(51) C09B 67/22
D06L 4/621
D06L 4/664
(11) EP4332175
(21) EP22193670.1
(47) 21.05.2025
(22) 02.09.2022
(54) OPTICAL BRIGHTENING AGENT COMPOSITION
(73) CHT Germany GmbH
(72) BACHUS, Herbert
FLATAU, Mike
REDLING, Erwin
WERZ, Patrick
WITZEL-WILHELM, Heike

(51) C09D 4/06
C08F 2/50
C09D 7/61
C08F 265/06
C08F 263/04
C09D 151/00
C08F 222/10
(11) EP3681962
(21) EP18866172.2
(47) 21.05.2025
(87) US2018055180
18.04.2019
(22) 10.10.2018
(54) ACRYLIC EMULSIONS MODIFIED WITH FUNCTIONAL (METH)ACRYLATES TO ENABLE CROSSLINKING
(73) Miwon North America Incorporated
(72) GOODRICH, James E.
NUNEZ, Juan G.
(31) 201816154069
201762571314 P
(32) 08.10.2018
12.10.2017
(33) United States of America
United States of America

(51) C09D 5/00
C09D 123/30
C09D 7/20
C09D 7/63
(11) EP4032956
(21) EP20865974.8
(47) 21.05.2025
(87) JP2020032245
25.03.2021
(22) 26.08.2020
(54) POLYOLEFIN-BASED COATING COMPOSITION
(73) TOYOBO MC Corporation
(72) YAMASAKI, Hokuto
KASHIHARA, Kenji
(31) 2019170662
(32) 19.09.2019
(33) Japan

(51) C09D 5/02
B27K 3/12
B27K 3/34
B27K 3/50
C09D 5/14
C09D 195/00
D06M 13/00
D06M 15/00
C09D 7/20
(11) EP3784738
(21) EP19722661.6
(47) 21.05.2025
(87) FI2019050332
31.10.2019
(22) 25.04.2019
(54) PRODUCTION OF NANOSCALE EMULSION
(73) BDC-Technology Oy
(72) KOSKELA, Juha
(31) 20185392
(32) 26.04.2018
(33) Finland

(51) C09D 5/02
C09D 127/08
C08F 214/08
C08F 214/10
C08F 220/42
C08F 220/44
(11) EP4129668
(21) EP21776827.4
(47) 21.05.2025
(87) JP2021009588
30.09.2021
(22) 10.03.2021
(54) AQUEOUS DISPERSION OF VINYLIDENE CHLORIDE COPOLYMER AND FILM
(73) Asahi Kasei Kabushiki Kaisha
(72) HOSOE, Natsuki
YAMASAKI, Naoaki
(31) 2020059059
(32) 27.03.2020
(33) Japan

(51) C09D 5/18
(11) EP3487946
(21) EP17831947.1
(47) 21.05.2025
(87) US2017043266
25.01.2018
(22) 21.07.2017
(54) IMPROVED COATINGS, COATED SEPARATORS, BATTERIES, AND RELATED METHODS
(73) Celgard LLC
(72) LANE, Michael B.
JEON, Insik
KRUGER, Edward
YU, Xiang
SMITH, Ronnie, E.
REINARTZ, Stefan
MA, Junqing
(31) 201662365780 P
(32) 22.07.2016
(33) United States of America

(51) C09D 7/45
C09D 17/00
C09B 67/46
(11) EP4341353
(21) EP22701929.6
(47) 21.05.2025
(87) EP2022051180
24.11.2022
(22) 20.01.2022
(54) UNIVERSAL DISPERSING AGENT FOR INORGANIC AND ORGANIC PIGMENTS
(73) Clariant International Ltd
(72) HÄUSSLER, Matthias
ABEN, Simon
SCHNEIDER, Jan
JÖRG, Rüger
(31) 21174871
(32) 20.05.2021
(33) European Patent Office (EPO)

(51) C09D 123/08
B31C 7/02
B65D 3/06
C09J 7/35
C09J 123/08
D21H 19/84
C08K 3/34
C09D 109/08
(11) EP3710547
(21) EP18879157.8
(47) 21.05.2025
(87) US2018061461
23.05.2019
(22) 16.11.2018
(54) HEAT-SEALABLE ARTICLE COATED WITH AN ETHYLENE/(METH)ACRYLIC ACID-COPOLYMER
(73) Artemyn USA, LLC
(72) MEIZANIS, Paul
PRATT, Gareth V.
(31) 201762587590 P
(32) 17.11.2017
(33) United States of America

(51) C09J 5/04
B32B 7/12
B32B 15/082
B32B 15/085
B32B 15/088
B32B 15/09
B32B 15/12
B32B 15/20
(11) EP3508437
(21) EP17846475.6
(47) 21.05.2025
(87) JP2017030888
08.03.2018
(22) 29.08.2017
(54) METHOD FOR MANUFACTURING FLEXIBLE PACKAGING FILM
(73) DIC Corporation
(72) OGAWA Masahiko
TAKAHASHI Shigekazu
TAKADA Choichi
ICHIMURA Naoki
(31) 2016172727
(32) 05.09.2016
(33) Japan

(51) C09J 7/21
G09F 3/10
G09F 3/02
(11) EP3541884
(21) EP16806208.1
(47) 21.05.2025
(87) FI2016050812
24.05.2018
(22) 17.11.2016
(54) A LINERLESS THERMAL LABEL WEB AND LABELS PRODUCED THEREOF
(73) UPM Raflatac Oy
(72) KARHU, Johanna

PIETARI, Ismo

(51) C09J 7/29
A61F 13/472
A61F 13/56
(11) EP4138749
(21) EP21725310.3
(47) 21.05.2025
(87) US2021028625
28.10.2021
(22) 22.04.2021
(54) ADHESIVE FOR AN ABSORBENT ARTICLE
(73) The Procter & Gamble Company
(72) CAPUTI, Mariangela
CARLA, Vito
MORAND, Matthias
SWITZER, Andrea Pfarr
KIRKBRIDE, Tana
(31) 202063013573 P
(32) 22.04.2020
(33) United States of America

(51) C09J 11/02
C08K 7/18
C08K 3/36
C09J 7/10
(11) EP3694945
(21) EP18783444.5
(47) 21.05.2025
(87) EP2018077109
18.04.2019
(22) 05.10.2018
(54) FILLED ADHESIVE COMPOUND
(73) TESA SE
(72) SCHUBERT, Thomas
MAYER, Michael
RADEMACHER, Franciska
(31) 102017218264
(32) 12.10.2017
(33) Germany

(51) C09J 133/08
C08F 220/20
(11) EP4061904
(21) EP20815942.6
(47) 21.05.2025
(87) IB2020060823
27.05.2021
(22) 17.11.2020
(54) CROSSLINKABLE AND CROSSLINKED ACRYLIC ADHESIVE COMPOSITIONS
(73) 3M Innovative Properties Company
(72) SIMONE, Peter M.
CLAPPER, Jason D.
ELLIS, Mark F.
BEAGI, Hollis Z.
WESSEL, Matthew H.
(31) 201962938486 P
(32) 21.11.2019
(33) United States of America

(51) C09J 183/04
C08L 71/02
C08L 101/10
(11) EP3877480
(21) EP19797231.8
(47) 21.05.2025
(87) EP2019079472
14.05.2020
(22) 29.10.2019
(54) MOISTURE-CURABLE SINGLE-COMPONENT COMPOUND, AND METHOD FOR JOINING, CASTING AND COATING USING SAID COMPOUND
(73) DELO Industrie Klebstoffe GmbH & Co. KGaA
(72) TRUE, Markus
EHRET, Markus
SÜVEGES, Bastian
(31) 102018127854
(32) 08.11.2018
(33) Germany

(51) C09J 183/04
C09J 183/05
B32B 9/00
B32B 27/00
C08J 7/04
C09J 7/00
C09J 7/38
C09J 11/02
C09J 183/07
G02F 1/1333
G02F 1/1335
G09F 9/00
(11) EP3650515
(21) EP18827418.7
(47) 21.05.2025
(87) JP2018024553
10.01.2019
(22) 28.06.2018
(54) ORGANOPOLYSILOXANE COMPOSITION FOR FORMING PRESSURE SENSITIVE ADHESIVE LAYER AND USE OF SAME
(73) Dow Corning Toray Co., Ltd.
(72) ITOH, Maki
NAKAMURA, Akihiro
SUTO, Michitaka
(31) 2017133255
(32) 07.07.2017
(33) Japan

(51) C09K 5/10
(11) EP4204512
(21) EP21766610.6
(47) 21.05.2025
(87) EP2021073287
03.03.2022
(22) 23.08.2021
(54) HEAT EXCHANGE METHOD USING FLUORINATED VINYLETHERS HAVING A LOW GWP
(73) Solvay Specialty Polymers Italy S.p.A.
(72) ANTENUCCI, Emanuela
KAPELYUSHKO, Valeriy
MONZANI, Cristiano
DENISOV, Evgeny
(31) 20193274
(32) 28.08.2020
(33) European Patent Office (EPO)

(51) C09K 8/54
E21B 37/06
E21B 41/02
C23F 11/08
C23F 11/14
C23F 11/173
C23F 11/18
(11) EP3853318
(21) EP19862248.2
(47) 21.05.2025
(87) US2019052308
26.03.2020
(22) 21.09.2019
(54) ORGANIC BLEND ADDITIVE USEFUL FOR INHIBITING LOCALIZED CORROSION OF EQUIPMENT USED IN OIL AND GAS PRODUCTION
(73) Baker Hughes Holdings LLC
(72) MENENDEZ, Carlos, M.
(31) 201916577972
201862734752 P
(32) 20.09.2019
21.09.2018
(33) United States of America
United States of America

(51) C09K 8/588
C08F 120/56
C09K 8/68
C09K 8/88
(11) EP4457296
(21) EP24710126.4
(47) 21.05.2025
(87) EP2024056692
19.09.2024
(22) 13.03.2024
(54) METHOD FOR INJECTING AN AQUEOUS POLYMER SOLUTION INTO AN UNDERGROUND FORMATION
(73) SNF Group
(72) FAVERO, Cédrick
(31) 23161906
(32) 14.03.2023
(33) European Patent Office (EPO)

(51) C09K 11/02
C09K 11/06
C09B 67/02
G01N 33/52
G01N 33/531
G01N 33/533
G01N 33/543
A61K 49/00
(11) EP4069799
(21) EP20820801.7
(47) 21.05.2025
(87) EP2020084247
10.06.2021
(22) 02.12.2020
(54) LUMINESCENT ZWITTERIONIC POLYMERIC NANOPARTICLES
(73) Université de Strasbourg
Centre national de la recherche scientifique
(72) KLYMCHENKO, Andrey
REISCH, Andreas
RUNSER, Anne
DUJARDIN, Denis
(31) 19306564
(32) 03.12.2019
(33) European Patent Office (EPO)

(51) C09K 11/06
C07D 251/24
C07D 307/91
C07D 333/76
C07D 405/04
C07D 405/14
C07D 409/04

H10K 85/60
H10K 50/11
H10K 50/12
(11) EP4212517
(21) EP21867035.4
(47) 21.05.2025
(87) KR2021011732
17.03.2022
(22) 01.09.2021
(54) COMPOUND FOR ORGANIC OPTOELECTRONIC ELEMENT, COMPOSITION FOR ORGANIC OPTOELECTRONIC ELEMENT, ORGANIC OPTOELECTRONIC ELEMENT, AND DISPLAY DEVICE
(73) Samsung SDI Co., Ltd.
(72) LEE, Byoungkwan
LEE, Yoonman
SHIN, Sunwoong
LEE, Sangshin
JANG, Kipo
NAMGUNG, Ran
PARK, Seungin
JUNG, Sung-Hyun
JUNG, Ho Kuk
JO, Youngkyoung
(31) 20200115635
(32) 09.09.2020
(33) Korea (Republic)

(51) C09K 11/62
C09K 11/77
(11) EP3760691
(21) EP20191671.5
(47) 21.05.2025
(22) 14.04.2017
(54) SCINTILLATOR AND PREPARATION METHOD THEREFOR
(73) Kyungpook National University Industry-Academic Cooperation Foundation
(72) KIM, Hong Joo
KIM, Sunghwan
PARK, Hwanbae
ROOH, Gul
(31) 20160046033
20160046030
(32) 15.04.2016
15.04.2016
(33) Korea (Republic)
Korea (Republic)

(51) C09K 13/00
C23F 1/02
C23F 1/32
C23F 1/36
H10N 60/01
(11) EP4070390
(21) EP19817248.8
(47) 21.05.2025
(87) EP2019083906
10.06.2021
(22) 05.12.2019
(54) METHOD OF SELECTIVELY ETCHING A METAL COMPONENT
(73) Microsoft Technology Licensing, LLC
(72) VAITIEKENAS, Saulius
UPADHYAY, Shivendra
MARCUS, Charles, Masamed

(51) C09K 19/60
C09K 19/54
C09K 19/04
(11) EP4244304
(21) EP20804262.2
(47) 21.05.2025
(87) EP2020081615
19.05.2022
(22) 10.11.2020
(54) METHOD FOR PREPARING A COATED ARTICLE
(73) Transitions Optical, Ltd.
(72) HE, Meng
KUMAR, Anil
VELDKAMP, Brad S.
EVANS, Robin Lee

(51) C09K 19/60
C09K 19/54
C09K 19/04
(11) EP4244305
(21) EP20804516.1
(47) 21.05.2025
(87) EP2020081620
19.05.2022
(22) 10.11.2020
(54) PHOTOCHROMIC-DICHROIC ARTICLES
(73) Transitions Optical, Ltd.
(72) NGUYEN, Henry
BROWN, Cory S.
KUMAR, Anil
GRUBB, Alan M.
REDDY, Ramaiahgari
LI, Yannian

(51) C10B 53/07
C10G 1/00
C10G 1/10
C08F 10/02
C10G 51/04
(11) EP4127102
(21) EP20928609.5
(47) 21.05.2025
(87) US2020066822
07.10.2021
(22) 23.12.2020
(54) CIRCULAR ECONOMY FOR PLASTIC WASTE TO POLYETHYLENE VIA REFINERY FCC OR FCC/ALKYLATION UNITS
(73) Chevron U.S.A. Inc.
(72) TIMKEN, Hye-Kyung
MCCORD, Cameron
(31) 202063002020 P
202063002053 P
(32) 30.03.2020
30.03.2020
(33) United States of America
United States of America

(51) C10G 31/08
B01D 17/04
C07C 47/127
C10G 33/04
C08G 8/08
C08G 16/00
(11) EP3574062
(21) EP18701593.8
(47) 21.05.2025
(87) IB2018050211
02.08.2018
(22) 12.01.2018
(54) METHOD OF DEMULSIFICATION IN THE PRESENCE OF A DEMULSIFICATION ADDITIVE COMPOSITION
(73) Dorf Ketal Chemicals (India) Private Limited
(72) SUBRAMANIYAM, Mahesh
(31) 201721002955
(32) 25.01.2017
(33) India

(51) C10G 45/02
C10G 65/02
C10G 65/04
C10G 31/08
C10G 67/00
(11) EP3630925
(21) EP18810359.2
(47) 21.05.2025
(87) US2018034362
06.12.2018
(22) 24.05.2018
(54) PROCESS FOR HYDROTREATING A RESIDUE STREAM
(73) UOP LLC
(72) SUN, Ping
YOKOMIZO, Grant H.
(31) 201715612425
(32) 02.06.2017
(33) United States of America

(51) C10G 50/00
C10G 1/00
B01J 6/00
C10G 9/00
B01J 19/00
B01J 19/14
B01J 19/24
(11) EP3889240
(21) EP21162062.0
(47) 21.05.2025
(22) 11.03.2021
(54) REACTORS FOR PREPARING VALUABLE HYDROCARBONS AND HYDROGEN FROM METHANE THROUGH NON-OXIDATIVE PYROLYSIS
(73) SK Innovation Co., Ltd.
(72) YUN, Dong Min
IM, Ju Hwan
KIM, Do Kyoung
(31) 20200039791
(32) 01.04.2020
(33) Korea (Republic)

(51) C10G 65/02
C10L 1/04
C07C 1/20
C10G 3/00
C10G 45/58
C10G 65/04
C10G 45/02
B01D 53/00
B01D 53/14
(11) EP3759198
(21) EP19760025.7
(47) 21.05.2025
(87) US2019019533
06.09.2019
(22) 26.02.2019

(54) PROCESS FOR PRODUCING FUELS FROM A BLENDED BIORENEWABLE FEED
(73) UOP LLC
(72) WEXLER, James T.
HOEHN, Richard K.
QUOCK, Joe
(31) 201815907060
(32) 27.02.2018
(33) United States of America

(51) C10L 1/14
C10L 1/183
C10L 3/12
C10L 1/16
C10L 1/26
(11) EP4212607
(21) EP22151838.4
(47) 21.05.2025
(22) 17.01.2022
(54) LPG FUEL COMPOSITIONS, ADDITIVES THEREFOR AND USES THEREOF
(73) TotalEnergies One Tech
(72) MONDKAR, Hemant Sunanda
EYDOUX, Franck Georges
REDDY, Vishnu Vardhan
SHIRKE, Vrushali Vijay
KAPOOR, Rohil
D'SOUZA, Roark
EDAPPADY, NIRANJAN

(51) C10M 169/06
C10M 105/04
C10M 107/02
C10M 115/08
C10M 119/02
C10N 50/10
(11) EP4375352
(21) EP22845756.0
(47) 21.05.2025
(87) JP2022025934
26.01.2023
(22) 29.06.2022
(54) GREASE COMPOSITION, AND METHOD FOR PRODUCING GREASE COMPOSITION
(73) JTEKT CORPORATION
(72) NIIYA TAKAHARA, Kanako
MATSUYAMA, Junya
(31) PCT/JP2021/027389
(32) 21.07.2021
(33) World Intellectual Property Office (WIPO)

(51) C10M 173/02
C10N 30/06
C10N 40/20
(11) EP4363536
(21) EP22741246.7
(47) 21.05.2025
(87) EP2022068164
05.01.2023
(22) 30.06.2022
(54) AQUEOUS LUBRICANT COMPOSITION FOR METALWORKING
(73) TotalEnergies OneTech
(72) VERROUL, Véronique
FRELECHOUX, Richard
(31) 2107130
(32) 01.07.2021
(33) France

(51) C11D 3/37
(11) EP4134421
(21) EP21191154.0
(47) 21.05.2025
(22) 12.08.2021
(54) DETERGENT COMPOSITION COMPRISING DETERSIVE SURFACTANT AND GRAFT POLYMER
(73) The Procter & Gamble Company
(72) BEAN, Jessica Eleanor
BECKER, Natalia
BENLAHMAR, Ouidad
BUECHSE, Andreas
DEL REGNO, Annalaura
FLECKENSTEIN, Peter Joachim
GORCZYNSKA-COSTELLO, Katarzyna
HUELSKOETTER, Frank
MCLUCKIE, Kate Moira
MUELLER, Jan-Ole
SETTELS, Volker
SI, Gang

(51) C11D 17/00
C11D 9/22
C11D 9/26
C11D 9/06
C11D 9/24
(11) EP4061919
(21) EP20807413.8
(47) 21.05.2025
(87) EP2020082694
27.05.2021
(22) 19.11.2020
(54) A SOAP BAR COMPOSITION FOR ENHANCED DELIVERY OF WATER SOLUBLE BENEFIT AGENT
(73) Unilever IP Holdings B.V.
(72) AGARKHED, Ajit, Manohar
HEGISHTE, Swapnil, Ravikant
IYER, Vidula
KHOKHAR, Jasmeet, Kaur
PARUCHURI, Divya
PRATAP, Shailendra
(31) 19210580
(32) 21.11.2019
(33) European Patent Office (EPO)

(51) C12C 1/18
C12C 1/16
C12C 1/02
C12C 1/027
A23L 7/20
C12C 1/067
(11) EP4166640
(21) EP22201127.2
(47) 21.05.2025
(22) 12.10.2022
(54) PROCESS FOR PRODUCING MALT
(73) Malzfabrik Rheinpfalz GmbH
(72) Leisler, Christian
(31) 102021126352
(32) 12.10.2021
(33) Germany

(51) C12M 1/40
C12P 19/34
C12P 19/04
C12P 21/02
C12Q 1/34
C12Q 1/37
(11) EP4153241
(21) EP21925332.5
(47) 21.05.2025
(87) CN2021087115
18.08.2022
(22) 14.04.2021
(54) CONJUGATION DEVICE AND METHOD FOR PRODUCING CONJUGATES
(73) Genequantum Healthcare (Suzhou) Co., Ltd.
Lisure Science (Suzhou) Co., Ltd
(72) QIN, Gang
ZHOU, Sheng
LV, Cao
WALTER, Joachim
(31) PCT/CN2021/076218
(32) 09.02.2021
(33) World Intellectual Property Office (WIPO)

(51) C12M 3/00
C12M 1/12
C12M 3/06
C12M 1/00
C12M 1/34
C12M 1/36
B01L 3/00
(11) EP3190172
(21) EP16207323.3
(47) 21.05.2025
(22) 29.12.2016
(54) INTERCONNECTIONS OF MULTIPLE PERFUSED ENGINEERED TISSUE CONSTRUCTS AND MICROBIOREACTORS, MULTI-MICROFORMULATORS AND APPLICATIONS OF THE SAME
(73) Vanderbilt University
(72) WIKSWO, John P.
MARKOV, Dmitry A.
SAMSON, Philip C.
BLOCK, Frank E. III
SCHAFFER, David K.
REISERER, Ronald S.
(31) 201615191092
201662295306 P
201662276047 P
(32) 23.06.2016
15.02.2016
07.01.2016
(33) United States of America
United States of America
United States of America

(51) C12M 3/06
C12M 1/00
C12M 1/34
G01N 33/50
G01N 35/10
(11) EP4388075
(21) EP22764796.3
(47) 21.05.2025
(87) EP2022072867
23.02.2023
(22) 16.08.2022
(54) APPARATUS FOR MICROSCOPIC WORM OBSERVATION
(73) Nagi Bioscience SA
(72) CORNAGLIA, Matteo
TACHE, Fabien
(31) 21191741
(32) 17.08.2021

(33) European Patent Office (EPO)

(51) C12N 1/00
C12N 1/04
C12N 5/071
C12N 5/0775
C12N 5/077
(11) EP4083186
(21) EP20905080.6
(47) 21.05.2025
(87) JP2020048636
01.07.2021
(22) 25.12.2020
(54) CELL GROWTH REGULATOR
(73) Bourbon Corporation
(72) TAKIZAWA Sakiko
FUJIMOTO Shunsuke
TAKASAKA Mieko
SASAKI Katsunori
(31) 2019239572
(32) 27.12.2019
(33) Japan

(51) C12N 5/02
G01N 21/64
G01N 15/14
G01N 15/10
G01N 15/1434
G01N 15/1433
(11) EP3864140
(21) EP19870207.8
(47) 21.05.2025
(87) US2019055972
16.04.2020
(22) 11.10.2019
(54) ANALYSIS OF VIABLE AND NONVIABLE CELLS
(73) SageMedic, Corp.
(72) MOROZ, Ekaterina
APFEL, Christian
ANDERSON, Kraig K.
(31) 201816159482
(32) 12.10.2018
(33) United States of America

(51) C12N 9/10
C12N 15/54
C12N 15/63
C12N 15/70
C12P 13/00
C12R 1/19
(11) EP3712262
(21) EP17932405.8
(47) 21.05.2025
(87) CN2017111161
23.05.2019
(22) 15.11.2017
(54) TRANSAMINASE MUTANT AND APPLICATION THEREOF
(73) Asymchem Life Science (Tianjin) Co., Ltd.
(72) HONG, Hao
JAMES, Gage
LU, Jiangping
XU, Xingfu
YU, Wenyan
HUANG, Xin
MA, Yulei
CHENG, Yibing

(51) C12N 9/64
A61P 7/00
A61P 9/00
C12M 1/00
C12N 11/14
A61P 7/02
(11) EP4299735
(21) EP23210110.5
(47) 21.05.2025
(22) 02.08.2010
(54) METHODS OF PURIFYING RECOMBINANT ADAMTS13 AND OTHER PROTEINS AND COMPOSITIONS THEREOF
(73) Takeda Pharmaceutical Company Limited
(72) Hasslacher, Meinhard
Mitterer, Artur
Fiedler, Christian
Mayer, Christa
(31) 23030809 P
(32) 31.07.2009
(33) United States of America

(51) C12N 9/90
C12N 15/52
C12P 17/04
C12P 5/00
(11) EP4208546
(21) EP21778693.8
(47) 21.05.2025
(87) US2021071351
10.03.2022
(22) 02.09.2021
(54) SQUALENE HOPENE CYCLASE DERIVATIVES AND USE THEREOF FOR PRODUCING AMBROX
(73) International Flavors & Fragrances Inc.
(72) BANNON, Lyndsey Jane
DOURADO, Daniel Fernando Andrade Ribeiro
LIPSCOMB, David Andrew
MCINTYRE, Peter Brian Alexander
MIX, Stefan
MOODY, Thomas Shaw
QUINN, Derek
JONES, Paul Daniel
NARULA, Anubhav P.S.
(31) 202063073633 P
(32) 02.09.2020
(33) United States of America

(51) C12N 15/10
C40B 40/10
C40B 70/00
C07K 16/00
(11) EP3704249
(21) EP18874783.6
(47) 21.05.2025
(87) US2018058565
09.05.2019
(22) 31.10.2018
(54) KITS FOR ANALYSIS USING NUCLEIC ACID ENCODING AND/OR LABEL
(73) Encodia, Inc.
(72) CHEE, Mark, S.
BEIERLE, John, M.
MURANAKA, Norihito
GUNDERSON, Kevin
WEINER, Michael, Phillip
SHI, Lei
JAMES, Robert, C.
MONFREGOLA, Luca
(31) 201762583448 P
201762582312 P
201762579844 P
(32) 08.11.2017
06.11.2017
31.10.2017
(33) United States of America
United States of America
United States of America

(51) C12N 15/113
A61K 31/713
(11) EP3647424
(21) EP19194079.0
(47) 21.05.2025
(22) 10.11.2015
(54) HEPATITIS B VIRUS (HBV) IRNA COMPOSITIONS AND METHODS OF USE THEREOF
(73) Alnylam Pharmaceuticals, Inc.
(72) HINKLE, Gregory
SEPP-LORENZINO, Laura
JADHAV, Vasant
MAIER, Martin
MILSTEIN, Stuart
MANOHARAN, Muthiah
RAJEEV, Kallanthottathil, G.
(31) 201562137464 P
201462077799 P
201462077672 P
(32) 24.03.2015
10.11.2014
10.11.2014
(33) United States of America
United States of America
United States of America

(51) C12N 15/86
A61K 48/00
(11) EP3807413
(21) EP19749864.5
(47) 21.05.2025
(87) US2019037489
26.12.2019
(22) 17.06.2019
(54) ADENO-ASSOCIATED VIRUS VECTOR DELIVERY OF MUSCLE SPECIFIC MICRO-DYSTROPHIN TO TREAT MUSCULAR DYSTROPHY
(73) Research Institute at Nationwide Children's Hospital
(72) RODINO-KLAPAC, Louise
MENDELL, Jerry, R.
(31) 201962860220 P
201962823649 P
201862752841 P
201862740402 P
201862686668 P
(32) 11.06.2019
25.03.2019
30.10.2018
02.10.2018
18.06.2018
(33) United States of America
United States of America
United States of America
United States of America
United States of America

(51) C12P 7/42

C12N 15/52
C12N 9/88
C12N 1/21
(11) EP3130664
(21) EP15776134.7
(47) 21.05.2025
(87) JP2015060805
15.10.2015
(22) 07.04.2015
(54) CORYNEFORM BACTERIUM TRANSFORMANT AND METHOD FOR PRODUCING 4-HYDROXYBENZOIC ACID OR A SALT THEREOF
(73) Green Chemicals Co., Ltd.
(72) YUKAWA, Hideaki
INUI, Masayuki
HIRAGA, Kazumi
SUDA, Masako
HASHIMOTO, Ryoma
(31) 2014079504
(32) 08.04.2014
(33) Japan

(51) C12P 19/10
A61J 3/07
A61K 9/48
(11) EP3989910
(21) EP20832120.8
(47) 21.05.2025
(87) US2020035909
30.12.2020
(22) 03.06.2020
(54) METHOD FOR THE PRODUCTION OF PULLULAN SOFT CAPSULES
(73) Lefan Capsule International Inc
(72) YUN, Xianyu
WANG, Sheng
FANG, Zhongming
WANG, Fei
LIU, Peiyong
CAO, Xiaosan
LU, Zhidong
(31) 201916453111
(32) 26.06.2019
(33) United States of America

(51) C12P 19/24
(11) EP3676388
(21) EP18762500.9
(47) 21.05.2025
(87) EP2018073317
07.03.2019
(22) 30.08.2018
(54) POLYPEPTIDES HAVING D-PSICOSE 3-EPIMERASE ACTIVITY AND POLYNUCLEOTIDES ENCODING SAME
(73) Novozymes A/S
(72) SHEN, Xinyu
DEINHAMMER, Randall, Scott
HUFFMAN, James, Ron
STALLINGS, Kendra
HOFF, Tine
SALOMON, Jesper
OLSEN, Anne, Goldbech
(31) 201762552746 P
(32) 31.08.2017
(33) United States of America

(51) C12Q 1/04
C12Q 1/24
G01N 33/543
C12N 11/02
C12N 11/14
(11) EP3775254
(21) EP19717559.9
(47) 21.05.2025
(87) GB2019050959
10.10.2019
(22) 03.04.2019
(54) MICROORGANISM SEPARATION AND DETECTION
(73) Momentum Bioscience Limited
(72) LOCKHART, Daniel
JAY, Paul
TURNER, James
ROGERS, Andrew
CROW, Matthew
MULLEN, William
(31) 201805479
(32) 03.04.2018
(33) United Kingdom

(51) C12Q 1/68
(11) EP3359696
(21) EP16854568.9
(47) 21.05.2025
(87) US2016056451
13.04.2017
(22) 11.10.2016
(54) DIAGNOSTIC ASSAY FOR URINE MONITORING OF BLADDER CANCER
(73) Convergent Genomics, Inc.
Levin, Trevor
King, Carly
Phillips, Kevin
Evans-Holm, Martha
Li, Yueyao
(72) LEVIN, Trevor
KING, Carly
PHILLIPS, Kevin
EVANS-HOLM, Martha
LI, Yueyao
(31) 201562239202 P
(32) 08.10.2015
(33) United States of America

(51) C12Q 1/68
(11) EP4065725
(21) EP20828204.6
(47) 21.05.2025
(87) US2020062419
03.06.2021
(22) 25.11.2020
(54) METHODS, COMPOSITIONS AND SYSTEMS FOR IMPROVING THE BINDING OF METHYLATED POLYNUCLEOTIDES
(73) Guardant Health, Inc.
(72) HITE, Dustin Howard
GHADIRI, Farsheed
MORTIMER, Stefanie Ann Ward
(31) 201962940853 P
(32) 26.11.2019
(33) United States of America

(51) C12Q 1/6806
C12Q 1/6853
C12Q 1/6876
C12N 9/22
(11) EP4090766
(21) EP21741739.3
(47) 21.05.2025
(87) US2021013598
22.07.2021
(22) 15.01.2021
(54) METHODS OF TARGETED SEQUENCING
(73) Jumpcode Genomics, Inc.
(72) BROWN, Keith
(31) 202063009603 P
202062962777 P
(32) 14.04.2020
17.01.2020
(33) United States of America
United States of America

(51) C12Q 1/6818
G01N 33/53
(11) EP4384634
(21) EP22761331.2
(47) 21.05.2025
(87) US2022039853
16.02.2023
(22) 09.08.2022
(54) DETECTION OF ANALYTES USING TARGETED EPIGENETIC ASSAYS, PROXIMITY-INDUCED TAGMENTATION, STRAND INVASION, RESTRICTION, OR LIGATION
(73) ILLUMINA, INC.
(72) KENNEDY, Andrew
SHULTZABERGER, Sarah
BUSBY, Kayla
BROWN, Colin
PRICE, Andrew
VERMAAS, Eric
PANTOJA, Rigoberto
FEELEY, Matthew
ZOU, Jennifer
LI, Yong
ALMASI, Sepideh
DUTTA, Anindita
ALVAREZ, Michelle
(31) 202163250574 P
202163231970 P
(32) 30.09.2021
11.08.2021
(33) United States of America
United States of America

(51) C12Q 1/6827
C12Q 1/6869
C12Q 1/6883
C12Q 1/6886
C12Q 1/6806
C12Q 1/6881
(11) EP3827095
(21) EP19840761.1
(47) 21.05.2025
(87) CN2019097329
30.01.2020
(22) 23.07.2019
(54) CELL-FREE DNA DAMAGE ANALYSIS AND ITS CLINICAL APPLICATIONS
(73) The Chinese University Of Hong Kong
Grail, Inc.
(72) LO, Yuk-Ming Dennis
CHIU, Rossa Wai Kwun
CHAN, Kwan Chee
JIANG, Peiyong
CHENG, Suk Hang

(31) 201862785118 P
201862702080 P
(32) 26.12.2018
23.07.2018
(33) United States of America
United States of America

(51) C12Q 1/6844
(11) EP4219755
(21) EP23161744.0
(47) 21.05.2025
(22) 01.12.2020
(54) TIME-BASED CLUSTER IMAGING OF AMPLIFIED CONTIGUITY PRESERVED LIBRARY FRAGMENTS OF GENOMIC DNA
(73) Illumina Cambridge Limited
(72) MORRELL, Natalie
SLATTER, Andrew
THOMSON, Vicki
(31) 201962942563 P
(32) 02.12.2019
(33) United States of America

(51) C12Q 1/6844
B01L 3/00
C12Q 1/6816
(11) EP3899038
(21) EP19899251.3
(47) 21.05.2025
(87) US2019067967
25.06.2020
(22) 20.12.2019
(54) RATIOMETRIC FLUORESCENCE CODING METHOD FOR MULTIPLEX NUCLEIC ACID AMPLIFICATION ASSAYS
(73) The Johns Hopkins University
(72) WANG, Tza-Huei Jeff
ZHANG, Ye
(31) 201862784100 P
(32) 21.12.2018
(33) United States of America

(51) C12Q 1/6869
C40B 20/04
(11) EP3351661
(21) EP18159851.7
(47) 21.05.2025
(22) 25.11.2013
(54) METHODS FOR STANDARDIZED SEQUENCING OF NUCLEIC ACIDS AND USES THEREOF
(73) The University of Toledo
(72) WILLEY, James C.
BLOMQUIST, Thomas
CRAWFORD, Erin
(31) 201361784394 P
201261730463 P
201261729853 P
(32) 14.03.2013
27.11.2012
26.11.2012
(33) United States of America
United States of America
United States of America

(51) C12Q 1/6886
(11) EP3704273
(21) EP18804525.6
(47) 21.05.2025
(87) EP2018080073
09.05.2019
(22) 04.11.2018
(54) METHOD OF PREDICTING RESPONSE OF A MALIGNANT DISEASE TO IMMUNTHERAPY
(73) Dietrich, Dimo
(72) Dietrich, Dimo
(31) 102017125780
(32) 05.11.2017
(33) Germany

(51) C12Q 1/6886
(11) EP3976830
(21) EP20728086.8
(47) 21.05.2025
(87) EP2020065099
03.12.2020
(22) 29.05.2020
(54) DETECTION OF HYPERMETHYLATED GENES FOR DIAGNOSING PANCREATIC CANCER
(73) Université Paris Cité
Centre national de la recherche scientifique
Institut National de la Santé et de la Recherche Médicale
ASSISTANCE PUBLIQUE - HÔPITAUX DE PARIS
(72) WANG-RENAULT, Shufang
TALY, Valérie
BACHET, Jean
LAURENT-PUIG, Pierre
PIETRASZ, Daniel
(31) 19305695
(32) 29.05.2019
(33) European Patent Office (EPO)

(51) C12Q 1/6886
(11) EP3987062
(21) EP20733449.1
(47) 21.05.2025
(87) EP2020067370
24.12.2020
(22) 22.06.2020
(54) DETECTION OF HYPERMETHYLATED GENES FOR DIAGNOSING GASTRIC CANCER
(73) Université Paris Cité
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)
Assistance Publique-Hôpitaux de Paris
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)
(72) WANG-RENAULT, Shufang
TALY, Valérie
LAURENT-PUIG, Pierre
ZAANAN, Aziz
(31) 19305811
(32) 21.06.2019
(33) European Patent Office (EPO)

(51) C12Q 1/6886
(11) EP4281588
(21) EP22702433.8
(47) 21.05.2025
(87) EP2022051512
28.07.2022
(22) 24.01.2022
(54) A METHOD FOR DIAGNOSING ENDOMETRIAL OR OVARIAN CARCINOMA
(73) Université Paris Cité
Assistance Publique Hôpitaux de Paris
Centre National de la Recherche Scientifique
INSERM (Institut National de la Santé et de la Recherche Médicale)
SORBONNE UNIVERSITE
(72) ALEXANDRE, Jérôme
BORGHESE, Bruno
BEINSE, Guillaume
TALY, Valérie
LAURENT-PUIG, Pierre
JUST, Pierre-Alexandre
(31) 21306344
21305086
(32) 28.09.2021
25.01.2021
(33) European Patent Office (EPO)
European Patent Office (EPO)

(51) C22B 3/06
C22B 3/46
C22B 15/00
C22B 1/02
C22B 3/00
H01M 10/54
(11) EP4441258
(21) EP22822974.6
(47) 21.05.2025
(87) EP2022083560
08.06.2023
(22) 29.11.2022
(54) A METHOD FOR IRON AND COPPER REMOVAL FROM SOLUTION USING METALLIC REAGENTS
(73) Umicore
(72) KLAASEN, Bart
(31) 21211405
(32) 30.11.2021
(33) European Patent Office (EPO)

(51) C22B 3/22
C22B 26/12
(11) EP3889279
(21) EP20212184.4
(47) 21.05.2025
(22) 07.12.2020
(54) EXTRACTION OF LITHIUM IONS AND OTHER RARE EARTH ALKALI METAL IONS FROM GEOTHERMAL WATER WITHIN A BINARY GEOTHERMAL POWER PLANT
(73) Karlsruher Institut für Technologie
(72) Grimmer, Jens C. H.
Saravia, Florencia
(31) 102020109137
(32) 02.04.2020
(33) Germany

(51) C22B 7/00
C22B 15/00
C22B 23/02
H01M 10/54
C22B 1/02
C22B 5/10
C22B 5/12
B09B 3/70
B09B 3/40

(11) EP4180137
(21) EP21838479.0
(47) 21.05.2025
(87) JP2021023472
13.01.2022
(22) 21.06.2021
(54) METHOD FOR RECOVERING VALUABLE METAL
(73) SUMITOMO METAL MINING CO., LTD.
(72) YAMASHITA Yu
(31) 2020118452
(32) 09.07.2020
(33) Japan

(51) C22C 1/04
C22C 28/00
B22F 3/105
G04B 37/22
C22C 1/047
C22C 30/00
(11) EP4381110
(21) EP22757274.0
(47) 21.05.2025
(87) EP2022070897
09.02.2023
(22) 26.07.2022
(54) ALLOY WITH COMPLEX COMPOSITION
(73) Hublot S.A., Genève
(72) BUTTET, Mathias
RECALCATI, Sébastien
(31) 0701242021
(32) 02.08.2021
(33) Switzerland

(51) C22C 1/055
C22C 29/06
C22C 29/08
B22F 3/15
B22F 5/00
(11) EP4389923
(21) EP22214877.7
(47) 21.05.2025
(22) 20.12.2022
(54) CEMENTED CARBIDE CUTTING TOOL AND MANUFACTURING METHOD THEREOF
(73) AB Sandvik Coromant
(72) GARCIA, José
CHYCHKO, Andrei

(51) C22C 38/00
C22C 38/42
C22C 38/44
C22C 38/46
C22C 38/50
C22C 38/48
C22C 38/54
C22C 38/02
C22C 38/04
C22C 38/06
C21D 9/08
C21D 6/00
C21D 8/10
C22C 38/58
(11) EP3492612
(21) EP17833981.8
(47) 21.05.2025
(87) JP2017024739
01.02.2018
(22) 05.07.2017
(54) HIGH STRENGTH SEAMLESS STEEL PIPE AND RISER
(73) Nippon Steel Corporation
(72) OE, Taro
(31) 2016148646
(32) 28.07.2016
(33) Japan

(51) C22C 38/02
C22C 38/04
C22C 38/08
C22C 38/12
C22C 38/14
C22C 38/16
C22C 38/32
C22C 38/60
C21D 1/18
C21D 9/00
C21D 9/46
C21D 8/02
C21D 8/04
C21D 9/48
C23C 2/02
C23C 2/06
C23C 2/26
C23C 2/28
C23C 2/40
C25D 5/36
C25D 7/06
(11) EP3919645
(21) EP19912661.6
(47) 21.05.2025
(87) JP2019051231
06.08.2020
(22) 26.12.2019
(54) HOT-PRESSED MEMBER, COLD-ROLLED STEEL SHEET FOR HOT-PRESSED MEMBER, AND METHOD FOR PRODUCING THE SAME
(73) JFE Steel Corporation
(72) TAKASHIMA, Katsutoshi
TANAKA, Minoru
TSUZUMI, Kenji
ARAKAWA, Shingo
SAKURAI, Michitaka
(31) 2019015062
(32) 31.01.2019
(33) Japan

(51) C23C 8/36
C23C 8/10
H05H 1/24
(11) EP3377668
(21) EP16867366.3
(47) 21.05.2025
(87) US2016063392
26.05.2017
(22) 22.11.2016
(54) METHOD AND DEVICE FOR PROMOTING ADHESION OF METALLIC SURFACES
(73) Atmospheric Plasma Solutions, Inc.
(72) YANCEY, Peter, Joseph
(31) 201562258522 P
(32) 22.11.2015
(33) United States of America

(51) C23C 16/455
C23C 16/48
C30B 25/16
(11) EP4200462
(21) EP21766306.1
(47) 21.05.2025
(87) US2021045873
24.02.2022
(22) 13.08.2021
(54) WINDOW FOR CHEMICAL VAPOR DEPOSITION SYSTEMS AND RELATED METHODS
(73) GlobalWafers Co., Ltd.
(72) TU, Chun-Chin
HAMANO, Manabu
HSU, Lunghsing
(31) 202062706452 P
(32) 18.08.2020
(33) United States of America

(51) C23C 28/00
C23C 28/04
C23C 14/02
C23C 14/06
C23C 14/32
H01L 33/32
H01L 21/02
H10N 30/079
H10N 30/00
H01L 33/00
H01L 33/12
(11) EP3840072
(21) EP20215698.0
(47) 21.05.2025
(22) 18.12.2020
(54) METHOD FOR MANUFACTURING A LAYER OF TEXTURED ALUMINIUM NITRIDE
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
(72) CADOT, Stéphane
MARTIN, François
GASSILOUD, Rémy
(31) 1915272
(32) 20.12.2019
(33) France

(51) C23C 28/00
C25D 9/08
C23C 22/34
C25D 3/30
C25D 5/36
C25D 5/50
C25D 9/00
(11) EP3760763
(21) EP19760710.4
(47) 21.05.2025
(87) JP2019008222
06.09.2019
(22) 01.03.2019
(54) SN-PLATED STEEL SHEET AND METHOD FOR MANUFACTURING SN-PLATED STEEL SHEET
(73) NIPPON STEEL CORPORATION
(72) YAMANAKA, Shintaro
NODA, Masakazu
SATO, Yasuhiko
NAKASONE, Nobuo
(31) 2018036587
(32) 01.03.2018
(33) Japan

(51) C23F 13/06
C23F 13/10
F16L 58/00

F16L 11/08
(11) EP3810831
(21) EP19732104.5
(47) 21.05.2025
(87) GB2019051662
26.12.2019
(22) 14.06.2019
(54) FLEXIBLE PIPE FOR SUBSEA TRANSPORTION OF PRODUCTION FILEDS, METHOD OF MANUFACTURING FLEXIBLE PIPE BODY, AND METHOD OF PROVIDING CORROSION PROTECTION TO ARMOUR WIRES OF AT LEAST ONE TENSILE ARMOUR LAYER OF A FLEXIBLE PIPE HAVING A BREACHED PIPE ANNULUS REGION.
(73) Baker Hughes Energy Technology UK Limited
(72) COLLINS, Peter Francis Richard
(31) 201810228
(32) 21.06.2018
(33) United Kingdom

(51) C25B 1/04
C25B 11/052
C25B 11/055
C25B 11/075
C25B 11/095
C25D 9/06
(11) EP4119700
(21) EP21768565.0
(47) 21.05.2025
(87) JP2021008958
16.09.2021
(22) 08.03.2021
(54) ALKALINE WATER ELECTROLYSIS METHOD, AND ANODE FOR ALKALINE WATER ELECTROLYSIS
(73) De Nora Permelec Ltd
KAWASAKI JUKOGYO KABUSHIKI KAISHA
NATIONAL UNIVERSITY CORPORATION YOKOHAMA NATIONAL UNIVERSITY
(72) MITSUSHIMA, Shigenori
KURODA, Yoshiyuki
TAKATSU, Shohei
NAGASHIMA, Ikuo
TANIGUCHI, Tatsuya
INOMATA, Akihiko
NAGAI, Ayaka
NISHIKI, Yoshinori
KATO, Akihiro
ZAENAL, Awaludin
NAKAI, Takaaki
(31) 2020039838
(32) 09.03.2020
(33) Japan

(51) C25B 1/26
C25B 1/34
C25B 15/02
C02F 1/467
H01M 8/0656
C02F 103/08
C25B 9/17
(11) EP3593401
(21) EP18763507.3
(47) 21.05.2025
(87) US2018021103
13.09.2018
(22) 06.03.2018
(54) IMPLEMENTATION OF FEEDBACK CONTROL FOR IMPROVED ELECTROCHEMICAL SYSTEM DESIGN
(73) Evoqua Water Technologies LLC
(72) DUKES, Simon Paul
GU, George Y.
GRIFFIS, Joshua
SHAW, Michael J.
(31) 201762469224 P
201762468544 P
201762467518 P
(32) 09.03.2017
08.03.2017
06.03.2017
(33) United States of America
United States of America
United States of America

(51) C25C 3/12
C04B 35/532
H05B 7/09
(11) EP3824121
(21) EP19742706.5
(47) 21.05.2025
(87) EP2019069029
23.01.2020
(22) 15.07.2019
(54) BLEND COMPOSITION COMPRISING PETROLEUM COKE AND PYROLYTIC CARBON FOR ELECTRODES
(73) BASF SE
(72) SCHEIFF, Frederik
LEDUC, Marc
BODE, Andreas
EICHHORN, Sabine
DALOZ, William
WYSS, Julien
(31) 18184459
(32) 19.07.2018
(33) European Patent Office (EPO)

(51) C25D 3/06
C23C 28/02
C25D 5/50
(11) EP3094765
(21) EP14878899.5
(47) 21.05.2025
(87) FI2014050031
23.07.2015
(22) 15.01.2014
(54) METHOD FOR PRODUCING A CHROMIUM COATING AND A COATED OBJECT
(73) Savroc Ltd
(72) MIETTINEN, Juha
RÄISÄ, Jussi

(51) C25D 5/12
C23C 28/00
C23C 2/04
C23C 24/06
C23C 4/08
C25D 7/00
C25D 7/06
(11) EP4060093
(21) EP21163067.8
(47) 21.05.2025
(22) 17.03.2021
(54) TRIBOLOGICALLY ENHANCED SURFACES FOR ELECTRICAL CONTACTS
(73) Rosenberger Hochfrequenztechnik GmbH & Co. KG
(72) Wagner, Reinhard
Dandl, Christian

(51) D01D 1/02
D01D 5/11
D01F 6/04
D01F 6/12
D01F 6/06
D01F 6/32
D01F 6/46
(11) EP3862467
(21) EP21151511.9
(47) 21.05.2025
(22) 08.06.2016
(54) FLASH-SPIN FLUID, USE THEREOF AND METHOD OF PREPARATION THEREOF
(73) DuPont Safety & Construction, Inc.
(72) Schmitz, Corneille
Van Meerveld, Jan
Skoplyak, Orest
Rebouillat, Serge
(31) 201562174014 P
(32) 11.06.2015
(33) United States of America

(51) D01D 5/06
D01F 13/02
D04H 3/013
D01F 2/02
C01D 5/00
C08B 16/00
C08B 15/06
(11) EP4323568
(21) EP23700145.8
(47) 21.05.2025
(87) FI2023050010
13.07.2023
(22) 05.01.2023
(54) CELLULOSIC TEXTILE FIBRE
(73) Infinited Fiber Company Oy
(72) MALANIN, Erkki
SIREN, Sakari
NUOPPONEN, Markus
VEIJOLA, Elias
(31) 20225011
(32) 07.01.2022
(33) Finland

(51) D01F 6/04
D01D 5/088
D01D 5/098
D01D 5/16
D02G 3/44
D02G 3/36
(11) EP3922765
(21) EP20774766.8
(47) 21.05.2025
(87) KR2020003815
24.09.2020
(22) 20.03.2020
(54) CUT RESISTANT POLYETHYLENE YARN, METHOD FOR MANUFACTURING SAME, AND PROTECTIVE ARTICLE PRODUCED USING SAME

(73) Kolon Industries, Inc.
(72) LEE, Young-Soo
LEE, Sang-Mok
KIM, Seong-Young
LEE, Sin-Ho
NAM, Min-Woo
(31) 20190124129
20190032246
(32) 07.10.2019
21.03.2019
(33) Korea (Republic)
Korea (Republic)

(51) D02J 1/18
B29B 11/16
D06H 7/04
D06M 15/59
B29K 105/14
D06M 101/40
B29B 15/12
D01D 5/42
D01F 9/12
D02J 13/00
D02J 1/22
D06M 15/55
D06M 15/564
D06M 15/643
(11) EP4163426
(21) EP21821463.3
(47) 21.05.2025
(87) JP2021020779
16.12.2021
(22) 01.06.2021
(54) METHOD FOR PRODUCING CARBON FIBER BUNDLE WITH SLIT, CARBON FIBER PACKAGE, AND METHOD FOR PRODUCING CARBON FIBER PACKAGE
(73) Mitsubishi Chemical Corporation
(72) OKAMOTO, Satoshi
MIZUTORI, Yukihiro
KANEHAGI, Junji
(31) 2020099997
(32) 09.06.2020
(33) Japan

(51) D03D 15/56
D03D 15/587
D04B 1/18
D04B 21/18
(11) EP3754067
(21) EP19754740.9
(47) 21.05.2025
(87) JP2019000400
22.08.2019
(22) 09.01.2019
(54) WOVEN OR KNITTED FABRIC
(73) Toray Industries, Inc.
(72) KEUM, Aram
TSUCHIKURA, Hiroshi
(31) 2018024424
(32) 14.02.2018
(33) Japan

(51) D04B 21/10
D04B 23/22
(11) EP4345202
(21) EP22199075.7
(47) 21.05.2025
(22) 30.09.2022
(54) KNITTED FABRIC WITH EDGE HARDENING AND DEVICE AND METHOD FOR PRODUCING SUCH A KNITTED FABRIC
(73) KARL MAYER Technische Textilien GmbH
(72) Bender, Stephan

(51) D04H 1/559
B32B 5/14
B32B 5/26
B65D 65/40
D04H 1/56
D04H 3/16
B32B 5/08
(11) EP4047116
(21) EP22150774.2
(47) 21.05.2025
(22) 10.01.2022
(54) USE OF A COMPOSITE MATERIAL AS A PACKAGING MATERIAL, IN PARTICULAR FOR STERILE PACKAGING APPLICATIONS
(73) Carl Freudenberg KG
(72) SPÖRL, Johanna
WAGNER, Klaus-Dietmar
RAU, Michaela
KOLEW, Alexander
KIMURA, Naotaka
VENUGOPAL, Arun Prasad
HOLLINGSWORTH, Anthony
(31) 102021103701
(32) 17.02.2021
(33) Germany

(51) D04H 3/147
(11) EP4237612
(21) EP21815099.3
(47) 21.05.2025
(87) CZ2021050121
05.05.2022
(22) 29.10.2021
(54) NONWOVEN FABRIC COMPRISING FILAMENTARY STRATA
(73) PFNonwovens Holding s.r.o.
PFNonwovens Czech s.r.o.
Reifenhäuser GmbH & Co. KG Maschinenfabrik
(72) KAUSCHKE, Michael
MECL, Zdenek
POLASKOVA, Nikol
BOHL, Patrick
NOACK, Christine
WAGNER, Tobias
(31) 20200591
(32) 02.11.2020
(33) Czech Republic

(51) D05B 11/00
D05B 19/12
D05B 27/12
D05B 33/00
D05B 35/00
D05B 63/00
D05B 69/12
(11) EP3887586
(21) EP19890949.1
(47) 21.05.2025
(87) US2019056232
04.06.2020
(22) 15.10.2019
(54) QUILTING MACHINE
(73) L&P Property Management Company
(72) JAMES, Michael, A.
MYERS, Terrance, L.
SMALLWOOD, Matthew, C.
(31) 201816205886
(32) 30.11.2018
(33) United States of America

(51) D06F 33/44
D06F 33/70
D06F 34/32
D06F 25/00
D06F 29/00
D06F 34/05
D06F 34/06
D06F 101/14
D06F 105/50
D06F 105/56
(11) EP3918124
(21) EP20749796.7
(47) 21.05.2025
(87) KR2020001415
06.08.2020
(22) 30.01.2020
(54) LAUNDRY TREATING APPARATUS
(73) LG Electronics Inc.
(72) KWON, Baekeun
BAE, Yonggyung
(31) 20190013431
(32) 01.02.2019
(33) Korea (Republic)

(51) D06F 34/18
D06F 58/38
D06F 103/04
D06F 103/08
D06F 103/10
D06F 105/12
D06F 105/56
(11) EP3562990
(21) EP16822204.0
(47) 21.05.2025
(87) EP2016082749
05.07.2018
(22) 28.12.2016
(54) APPLIANCE WITH RELIABLE INFORMATION OF A DRYING CYCLE
(73) Electrolux Appliances Aktiebolag
(72) DEL MASCHIO, Federico
PATTARELLO, Giorgio

(51) D06F 37/26
D06F 37/28
(11) EP3802941
(21) EP18728088.8
(47) 21.05.2025
(87) EP2018063764
28.11.2019
(22) 25.05.2018
(54) WASHING MACHINE
(73) Electrolux Professional AB (publ)
(72) STÜCHELI, Marius
JOHANSSON, Mattias
ANDERSSON, Lars

(51) D06F 58/02
D06F 39/12
D06F 58/38
D06F 103/32
D06F 105/30
D06F 105/32

(11) EP4039867
(21) EP22155566.7
(47) 21.05.2025
(22) 08.02.2022
(54) LAUNDRY TREATING APPARATUS
(73) LG Electronics Inc.
(72) KIM, Jongryul
HWANG, Eonhwa
KIM, Minseong
KIM, Jeongwoo
SHIN, Jinhyouk
KIM, Youngsoo
(31) 20210017345
(32) 08.02.2021
(33) Korea (Republic)

(51) D06F 58/20
D06F 58/10
D06F 58/24
D06F 58/34
D06F 73/02
D06F 103/18
D06F 103/58
(11) EP3611301
(21) EP19197612.5
(47) 21.05.2025
(22) 18.12.2015
(54) CLOTHES TREATMENT APPARATUS
(73) LG Electronics Inc.
(72) PARK, Sunghoo
DOH, Youngjin
PARK, Hyoungsup
(31) 20140184452
(32) 19.12.2014
(33) Korea (Republic)

(51) D06F 73/02
D06F 58/14
(11) EP4134483
(21) EP22180010.5
(47) 21.05.2025
(22) 20.06.2022
(54) CLOTHING CARE MACHINE
(73) Tsann Kuen (Zhangzhou) Enterprise Co., Ltd.
(72) ZHENG, Zhenxing
CHEN, Ronghuang
CAI, Ruifeng
XU, Xiaodong
(31) 202110932429
(32) 13.08.2021
(33) China

(51) D06F 79/02
(11) EP3699350
(21) EP19206970.6
(47) 21.05.2025
(22) 04.11.2019
(54) WIRELESS HANDHELD DEVICE
(73) Ningbo Haojia Electrical Appliances Co., Ltd.
(72) LI, Yongbo
(31) 201920888552 U
201920888534 U
201910512685
201910512683
201920217977 U
201920210297 U
(32) 13.06.2019
13.06.2019
13.06.2019
13.06.2019
19.02.2019
19.02.2019
(33) China
China
China
China
China
China

(51) D06N 3/04
D06N 3/14
D06M 13/00
D06M 15/333
D06M 15/564
(11) EP3812507
(21) EP19823144.1
(47) 21.05.2025
(87) JP2019024016
26.12.2019
(22) 18.06.2019
(54) METHOD OF MANUFACTURING SHEET ARTICLE
(73) Toray Industries, Inc.
(72) FURUI, Takanori
KOIDE, Gen
NISHIMURA, Makoto
(31) 2018116758
(32) 20.06.2018
(33) Japan

(51) D21C 1/06
D21B 1/00
D21C 3/02
D21C 5/00
D21C 9/00
D21C 9/02
D21C 9/10
(11) EP3914767
(21) EP20701060.4
(47) 21.05.2025
(87) EP2020051429
30.07.2020
(22) 21.01.2020
(54) PREPARATION OF CELLULOSE FIBERS
(73) Jena Trading ApS
(72) VINTHER, Per
LAWTHER, John Mark
(31) 19153123
(32) 22.01.2019
(33) European Patent Office (EPO)

(51) D21C 9/00
D21H 17/00
D21H 21/18
D21C 9/08
(11) EP3341522
(21) EP16757398.9
(47) 21.05.2025
(87) US2016045510
02.03.2017
(22) 04.08.2016
(54) METHOD FOR MAKING LIGNOCELLULOSIC PAPER AND PAPER PRODUCTS
(73) Solenis Technologies, L.P.
(72) GU, Qu-Ming
HUYNH-BA, Josette
(31) 201514835931
(32) 26.08.2015
(33) United States of America

(51) D21F 9/02
(11) EP4328376
(21) EP23188826.4
(47) 21.05.2025
(22) 01.08.2023
(54) INCLINED SCREEN FORMER
(73) Voith Patent GmbH
(72) FRIESENHAHN, Egon
Falkenberg, Rainer
Schilz, Andreas
Schröder, Ralf
(31) 102022121105
(32) 22.08.2022
(33) Germany

(51) D21H 11/02
D21H 11/14
D21H 27/30
D21H 27/38
(11) EP4357520
(21) EP22202546.2
(47) 21.05.2025
(22) 19.10.2022
(54) PAPERBOARD COMPRISING RECYCLED FIBRES
(73) Billerud Aktiebolag (publ)
(72) HÄGGQUIST, Mats
NORDSTRÖM, Fredrik

(51) D21H 19/54
D21H 27/10
(11) EP4267795
(21) EP21916033.0
(47) 21.05.2025
(87) TR2021051457
07.07.2022
(22) 22.12.2021
(54) A PACKAGE PAPER WHICH IS SUITABLE FOR CONTACT WITH FOOD
(73) Modern Karton Sanayi ve Ticaret Anonim Sirketi
(72) BAGBAKAR ORHAN, Duygu
OZGUR SAGLAM, Nalan
(31) 202021876
(32) 28.12.2020
(33) Türkiye

(51) D21H 27/32
B31D 5/00
D21H 19/10
D21H 21/14
B31C 3/00
F24H 3/02
B31C 11/02
B31D 5/02
A47G 21/18
(11) EP3981914
(21) EP20817665.1
(47) 21.05.2025
(87) KR2020007310
10.12.2020
(22) 04.06.2020
(54) PAPER STRAW
(73) Lee & B Inc.
(72) LEE, Heon Kug
(31) 20200054809
20200054806
20200054805
20190079442
20190067384

(32) 07.05.2020
07.05.2020
07.05.2020
02.07.2019
07.06.2019
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) E01B 31/26
E01B 31/24
E01B 29/26
E01B 29/24
(11) EP4328385
(21) EP23192406.9
(47) 21.05.2025
(22) 21.08.2023
(54) VISION-BASED RAILWAY COMPONENT CHARACTERIZATION SYSTEM AND METHOD
(73) Racine Railroad Products, Inc.
(72) Brenny, Christopher D.
Hon, Jeff S.
Osmak, Mark S.
Pekala, Pawel J.
Sojka, Daniel M.
Gherke, Kyle
(31) 202263399835 P
(32) 22.08.2022
(33) United States of America

(51) E01C 19/28
(11) EP4278044
(21) EP22700286.2
(47) 21.05.2025
(87) EP2022050103
21.07.2022
(22) 05.01.2022
(54) COMPACTING VEHICLE, WHEREIN A TRAVEL DRIVE AND A VIBRATION UNIT ARE SUPPLIED WITH PRESSURE FLUID FROM A COMMON SUPPLY POINT
(73) Robert Bosch GmbH
(72) PENERT, Karsten
(31) 102021200285
(32) 14.01.2021
(33) Germany

(51) E01C 19/40
E01C 19/42
E04F 21/24
E04G 21/10
(11) EP4332303
(21) EP22193046.4
(47) 21.05.2025
(22) 31.08.2022
(54) MACHINE FOR TREATMENT OF A CONCRETE SURFACE, METHOD FOR TREATMENT OF A SEQUENCE OF CONCRETE SURFACES AND METHOD FOR MANUFACTURING A CONCRETE SURFACE
(73) Topp & Screed
(72) PIERARD, Baudouin
ROBINET, Philippe
DUHAUTPAS, Serge

(51) E01F 15/08
E01F 8/00
(11) EP4121603
(21) EP21771613.3
(47) 21.05.2025
(87) CA2021000020
23.09.2021
(22) 18.03.2021
(54) TRAFFIC BARRIER AND SOUNDWALL SYSTEM
(73) Vandorf SW1 Inc.
(72) ALBERSON, Dean Clinton
AYTON, Mark Christopher
GHUMAN, Mohammad Talha
POWELL, Benjamin Fraser
(31) 202117204586
202062991267 P
(32) 17.03.2021
18.03.2020
(33) United States of America
United States of America

(51) E01H 1/05
B60L 15/00
E01H 1/08
(11) EP4389983
(21) EP23219199.9
(47) 21.05.2025
(22) 21.12.2023
(54) SWEEPER MACHINE
(73) Tenax International S.r.l.
(72) GUARESCHI GEDDES DA FILICAIA, Vincenzo
(31) 202200026487
(32) 22.12.2022
(33) Italy

(51) E01H 5/06
(11) EP4230797
(21) EP23156416.2
(47) 21.05.2025
(22) 13.02.2023
(54) ATTACHMENT FOR CLEARING AND SPREADING SURFACES AND CLEARING DEVICE WITH SUCH AN ATTACHMENT
(73) Stehr, Jürgen
Werner, Hans
(72) Stehr, Jürgen
Werner, Hans
(31) 202022100945 U
(32) 18.02.2022
(33) Germany

(51) E02D 5/30
E02D 5/58
E02D 5/52
E02D 27/12
(11) EP3850160
(21) EP19889836.3
(47) 21.05.2025
(87) TR2019050724
04.06.2020
(22) 04.09.2019
(54) MULTIPLE FRICTION JOINT PILE SYSTEM
(73) Baykal, Ibrahim Gokhan
(72) Baykal, Ibrahim Gokhan
(31) 201813034
(32) 12.09.2018
(33) Türkiye

(51) E02D 27/42
(11) EP4400654
(21) EP21820653.0
(47) 21.05.2025
(87) ES2021070648
09.03.2023
(22) 06.09.2021
(54) HYBRID PREFABRICATED FOUNDATION FOR TOWERS AND METHOD OF INSTALLING A HYBRID PREFABRICATED FOUNDATION FOR TOWERS
(73) Acciona Generación Renovable, S.A.
(72) PIRLETTI, Massimiliano

(51) E02F 3/34
B66F 9/065
B66F 9/22
E02F 3/358
(11) EP3677726
(21) EP19216002.6
(47) 21.05.2025
(22) 13.12.2019
(54) WHEEL LOADER
(73) Groupe Mecalac
(72) Bollow, Michael
Schröder, Martin
(31) 102019100075
(32) 03.01.2019
(33) Germany

(51) E02F 3/36
(11) EP3757296
(21) EP20177626.7
(47) 21.05.2025
(22) 30.05.2020
(54) QUICK COUPLER WITH HYDRAULIC COUPLING MANIFOLD
(73) Caterpillar Inc.
(72) Lauterslager, Peter
(31) 201916442775
(32) 17.06.2019
(33) United States of America

(51) E02F 3/36
(11) EP4374013
(21) EP22747259.4
(47) 21.05.2025
(87) EP2022025330
26.01.2023
(22) 14.07.2022
(54) PIN GRABBER COUPLER
(73) Caterpillar SARL
(72) THOMPSON, Mark, W.
(31) 202117379278
(32) 19.07.2021
(33) United States of America

(51) E02F 3/43
E02F 9/20
E02F 9/26
(11) EP4290016
(21) EP22784398.4
(47) 21.05.2025
(87) JP2022009850
13.10.2022
(22) 08.03.2022
(54) WORK MACHINE
(73) KOBELCO CONSTRUCTION MACHINERY CO., LTD.
(72) NODA, Daisuke
FUKUO, Nobuhiro
AKIYAMA, Masaki
(31) 2021064743

(32) 06.04.2021
(33) Japan

(51) E02F 3/88
E02F 9/20
(11) EP4223940
(21) EP22154799.5
(47) 21.05.2025
(22) 02.02.2022
(54) ARRANGEMENT AND METHOD FOR REMOVING NATURAL RESOURCES FROM A BODY OF WATER
(73) BAUER Maschinen GmbH
(72) WEIXLER, Leonhard

(51) E02F 9/20
(11) EP4116504
(21) EP21838757.9
(47) 21.05.2025
(87) JP2021023146
13.01.2022
(22) 18.06.2021
(54) WORK MACHINE, AND METHOD FOR CONTROLLING WORK MACHINE
(73) Komatsu Ltd.
(72) HIRAMA, Takahiro
HAYASHI, Keiichi
(31) 2020118864
(32) 10.07.2020
(33) Japan

(51) E02F 9/26
E02F 3/43
E02F 9/20
E02F 9/22
B60W 30/18
(11) EP3722521
(21) EP19827343.5
(47) 21.05.2025
(87) JP2019010483
02.01.2020
(22) 14.03.2019
(54) WORK MACHINE AND SYSTEM INCLUDING WORK MACHINE
(73) Komatsu Ltd.
(72) DAIMON, Masaki
ARATAME, Hiroyuki
(31) 2018124614
(32) 29.06.2018
(33) Japan

(51) E02F 9/26
H04N 5/262
H04N 23/50
H04N 23/90
(11) EP4033749
(21) EP20865024.2
(47) 21.05.2025
(87) KR2020012605
25.03.2021
(22) 18.09.2020
(54) FRONT IMAGE GENERATION DEVICE FOR HEAVY EQUIPMENT
(73) Wise Automotive Corporation
(72) PARK, Jaehong
LEE, Jungpyo
(31) 20190158373
20190116070
(32) 02.12.2019
20.09.2019
(33) Korea (Republic)
Korea (Republic)

(51) E03C 1/14
E03C 1/182
E03C 1/232
(11) EP4063576
(21) EP21164564.3
(47) 21.05.2025
(22) 24.03.2021
(54) WASH BASIN ARRANGEMENT
(73) Geberit International AG
(72) OBERHOLZER, Marco
SCHINTLER, Michael
BRÄNDLI, Pascal

(51) E03C 1/22
E03C 1/29
E03C 1/292
E03F 5/04
(11) EP4030006
(21) EP21214945.4
(47) 21.05.2025
(22) 16.12.2021
(54) DRAIN FITTING, IN PARTICULAR FOR SHOWER TRAYS, WITH VARIABLE-LENGTH DIP TUBE
(73) Viega Technology GmbH & Co. KG
(72) Hennes, Frank
Skrodolies, Dr. Klaus
(31) 202021100191 U
(32) 15.01.2021
(33) Germany

(51) E03C 1/22
E03C 1/29
E03C 1/292
E03F 5/04
(11) EP4030007
(21) EP21214964.5
(47) 21.05.2025
(22) 16.12.2021
(54) DRAIN FITTING, IN PARTICULAR FOR SHOWER TRAYS, WITH FLEXIBLE DEFORMABLE PARTITION
(73) Viega Technology GmbH & Co. KG
(72) Hennes, Frank
Skrodolies, Dr. Klaus
(31) 202021100190 U
(32) 15.01.2021
(33) Germany

(51) E03D 1/14
E03D 1/22
E03D 9/05
E03D 1/34
E03D 1/35
E03D 1/36
E03D 9/052
E03B 7/07
E03C 1/10
E03D 5/10
(11) EP3535459
(21) EP17868185.4
(47) 21.05.2025
(87) ZA2017050081
11.05.2018
(22) 01.11.2017
(54) A CISTERN
(73) Ross-Kent, Dylan Hugh
(72) Ross-Kent, Dylan Hugh
(31) 201607579
(32) 02.11.2016
(33) South Africa

(51) E03D 5/02
(11) EP4353917
(21) EP22201355.9
(47) 21.05.2025
(22) 13.10.2022
(54) ACTUATING UNIT
(73) Geberit International AG
(72) MONTANI, Nathalia
KIRCHNER, Jonas

(51) E03F 5/04
(11) EP4323594
(21) EP22714869.9
(47) 21.05.2025
(87) EP2022056935
21.09.2023
(22) 17.03.2022
(54) ADAPTER FOR A DRAINAGE DEVICE
(73) WEDI GmbH
(72) WEDI, Stephan

(51) E04B 1/36
E04B 1/98
E04F 11/00
E04F 11/022
E04F 11/04
E04H 9/02
(11) EP3814581
(21) EP19826208.1
(47) 21.05.2025
(87) US2019037023
02.01.2020
(22) 13.06.2019
(54) ROTATIONAL CONNECTIONS FOR STAIRS
(73) EMEH, Inc.
(72) PEACHY, Anthony J.
BELVIN, Robert J.
SMITH, Kevin W.
OSTOJIC, Darko
(31) 201862691058 P
(32) 28.06.2018
(33) United States of America

(51) E04B 2/18
E04C 1/39
E04B 2/16
E04B 2/24
E04B 2/02
(11) EP3931406
(21) EP20763124.3
(47) 21.05.2025
(87) US2020019733
03.09.2020
(22) 25.02.2020
(54) INTERLOCKING COMPOSITE CONSTRUCTION BLOCKS
(73) Felton, Colin
(72) Felton, Colin
(31) 201962919084 P
(32) 26.02.2019
(33) United States of America

(51) E04B 2/90
E06B 3/26
(11) EP4377528
(21) EP22757276.5
(47) 21.05.2025
(87) EP2022070905
02.02.2023

(22) 26.07.2022
(54) DOUBLE-SKIN FAÇADE ELEMENT
(73) PROF. MICHAEL LANGE INGENIEURGESELLSCHAFT MBH
(72) LANGE, Michael
(31) 202021103997 U
(32) 27.07.2021
(33) Germany

(51) E04B 5/12
E04B 5/04
E04B 5/23
(11) EP3904619
(21) EP21166899.1
(47) 21.05.2025
(22) 06.04.2021
(54) FINISHED COMPOSITE PART
(73) MMK Holz-Beton-Fertigteile GmbH
(72) UHRIG, Dieter
(31) 503692020
(32) 29.04.2020
(33) Austria

(51) E04D 11/00
A01G 9/02
A01G 9/033
(11) EP4119736
(21) EP21185455.9
(47) 21.05.2025
(22) 13.07.2021
(54) COMPONENT FOR ASSEMBLING A GREEN ROOF OR WALL
(73) Sam Groofing Tech B.V.
(72) Vermeer, Adrianus Maria Antonius
van der Hart, Bartholomeus Leonardus Maria
Blaakman, Mark Leonard Wilhelmus
de Juncker, Ton

(51) E04D 13/068
E04D 13/072
E04D 13/064
(11) EP3985194
(21) EP21203043.1
(47) 21.05.2025
(22) 15.10.2021
(54) GUTTER ASSEMBLY
(73) Janssen, Bob
(72) Kooistra, Erik Hans
(31) 20202162
(32) 15.10.2020
(33) European Patent Office (EPO)

(51) E04F 13/08
E04C 2/296
E04B 1/94
E04C 2/52
E04C 2/04
E04C 2/38
E04C 2/00
E04F 13/04
(11) EP3999696
(21) EP20840960.7
(47) 21.05.2025
(87) US2020042501
21.01.2021
(22) 17.07.2020
(54) INTERLOCKING GYPSUM BUILDING SURFACE PRODUCTS, METHODS OF MANUFACTURE
(73) SAINT-GOBAIN PLACO
(72) JENKINS, Robert L.
LOOMIS, Garrett
DUPONT-MADINIER, Kim
JACOBITES, Brock
(31) 201962875238 P
(32) 17.07.2019
(33) United States of America

(51) E04F 15/02
E04F 15/04
E04F 15/10
(11) EP3868978
(21) EP21168281.0
(47) 21.05.2025
(22) 25.11.2015
(54) SET OF ESSENTIALLY IDENTICAL FLOOR PANELS PROVIDED WITH A MECHANICAL LOCKING SYSTEM
(73) Välinge Innovation AB
(72) PERVAN, Darko
(31) 1451438
(32) 27.11.2014
(33) Sweden

(51) E04F 15/02
E04F 15/20
(11) EP4067602
(21) EP22164277.0
(47) 21.05.2025
(22) 25.03.2022
(54) FLOORING CONSTRUCTION
(73) Hamberger Industriewerke GmbH
(31) 102021133526
102021107708
(32) 16.12.2021
26.03.2021
(33) Germany
Germany

(51) E04G 7/22
E04G 11/48
E04G 1/04
E04G 5/00
E04G 7/14
E04G 7/34
E04G 7/30
(11) EP3768917
(21) EP19771525.3
(47) 21.05.2025
(87) NO2019050060
26.09.2019
(22) 20.03.2019
(54) A STRUCTURAL SUPPORT SYSTEM AND A METHOD FOR PROVIDING A NODE SECTION FOR USE IN A STRUCTURAL SUPPORT SYSTEM
(73) Frico AS
(72) BRATLAND, Magne
FRITZØE, Steven
(31) 20180392
(32) 20.03.2018
(33) Norway

(51) E04G 11/38
E04G 11/48
E04G 9/04
E04G 9/05
E04G 9/02
(11) EP4234843
(21) EP23158433.5
(47) 21.05.2025
(22) 24.02.2023
(54) NEW PANEL FOR FORMWORKS FOR SLABS HAVING INCREASED THICKNESS AND BEING SECURED BY PINS
(73) ILPA Engineering S.r.l.
(72) PASOTTI, Rubens
(31) 202200003566
(32) 25.02.2022
(33) Italy

(51) E04H 1/12
E04H 15/56
E04H 12/04
E04H 15/20
(11) EP3875711
(21) EP21151026.8
(47) 21.05.2025
(22) 11.01.2021
(54) AN INFLATABLE STRUCTURE
(73) Dawsongroup PLC
(72) MILLER, Steve
KELSALL, David Harris
CASSELMAN, Stephen Clinton
(31) 202000525
(32) 14.01.2020
(33) United Kingdom

(51) E04H 4/00
A63B 69/00
(11) EP3060729
(21) EP14851043.1
(47) 21.05.2025
(87) US2014058890
09.04.2015
(22) 02.10.2014
(54) APPARATUS FOR GENERATING BREAKER WAVES IN A WAVE POOL
(73) Lochtefeld, Thomas J.
(72) Lochtefeld, Thomas J.
(31) 201361885720 P
(32) 02.10.2013
(33) United States of America

(51) E04H 4/16
(11) EP4403725
(21) EP23215995.4
(47) 21.05.2025
(22) 12.12.2023
(54) SUCTION ROBOT WITH DOUBLE OUTLET VOLUTE FOR CLEANING SWIMMING POOLS
(73) Kokido Development Limited
(72) BRUNEEL, Jean
ROUMAGNAC, Max
(31) 2300511
(32) 19.01.2023
(33) France

(51) E04H 12/12
B33Y 80/00
F03D 13/20
F03D 13/10
E04H 12/34
B33Y 40/20
B33Y 40/00
(11) EP4053360
(21) EP21160711.4
(47) 21.05.2025
(22) 04.03.2021
(54) METHOD FOR CREATING A TOWER FOR A WIND TURBINE
(73) Nordex Energy SE & Co. KG

(72) Malischewski, Mathias

(51) E05B 15/00
E05B 3/06
(11) EP4368798
(21) EP23203830.7
(47) 21.05.2025
(22) 16.10.2023
(54) POLYGONAL PIN
(73) Karcher GmbH
(72) WACKER, Janosch
(31) 102022211083
(32) 19.10.2022
(33) Germany

(51) E05B 47/06
E05B 3/00
(11) EP4372190
(21) EP22208298.4
(47) 21.05.2025
(22) 18.11.2022
(54) ELECTRONIC LOCKING UNIT
(73) Csank, Christian
(72) Csank, Christian

(51) E05B 47/06
E05B 15/00
(11) EP4245952
(21) EP23189926.1
(47) 21.05.2025
(22) 02.03.2018
(54) LOCK DEVICE FOR AN ELECTRONIC LOCKING SYSTEM, ELECTRONIC LOCKING SYSTEM AND METHOD
(73) ASSA ABLOY AB
(72) VON MATERN, Johan
SUNDKVIST, Oscar
SKARP, Daniel

(51) E05B 77/04
E05B 17/00
(11) EP4062015
(21) EP20807751.1
(47) 21.05.2025
(87) EP2020082632
27.05.2021
(22) 19.11.2020
(54) ARRANGEMENT FOR VEHICLE OPENING LEAF WITH IMMOBILIZING MEANS HOLDING THE OPENING LEAF CLOSED IN THE EVENT OF AN IMPACT
(73) Renault s.a.s
(72) PRUVOST, Laurent
(31) 1912970
(32) 20.11.2019
(33) France

(51) E05B 77/04
E05B 77/06
E05B 85/16
B60J 5/04
E05B 85/10
E05B 81/42
E05B 81/06
(11) EP4030022
(21) EP20862967.5
(47) 21.05.2025
(87) JP2020030014
18.03.2021
(22) 05.08.2020
(54) HANDLE DEVICE FOR VEHICLE
(73) Alpha Corporation
(72) TOYAMA, Takao
(31) 2019165089
(32) 11.09.2019
(33) Japan

(51) E05B 81/02
E05B 81/08
(11) EP3183438
(21) EP15834035.6
(47) 21.05.2025
(87) US2015045774
25.02.2016
(22) 18.08.2015
(54) NON-CONTACTING ACTUATOR FOR ROCKER ARM ASSEMBLY LATCHES
(73) Eaton Intelligent Power Limited
(72) STRETCH, Dale Arden
HUSEYIN, Mustafa
JUDS, Mark
KANK, Amogh
THEISEN, Peter
(31) 2335DE2014
201562190460 P
PCT/US2015/043069
(32) 18.08.2014
09.07.2015
31.07.2015
(33) India
United States of America
World Intellectual Property Office (WIPO)

(51) E05B 81/04
E05B 81/76
E05B 81/90
E05B 85/10
(11) EP3688256
(21) EP18789641.0
(47) 21.05.2025
(87) EP2018078694
20.06.2019
(22) 19.10.2018
(54) DOOR HANDLE ASSEMBLY OF A VEHICLE DOOR
(73) HUF Hülsbeck & Fürst GmbH & Co. KG
(72) BRESSER, Christian
RHEIN, Michael
REIFENBERG, Bernd
(31) 102017130030
(32) 14.12.2017
(33) Germany

(51) E05D 5/00
E05C 9/00
E05D 5/02
E05C 9/08
E05C 9/22
E05C 9/20
E05C 9/24
E05D 15/30
E05C 9/06
(11) EP3988751
(21) EP20825771.7
(47) 21.05.2025
(87) CN2020072612
24.12.2020
(22) 17.01.2020
(54) MOUNTING STRUCTURE
(73) (Shenzhen Hopo Window Control Technology Co., Ltd)
(72) GAO, Yanhong
HUANG, Jieying
(31) 201910531064
(32) 19.06.2019
(33) China

(51) E05D 15/10
(11) EP4370766
(21) EP22737510.2
(47) 21.05.2025
(87) EP2022069477
19.01.2023
(22) 12.07.2022
(54) AMS DOOR SYSTEM
(73) OAHU B.V.
VENTURA SYSTEMS C.V.
(72) ASJES, Hilbrand Hans
(31) 2028697
(32) 12.07.2021
(33) Netherlands

(51) E05D 15/56
E05D 15/10
E05D 15/06
(11) EP3421704
(21) EP17001122.5
(47) 21.05.2025
(22) 30.06.2017
(54) SLIDING DOOR WITH GUIDING GROOVE
(73) LANDERT Group AG
(72) Potocnik, Haymo
Krebs, Berhard

(51) E05F 15/40
E05F 15/655
E05F 15/659
H02P 7/03
H02P 3/12
H02P 3/14
H02P 6/16
(11) EP3835527
(21) EP19214698.3
(47) 21.05.2025
(22) 10.12.2019
(54) OPEN ROOF ASSEMBLY FOR USE IN A VEHICLE AND A METHOD FOR OPERATING SAME
(73) Inalfa Roof Systems Group B.V.
(72) Craane, Dennie Wilhelmus Hendrikus
Schwepper, Gerrit

(51) E05F 15/43
(11) EP3757332
(21) EP20161250.4
(47) 21.05.2025
(22) 05.03.2020
(54) DEVICE FOR OPENING AND/OR CLOSING A MODULE
(73) GEZE GmbH
(72) Hucker, Matthias
(31) 102019209103
(32) 24.06.2019
(33) Germany

(51) E06B 3/54
E04D 13/035
E06B 3/58
E06B 3/66
(11) EP3911826
(21) EP20700959.8
(47) 21.05.2025
(87) DK2020050008

23.07.2020
(22) 13.01.2020
(54) VIG FRAME SOLUTION WITH FLEXIBLE PORTION
(73) VKR Holding A/S
(72) ÖZDEN, Utku Ahmet
MOLBO, Jacob Christian
KRISTENSEN, Jens Troels Plesner
(31) PA201970026
PA201970025
PA201970024
PA201970023
PA201970022
PA201970021
PA201970020
(32) 14.01.2019
14.01.2019
14.01.2019
14.01.2019
14.01.2019
14.01.2019
14.01.2019
(33) Denmark
Denmark
Denmark
Denmark
Denmark
Denmark
Denmark

(51) E06B 3/66
C03C 21/00
E06B 3/673
C03C 3/066
C03C 8/04
C03C 27/10
(11) EP4421284
(21) EP24187738.0
(47) 21.05.2025
(22) 06.11.2023
(54) VACUUM INSULATED PANEL WITH TELLURIUM OXIDE AND/OR BORON AND BISMUTH OXIDE INCLUSIVE SEAL
(73) Luxwall, Inc.
(72) THOMSEN, Scott V.
(31) 202318379275
202363540729 P
202263427670 P
202263427661 P
202263427657 P
202263427645 P
(32) 12.10.2023
27.09.2023
23.11.2022
23.11.2022
23.11.2022
23.11.2022
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) E06B 3/70
A43D 3/14
A47L 23/20
E06B 3/82
(11) EP4227484
(21) EP22798994.4
(47) 21.05.2025
(87) KR2022003886
10.11.2022
(22) 22.03.2022
(54) SHOE CARE APPARATUS
(73) Samsung Electronics Co., Ltd.
(72) KIM, Daegeon
OH, Jinyounggeul
YUN, Sejin
LEE, Kanghyun
SEO, Dongpil
LEE, Junghee
(31) 20210096977
20210057892
(32) 23.07.2021
04.05.2021
(33) Korea (Republic)
Korea (Republic)

(51) E06B 3/70
E06B 3/50
E05F 15/678
E05F 15/686
E05D 13/00
E05D 15/44
(11) EP3914798
(21) EP20704355.5
(47) 21.05.2025
(87) IB2020050375
30.07.2020
(22) 17.01.2020
(54) MAIN TILTING DOOR FOR THE CLOSURE OF AN ACCESS OPENING OF A ROOM, PARTICULARLY OF A GARAGE SPACE AND METHOD FOR THE ASSEMBLY ON SITE OF A MAIN TILTING DOOR
(73) Silvelox Group S.p.A.
(72) CARLIN, Stefano
LAMBERTI, Silvano
LAMBERTI, Diego
(31) 201900000893
(32) 21.01.2019
(33) Italy

(51) E06B 3/82
E06B 3/70
(11) EP3553268
(21) EP19168989.2
(47) 21.05.2025
(22) 12.04.2019
(54) DOOR LEAF, DOOR AND METHOD FOR PRODUCING THE DOOR LEAF
(73) SCHÜCO International KG
(72) KLEINE-BECKEL, Sören
PEIN, Sören
WUTSCHKE, Berthold
SCHILLER, Mathias
LUTZENBERGER, Tobias
(31) 102018108835
(32) 13.04.2018
(33) Germany

(51) E06B 7/10
(11) EP4286643
(21) EP23165633.1
(47) 21.05.2025
(22) 30.03.2023
(54) VENT FOR A WINDOW FRAME
(73) Glazpart Limited
(72) O'Mahoney, Mark
Smith, Lewis
(31) 202303715
202208141
(32) 14.03.2023
01.06.2022
(33) United Kingdom
United Kingdom

(51) E06B 9/171
E06B 9/44
(11) EP4253711
(21) EP23160674.0
(47) 21.05.2025
(22) 08.03.2023
(54) WINDING DEVICE FOR USE ON A SUN PROTECTION DEVICE
(73) MHZ HACHTEL GmbH & Co. KG
(72) Hachtel, Jochen
Böhm, Dieter
(31) 102022106755
(32) 23.03.2022
(33) Germany

(51) E06B 9/327
E06B 9/58
(11) EP4191015
(21) EP22210350.9
(47) 21.05.2025
(22) 29.11.2022
(54) SUN PROTECTION SYSTEM WITH LATERAL GUIDE RAILS WITH GUIDE RAIL INSERTS
(73) WAREMA Renkhoff SE
(72) Zufall, Marcel
Kraft, Karlheinz
Steiger, Carsten
(31) 102021131227
(32) 29.11.2021
(33) Germany

(51) E06B 9/52
(11) EP4202174
(21) EP22215872.7
(47) 21.05.2025
(22) 22.12.2022
(54) KIT FOR A FRAME
(73) Büdenbender, Arnd
(72) BÜDENBENDER, Arnd
VAN LEEUWEN, Ritske Johannes
(31) 102021134511
(32) 23.12.2021
(33) Germany

(51) E21B 33/12
(11) EP3841279
(21) EP19853184.0
(47) 21.05.2025
(87) CA2019051133
27.02.2020
(22) 20.08.2019
(54) ANTI-EXTRUSION ASSEMBLY AND A SEALING SYSTEM COMPRISING SAME
(73) Northstar Drillstem Testers
(72) HORNE, Andrew
MARTINOVIC, Dragan
(31) 201862719802 P
(32) 20.08.2018
(33) United States of America

(51) E21B 47/125

E21B 17/00
E21B 41/00
E21B 17/04
E21B 17/20
E21B 47/06
E21B 47/113
E21B 47/135
(11) EP4204665
(21) EP21862444.3
(47) 21.05.2025
(87) US2021047038
03.03.2022
(22) 23.08.2021
(54) COILED TUBING-ENABLED DUAL TELEMETRY SYSTEM
(73) Baker Hughes Holdings LLC
(72) LIVESCU, Silviu
LINDSEY, Bennie J.
BLOMQUIST, Bryan
(31) 202017004408
(32) 27.08.2020
(33) United States of America

(51) E21B 47/125
E21B 33/12
(11) EP4051870
(21) EP20799674.5
(47) 21.05.2025
(87) EP2020080228
06.05.2021
(22) 28.10.2020
(54) APPARATUS AND METHOD FOR CONTACTING AN OPEN HOLE SURFACE
(73) Expro North Sea Limited
(72) TAYLOR, Samuel, Keith
(31) 201915617
(32) 28.10.2019
(33) United Kingdom

(51) E21D 9/10
E21C 25/16
(11) EP4191019
(21) EP23153926.3
(47) 21.05.2025
(22) 27.01.2017
(54) MINING MACHINE WITH MULTIPLE CUTTER HEADS
(73) Joy Global Underground Mining LLC
(72) Lugg, Peter, A.
Keech, Geoffrey, W.
Neilson, Bradley, M.
Daher, Nagy
Boyd, Ric
(31) 201662398717 P
201662398744 P
201662398834 P
201662377150 P
201662287682 P
(32) 23.09.2016
23.09.2016
23.09.2016
19.08.2016
27.01.2016
(33) United States of America
United States of America
United States of America
United States of America
United States of America

(51) F01D 5/08
(11) EP3613947
(21) EP19181504.2
(47) 21.05.2025
(22) 20.06.2019
(54) TURBULENT AIR REDUCER FOR A GAS TURBINE ENGINE
(73) RTX Corporation
(72) TATMAN, Neil L.
GALLE, Nathan K.
HAYFORD, Richard K.
(31) 201816108763
(32) 22.08.2018
(33) United States of America

(51) F01D 5/08
(11) EP4080016
(21) EP22162567.6
(47) 21.05.2025
(22) 16.03.2022
(54) PRESSURE GAIN FOR COOLING FLOW IN AIRCRAFT ENGINES
(73) RTX Corporation
(72) HANRAHAN, Paul R.
(31) 202117238793
(32) 23.04.2021
(33) United States of America

(51) F01D 5/14
B23P 15/04
F01D 5/28
F01D 9/04
F01D 9/06
F04D 29/38
(11) EP4127407
(21) EP21716517.4
(47) 21.05.2025
(87) FR2021050477
30.09.2021
(22) 22.03.2021
(54) CERAMIC MATRIX COMPOSITE TURBINE VANE
(73) Safran Ceramics
(72) GIMAT, Matthieu, Arnaud
BOUILLON, Eric
CARLIN, Maxime, François, Roger
(31) 2003081
(32) 27.03.2020
(33) France

(51) F01D 5/22
(11) EP4396445
(21) EP22773756.6
(47) 21.05.2025
(87) FR2022051638
09.03.2023
(22) 31.08.2022
(54) DAMPING DEVICE FOR ROTOR WHEEL OF AN AIRCRAFT TURBOMACHINE, ROTOR WHEEL OF AN AIRCRAFT TURBOMACHINE, AIRCRAFT TURBOMACHINE AND METHOD OF MANUFACTURING A DAMPING DEVICE
(73) SAFRAN AIRCRAFT ENGINES
(72) LEXILUS, Jean-Hilaire
(31) 2109134
(32) 01.09.2021
(33) France

(51) F01D 5/34
B23Q 15/00
F01D 5/12
G05B 19/19
B23B 1/00
B23B 5/36
G05B 19/4099
(11) EP3998396
(21) EP19943244.4
(47) 21.05.2025
(87) JP2019034196
04.03.2021
(22) 30.08.2019
(54) INTEGRALLY BLADED ROTOR MANUFACTURING METHOD, BLADE CUTTING PROGRAM FOR SAME, AND INTEGRALLY BLADED ROTOR
(73) Yamazaki Mazak Corporation
(72) HARADA, Yukihide
FUJITA, Tetsuji

(51) F01D 5/34
F04D 29/32
(11) EP3012411
(21) EP15190587.4
(47) 21.05.2025
(22) 20.10.2015
(54) INTEGRALLY BLADED ROTOR HAVING AXIAL ARM AND POCKET
(73) RTX Corporation
(72) FORCIER, Matthew P.
(31) 201462067548 P
(32) 23.10.2014
(33) United States of America

(51) F01D 9/04
F01D 5/14
F01D 5/18
(11) EP4343118
(21) EP23192552.0
(47) 21.05.2025
(22) 22.08.2023
(54) PLATFORM FOR STATOR VANE
(73) Rolls-Royce plc
(72) Alpan, Bogachan
(31) 202213805
(32) 22.09.2022
(33) United Kingdom

(51) F01D 9/04
F01D 25/24
(11) EP2821595
(21) EP13174893.1
(47) 21.05.2025
(22) 03.07.2013
(54) STATOR BLADE SECTION WITH MIXED FIXATION FOR AN AXIAL TURBOMACHINE
(73) Safran Aero Boosters SA
(72) Cortequisse, Jean-François

(51) F01D 9/04
F01D 25/24
F04D 29/64
(11) EP2995777
(21) EP15184339.8
(47) 21.05.2025
(22) 08.09.2015
(54) VANE RING FOR A GAS TURBINE ENGINE
(73) RTX Corporation
(72) CARR, Jesse M.
DUBE, Bryan P.
(31) 201462047710 P
(32) 09.09.2014

(33) United States of America

(51) F01D 11/00
F01D 25/00
F01D 21/04
F01D 5/14
F01D 5/28
F01D 5/30
(11) EP3862540
(21) EP21155550.3
(47) 21.05.2025
(22) 05.02.2021
(54) FLAT BLADE PLATFORM SEAL AND METHOD FOR FORMING SAME
(73) RTX Corporation
(72) FRANKLIN, Jordan J.
KARKOS, Peter
LYDERS, David R.
PARK, Chong H.
ZSUNKAN, Matthew R.
(31) 202016785145
(32) 07.02.2020
(33) United States of America

(51) F01D 17/16
(11) EP4191029
(21) EP22194649.4
(47) 21.05.2025
(22) 08.09.2022
(54) TURBOCHARGER HAVING VARIABLE-VANE TURBINE NOZZLE INCLUDING ARRANGEMENT FOR LOCKING THE VANES IN FULLY OPEN POSITION
(73) Garrett Transportation I Inc.
(72) Zmeskal, Martin
Tingaud, Aurelien
Musil, Jan
Letal, Filip
(31) 202117457038
(32) 01.12.2021
(33) United States of America

(51) F01D 21/00
F01K 13/02
F01K 7/16
F01D 17/10
F01D 17/14
(11) EP3757355
(21) EP19757587.1
(47) 21.05.2025
(87) JP2019002913
29.08.2019
(22) 29.01.2019
(54) CONTROL DEVICE FOR STEAM GOVERNING VALVE OF POWER GENERATION PLANT, AND METHOD FOR CONTROLLING STEAM GOVERNING VALVE OF POWER GENERATION PLANT
(73) Kabushiki Kaisha Toshiba
Toshiba Energy Systems & Solutions Corporation
(72) MIYAKE, Ryota
TAKADO, Naoyuki
AOKI, Toshio
(31) 2018028945
(32) 21.02.2018
(33) Japan

(51) F01D 25/10
F01D 25/20
(11) EP4179185
(21) EP21746518.6
(47) 21.05.2025
(87) FR2021051241
13.01.2022
(22) 06.07.2021
(54) START-UP METHOD FOR AN AIRCRAFT ENGINE
(73) Safran Helicopter Engines
(72) SERGHINE, Camel
ROBERT, Olivier
KLONOWSKI, Thomas
SEVE Caroline Maud Léna
(31) 2007261
(32) 09.07.2020
(33) France

(51) F01N 3/027
F01N 3/20
(11) EP4379198
(21) EP23211386.0
(47) 21.05.2025
(22) 22.11.2023
(54) SUPPORT UNIT FOR SUPPORTING A HEAT CONDUCTOR OF AN EXHAUST GAS HEATER ON A SUPPORT STRUCTURE
(73) Purem GmbH
(72) Brenner, Holger
(31) 102022131967
(32) 02.12.2022
(33) Germany

(51) F01N 3/027
F01N 3/20
F01N 13/18
(11) EP4223991
(21) EP23150031.5
(47) 21.05.2025
(22) 02.01.2023
(54) ELECTRIC EXHAUST GAS HEATER
(73) Purem GmbH
(72) Uysal, Fatih
Höckel, Sandra
(31) 102022102376
(32) 02.02.2022
(33) Germany

(51) F01N 3/20
F02D 41/02
F02M 26/05
F02M 26/34
F02M 31/04
F01N 3/22
F02B 37/16
F01N 3/30
F01N 3/32
F02M 26/35
F02M 31/13
(11) EP3894675
(21) EP18829282.5
(47) 21.05.2025
(87) EP2018085054
18.06.2020
(22) 14.12.2018
(54) A METHOD FOR CONTROLLING AN INTERNAL COMBUSTION ENGINE ARRANGEMENT
(73) VOLVO TRUCK CORPORATION
(72) CARLÉN ANDERSSON, Johan
RAHM, Fredrik

(51) F01P 3/20
F02B 29/04
(11) EP3001006
(21) EP15187081.3
(47) 21.05.2025
(22) 28.09.2015
(54) A COOLING SYSTEM FOR AN INTERNAL COMBUSTION PISTON ENGINE, A METHOD OF OPERATING AN INTERNAL COMBUSTION PISTON ENGINE AND AN INTERNAL COMBUSTION PISTON ENGINE
(73) Wärtsilä Finland Oy
(72) CALCINOTTO, Paolo
PERINEL, Luciano
LOLLIS, Davide
(31) 20145849
(32) 29.09.2014
(33) Finland

(51) F01P 7/10
B60K 11/08
F01P 11/10
(11) EP4098856
(21) EP22176960.7
(47) 21.05.2025
(22) 02.06.2022
(54) DEVICE FOR REGULATING THE CIRCULATION OF A FLOW OF EXTERNAL AIR FOR A GRILLE OF A MOTOR VEHICLE
(73) Renault s.a.s
(72) DUCHET-ANNEZ, Christophe
SOLTOIAN, Serghei
(31) 2105852
(32) 03.06.2021
(33) France

(51) F01P 11/00
F01P 11/02
F01P 11/04
B60K 11/02
F01P 5/10
(11) EP4261392
(21) EP22823884.6
(47) 21.05.2025
(87) CN2022086407
22.12.2022
(22) 12.04.2022
(54) EXPANSION KETTLE, COOLING SYSTEM, AND AUTOMOBILE
(73) Zhejiang Geely Holding Group Co., Ltd.
Ningbo Geely Automobile Research & Development Co. Ltd.
(72) LI, Guibin
LIN, Bingrong
XU, Junbo
(31) 202110677593
(32) 18.06.2021
(33) China

(51) F02B 29/04
F28D 1/04
F28D 7/00
F01P 3/18
F01P 3/12
F28D 21/00
(11) EP4030042
(21) EP21191035.1
(47) 21.05.2025
(22) 12.08.2021

(54) RADIATOR-INTERCOOLER INTEGRATED MODULE AND VEHICLE INCLUDING THE SAME
(73) Hyundai Motor Company
Kia Corporation
(72) KANG, Seung Jae
CHOI, Won Rok
PARK, Hyun Jin
(31) 20210006722
(32) 18.01.2021
(33) Korea (Republic)

(51) F02B 37/18
F02B 37/02
F02M 26/43
F16K 5/04
F16K 11/085
F16K 5/18
(11) EP3673160
(21) EP18762593.4
(47) 21.05.2025
(87) GB2018052381
28.02.2019
(22) 22.08.2018
(54) A TURBINE BYPASS VALVE
(73) Cummins Ltd
(72) SHARP, Nicholas Kenneth
BROWNING, Nicholas
(31) 201713453
(32) 22.08.2017
(33) United Kingdom

(51) F02C 3/22
F02C 7/224
(11) EP4361420
(21) EP23199577.0
(47) 21.05.2025
(22) 26.09.2023
(54) COMBINED GAS TURBINE ENGINE AND FUEL CELL
(73) Rolls-Royce plc
(72) Grech, Nicholas
Palmer, Chloe
Tacconi, Jacopo
(31) 202215722
(32) 24.10.2022
(33) United Kingdom

(51) F02C 7/052
F02C 7/055
F02C 7/057
(11) EP4124737
(21) EP22184521.7
(47) 21.05.2025
(22) 12.07.2022
(54) SYSTEM AND METHOD FOR INHIBITING PARTICULATE AND FOREIGN OBJECT INGRESS IN COMBUSTION SYSTEMS
(73) General Electric Technology GmbH
(72) JUPUDI, Maruthi Manohar
SCIPIO, Alston Ilford
SOUDARY, Mallareddy
HOFFMANN, Juergen Gerhard
(31) 202117387493
(32) 28.07.2021
(33) United States of America

(51) F02C 7/14
F02C 7/224
(11) EP3540196
(21) EP19161301.7
(47) 21.05.2025
(22) 07.03.2019
(54) SYSTEMS AND METHODS FOR FUEL-BASED THERMAL MANAGEMENT
(73) RTX Corporation
(72) VEILLEUX Jr, Leo J
LIBAROV, Lubomir A.
(31) 201815918097
(32) 12.03.2018
(33) United States of America

(51) F02C 7/22
F02C 3/22
F02C 9/40
(11) EP4490395
(21) EP23713721.1
(47) 21.05.2025
(87) FR2023050321
21.09.2023
(22) 09.03.2023
(54) AERONAUTICAL DEVICE FOR DISTRIBUTING GAS
(73) Aresia-Villeneuve
(72) SUTTER, Xavier
BERTOLO, Jean-Christophe
LEGRAND, Pascal
PAUN, Florin-Calin
WALKER, Nicolas
(31) 2202235
(32) 14.03.2022
(33) France

(51) F02C 7/232
F01D 25/00
F02B 77/04
(11) EP4116559
(21) EP22184087.9
(47) 21.05.2025
(22) 11.07.2022
(54) DE-PRESERVING A FUEL SYSTEM OF A TURBINE ENGINE
(73) RTX Corporation
(72) SEYLER, Joshua
HORVATH, Lajos H.
CHUKRALLAH, Sami
KONNEY, Richard D.
(31) 202117371218
(32) 09.07.2021
(33) United States of America

(51) F02C 7/277
F01D 5/02
(11) EP3940213
(21) EP21182658.1
(47) 21.05.2025
(22) 30.06.2021
(54) AIR STARTER WITH OFFSET INTERFACE
(73) Unison Industries LLC
(72) PATIL, Sharad Pundlik
NAYAK, Subrata
DRANSCHAK, David Allan
MEYERS, Shiloh Montegomery
AGRAWAL, Bajarang
ASDEV, Jasraj
GANIGER, Ravindra Shankar
(31) 202011030169
(32) 15.07.2020
(33) India

(51) F02C 7/32
F02C 7/36
F16H 1/28
F16H 57/08
(11) EP4151846
(21) EP22195169.2
(47) 21.05.2025
(22) 12.09.2022
(54) AIRCRAFT TURBINE ENGINE
(73) Safran Transmission Systems
(72) MOULY,, Guillaume Pierre
SIMON,, Adrien Louis
BECK,, Guillaume Julien
LEFEBVRE,, Simon Loïc Clément
(31) 2109922
(32) 21.09.2021
(33) France

(51) F02C 7/36
F01D 15/10
B64D 41/00
F02C 7/32
B64D 35/00
(11) EP4134533
(21) EP22190388.3
(47) 21.05.2025
(22) 15.08.2022
(54) MECHANICAL DRIVE SHAFT ARRANGEMENTS FOR TAIL CONE GENERATORS
(73) PRATT & WHITNEY CANADA CORP.
(72) MENHEERE, David
(31) 202117402503
(32) 14.08.2021
(33) United States of America

(51) F02C 9/00
G01N 33/28
(11) EP3751120
(21) EP20179336.1
(47) 21.05.2025
(22) 10.06.2020
(54) SYSTEM AND METHOD FOR DIAGNOSING A CONDITION OF AN ENGINE
(73) Pratt & Whitney Canada Corp.
(72) JEAN, Maurice
SAVARD, Nathalie
SEVIGNY, Sonia
PRONOVOST, Stephanie
(31) 201916439154
(32) 12.06.2019
(33) United States of America

(51) F02C 9/28
(11) EP4148256
(21) EP22194693.2
(47) 21.05.2025
(22) 08.09.2022
(54) OUTPUT POWER MANAGEMENT FOR ENGINES
(73) PRATT & WHITNEY CANADA CORP.
(72) TETRAULT, Philippe-Andre
CLOUTIER, Yves
(31) 202117468906
(32) 08.09.2021
(33) United States of America

(51) F02C 9/42
(11) EP3693583
(21) EP20156484.6
(47) 21.05.2025
(22) 10.02.2020

(54) SYSTEM AND METHOD FOR OPERATING ENGINES OF AN AIRCRAFT IN AN ASYMMETRIC OPERATING REGIME
(73) Pratt & Whitney Canada Corp.
(72) MANOUKIAN, Patrick
MORGAN, Keith
(31) 201916654366
201962803064 P
201962803070 P
(32) 16.10.2019
08.02.2019
08.02.2019
(33) United States of America
United States of America
United States of America

(51) F02D 41/22
F02D 41/00
F02D 41/14
F02M 25/08
(11) EP3795815
(21) EP20194906.2
(47) 21.05.2025
(22) 07.09.2020
(54) METHOD FOR OPERATING A COMBUSTION ENGINE WITH HC SENSOR INTEGRATED INTO A PURGE GAS LINE
(73) VOLKSWAGEN AG
(72) Lindlau, Michael
Brand, Michael
(31) 102019214236
(32) 18.09.2019
(33) Germany

(51) F02K 1/60
(11) EP2060767
(21) EP08252854.8
(47) 21.05.2025
(22) 28.08.2008
(54) Pivoting door thrust reverser for a turbofan gas turbine engine
(73) Pratt & Whitney Canada Corp.
Gulfstream Aerospace Corporation
(72) Lair, Jean-Pierre
(31) 941371
(32) 16.11.2007
(33) United States of America

(51) F02M 39/02
F01L 1/047
F02M 59/10
F16H 25/14
(11) EP3808968
(21) EP19203611.9
(47) 21.05.2025
(22) 16.10.2019
(54) A VEHICLE ENGINE COMPRISING AN ARRANGEMENT FOR TRANSFERRING FORCE FROM A CAMSHAFT TO AN OUTPUT DEVICE
(73) Volvo Car Corporation
(72) MORÉN, Mats

(51) F02M 47/02
F02M 63/00
(11) EP4069963
(21) EP20812106.1
(47) 21.05.2025
(87) EP2020084089
10.06.2021
(22) 01.12.2020
(54) FUEL INJECTION VALVE HAVING A SLIDE VALVE FOR INTERNAL COMBUSTION ENGINES
(73) Ganser-Hydromag AG
(72) GANSER, Marco
(31) 15272019
(32) 03.12.2019
(33) Switzerland

(51) F02P 5/15
F02D 41/14
F02M 26/03
F02B 1/12
F02D 41/40
(11) EP3739198
(21) EP19747336.6
(47) 21.05.2025
(87) JP2019002095
08.08.2019
(22) 23.01.2019
(54) ENGINE CONTROL METHOD AND ENGINE CONTROL DEVICE
(73) MAZDA MOTOR CORPORATION
(72) HITOMI, Mitsuo
NAKAI, Eiji
YAMAGUCHI, Naohiro
MORIMOTO, Hiroki
(31) 2018013278
(32) 30.01.2018
(33) Japan

(51) F03D 1/06
(11) EP3857052
(21) EP19780109.5
(47) 21.05.2025
(87) US2019051859
02.04.2020
(22) 19.09.2019
(54) JOINT INTERFACE FOR WIND TURBINE ROTOR BLADE COMPONENTS
(73) General Electric Renovables España, S.L.
(72) MERZHAEUSER, Thomas
RODWELL, Andrew Mitchell
HUTCH, Scott Jacob
(31) 201816140900
(32) 25.09.2018
(33) United States of America

(51) F03D 1/06
(11) EP3855014
(21) EP20153162.1
(47) 21.05.2025
(22) 22.01.2020
(54) SPLIT ROTOR BLADE OF A WIND POWER PLANT AND ROTOR BLADE SEGMENT
(73) Nordex Energy SE & Co. KG
(72) Lipka, Thomas
Nickel, Andreas
Block, Tim Berend

(51) F03D 1/06
F03D 80/00
(11) EP3874141
(21) EP18804487.9
(47) 21.05.2025
(87) US2018058718
07.05.2020
(22) 01.11.2018
(54) SPAN-WISE EXTENDING PIN FOR JOINING ROTOR BLADE SEGMENTS
(73) General Electric Renovables España, S.L.
(72) HUTH, Scott Jacob
DUDON, Matthew Brian
WRIGHT, Jon Stuart

(51) F03D 7/02
(11) EP4121650
(21) EP21714311.4
(47) 21.05.2025
(87) DK2021050082
23.09.2021
(22) 15.03.2021
(54) CONTROL OF A WIND TURBINE WITH A MODIFIED POWER REFERENCE
(73) VESTAS WIND SYSTEMS A/S
(72) THOMSEN, Jesper Sandberg
MAREE, Johannes Philippus
HOVGAARD, Tobias Gybel
SLOTH-ODGAARD, Peter
(31) PA202070171
(32) 16.03.2020
(33) Denmark

(51) F03D 7/04
F03D 80/40
F03D 80/10
F03D 17/00
(11) EP3380722
(21) EP16791624.6
(47) 21.05.2025
(87) EP2016077035
01.06.2017
(22) 09.11.2016
(54) METHOD FOR OUTPUTTING CONTROL INSTRUCTIONS OR EVENT MESSAGES FOR A WIND ENERGY INSTALLATION OR A WIND FARM, AND AN EVALUATION DEVICE AND A SYSTEM THEREFOR
(73) Wobben Properties GmbH
(72) DEMUTH, Simon
(31) 102015120306
(32) 24.11.2015
(33) Germany

(51) F03D 9/25
F03D 80/60
F03D 1/02
F03D 1/04
(11) EP4124747
(21) EP21020387.3
(47) 21.05.2025
(22) 26.07.2021
(54) WIND TURBINE COMPRISING A FAIRING
(73) Barbeito-Taboada, Fernando
Ureña-Maggi, Julio
(72) Barbeito-Taboada, Fernando
Ureña-Maggi, Julio

(51) F03D 13/10
F03D 1/06
B29D 99/00
(11) EP3873728
(21) EP18804486.1
(47) 21.05.2025
(87) US2018058713
07.05.2020
(22) 01.11.2018

(54) SPACER MATERIAL FOR REDUCING A BOND GAP BETWEEN A BEAM STRUCTURE AND A BLADE SHELL OF A SEGMENTED ROTOR BLADE
(73) General Electric Renovables España, S.L.
(72) HUTH, Scott Jacob
RODWELL, Andrew Mitchell
COLLIER, Andrew Ross
LOPEZ, Alec Antonio
(51) F03G 7/10
F03G 7/04
F01C 1/22
F01K 25/10
F01K 27/00
(11) EP2780590
(21) EP12850367.9
(47) 21.05.2025
(87) NZ2012000211
23.05.2013
(22) 15.11.2012
(54) COLD STATE ENGINE FOR UTILISING AIR THERMAL ENERGY TO OUTPUT WORK, REFRIGERATION AND WATER
(73) Lew, Jason
(72) Lew, Jason
(31) 59648111
(32) 16.11.2011
(33) New Zealand
(51) F04B 39/02
F04B 39/12
F04B 39/00
(11) EP4293226
(21) EP23178959.5
(47) 21.05.2025
(22) 13.06.2023
(54) RECIPROCATING COMPRESSOR
(73) LG Electronics Inc.
(72) KIM, Younghwan
SON, Youngboo
JANG, Seokjong
(31) 20220073622
(32) 16.06.2022
(33) Korea (Republic)
(51) F04B 49/06
F04B 49/20
F04B 49/24
F04B 35/04
F25B 49/02
(11) EP4193064
(21) EP21853259.6
(47) 21.05.2025
(87) US2021044947
10.02.2022
(22) 06.08.2021
(54) SYSTEMS AND METHODS FOR MULTI-STAGE OPERATION OF A COMPRESSOR
(73) Copeland LP
(72) PATEL, Kashmira
GREEN, Charles E.
BROKER, John F.
(31) 202016987574
(32) 07.08.2020
(33) United States of America
(51) F04C 2/344
F04C 15/00
(11) EP3882465
(21) EP21162276.6
(47) 21.05.2025
(22) 12.03.2021
(54) REDUCED-NOISE ROTARY PUMP
(73) Schwäbische Hüttenwerke Automotive GmbH
(72) Jäggle, Gerd
Eisele, Fabian
Wahl, Thomas
Peters, Sven
(31) 102020107485
(32) 18.03.2020
(33) Germany
(51) F04C 18/16
F04C 18/08
(11) EP3719321
(21) EP18905002.4
(47) 21.05.2025
(87) CN2018120371
15.08.2019
(22) 11.12.2018
(54) SCREW COMPRESSOR ROTOR STRUCTURE AND VARIABLE-FREQUENCY SCREW COMPRESSOR HAVING SAME
(73) Gree Electric Appliances, Inc. of Zhuhai
(72) LIU, Hua
ZHANG, Tianyi
LI, Rihua
LONG, Zhongkeng
XU, Yungong
(31) 201810130545
(32) 08.02.2018
(33) China
(51) F04C 29/02
F04B 39/04
F04C 29/00
(11) EP4148276
(21) EP21833778.0
(47) 21.05.2025
(87) JP2021021618
06.01.2022
(22) 07.06.2021
(54) COMPRESSOR
(73) Daikin Industries, Ltd.
(72) OHNISHI, Yousuke
KAJIWARA, Mikio
NISHIDE, Youhei
TOMIOKA, Naoto
ADACHI, Masaaki
OKAMOTO, Daisuke
UEDA, Hitoshi
(31) 2020113304
(32) 30.06.2020
(33) Japan
(51) F04D 15/00
F04D 15/02
G01P 3/26
(11) EP3754201
(21) EP20180320.2
(47) 21.05.2025
(22) 16.06.2020
(54) ON/OFF CONTROL METHOD OF A PUMP
(73) CALPEDA S.p.A.
(72) BARONCINI, Tiziana
MARANGON, Gianluca
MARCHETTI, Alberto
MENARA, Ivan
(31) 201900009747
(32) 21.06.2019
(33) Italy
(51) F04D 19/04
F04D 27/00
G01J 5/00
G01J 5/061
G01J 5/02
G01J 5/12
G01J 5/04
(11) EP3510369
(21) EP17767885.1
(47) 21.05.2025
(87) GB2017052596
15.03.2018
(22) 06.09.2017
(54) VACUUM PUMP COMPRISING INFRARED TEMPERATURE SENSING SYSTEM
(73) Edwards Limited
(72) HASLETT, Brent
GRANTHAM, Andrew
HAYLOCK, James
(31) 201615124
(32) 06.09.2016
(33) United Kingdom
(51) F04D 27/02
F04D 29/46
F04D 29/42
(11) EP4105493
(21) EP21179246.0
(47) 21.05.2025
(22) 14.06.2021
(54) TURBO COMPRESSOR ASSEMBLY
(73) Volvo Car Corporation
(72) ROLANDSON, Ola
(51) F04D 29/02
F04D 29/22
F04D 29/40
F04D 29/42
F04D 29/62
(11) EP4137701
(21) EP22187217.9
(47) 21.05.2025
(22) 27.07.2022
(54) PUMP CAPABLE OF DELIVERING HEATED FLUID
(73) BSH Hausgeräte GmbH
(72) Wang, Yukun
Lu, Jin
Li, Liangdong
(31) 202121917675 U
(32) 16.08.2021
(33) China
(51) F04F 5/44
F04F 5/04
F04F 5/10
(11) EP3351805
(21) EP16846258.8
(47) 21.05.2025
(87) JP2016075519
23.03.2017
(22) 31.08.2016
(54) EJECTOR AND VACUUM GENERATION DEVICE WITH SAME
(73) TLV Co., Ltd.
(72) KURODA, Junji

(31) 2015184383
(32) 17.09.2015
(33) Japan

(51) F15B 11/00
F15B 13/044
F15B 11/10
A01C 5/06
A01C 7/20
(11) EP3850223
(21) EP19860688.1
(47) 21.05.2025
(87) US2019051204
19.03.2020
(22) 14.09.2019
(54) FLUID CONTROL ASSEMBLY AND SYSTEM
(73) Precision Planting LLC
(72) HERRMANN, Tristan
STOLLER, Jason
SCHLIPF, Ben
(31) 201962840372 P
201962791203 P
201862731813 P
PCT/US2019/020452
(32) 29.04.2019
11.01.2019
14.09.2018
02.03.2019
(33) United States of America
United States of America
United States of America
World Intellectual Property Office (WIPO)

(51) F15B 11/042
(11) EP3699437
(21) EP19159142.9
(47) 21.05.2025
(22) 25.02.2019
(54) FLOW CONTROL FOR AN ACTUATOR
(73) Siemens Gamesa Renewable Energy A/S
(72) Kristensen, Mikkel Aggersbjerg

(51) F15B 11/08
F15B 19/00
(11) EP4001667
(21) EP21206690.6
(47) 21.05.2025
(22) 05.11.2021
(54) METHOD FOR CONTROLLING AN OPEN CENTER ELECTRO-HYDRAULIC CONTROL VALVE, IN PARTICULAR FOR OPERATING AN ORGAN OF AN AGRICULTURAL OR WORK VEHICLE
(73) CNH Industrial Italia S.p.A.
(72) GARRAMONE, Adriano
GRAVILI, Andrea
LIBERTI, Stefano
(31) 202000027167
(32) 12.11.2020
(33) Italy

(51) F15B 21/14
F15B 1/02
F15B 1/033
E02F 3/42
E02F 9/22
(11) EP3779211
(21) EP19785881.4
(47) 21.05.2025
(87) JP2019014728
17.10.2019
(22) 03.04.2019
(54) FLUID PRESSURE CIRCUIT
(73) Eagle Industry Co., Ltd.
(72) SHIMADA, Yoshiyuki
(31) 2018074578
(32) 09.04.2018
(33) Japan

(51) F16B 12/20
F16B 12/24
(11) EP4118346
(21) EP20833901.0
(47) 21.05.2025
(87) EP2020087617
16.09.2021
(22) 22.12.2020
(54) IMPROVED JOINING DEVICE FOR FURNITURE PARTS AND FURNISHING ACCESSORIES
(73) Effegi Brevetti S.r.l.
(72) GIOVANNETTI, Antonio Sergio
(31) 202000005086
(32) 10.03.2020
(33) Italy

(51) F16B 15/08
(11) EP3674569
(21) EP19219761.4
(47) 21.05.2025
(22) 27.12.2019
(54) CONNECTION FASTENER
(73) Max Co., Ltd.
(72) ARAI, Toshimichi
YONEYAMA, Satoru
YOKOCHI, Yasushi
FUKUSHIMA, Naoyuki
(31) 2018244824
(32) 27.12.2018
(33) Japan

(51) F16B 35/04
(11) EP4299929
(21) EP23735219.0
(47) 21.05.2025
(87) JP2023010621
23.11.2023
(22) 17.03.2023
(54) BANJO BOLT
(73) Matsumoto Heavy Industry Co., Ltd.
(72) YOKOTA, Koichi
SHIMOKAWA, Shinya
ITOHARA, Hironobu
(31) 2022080071
(32) 16.05.2022
(33) Japan

(51) F16B 37/08
F16B 21/02
F16B 21/04
F16B 7/10
F16B 7/18
(11) EP4234961
(21) EP22158606.8
(47) 21.05.2025
(22) 24.02.2022
(54) FLEXIBLE CONNECTION ASSEMBLY WITH INTEGRATED VIBRATION DAMPER
(73) Airbus Operations GmbH
(72) Benthien, Hermann
Poppe, Andreas

(51) F16C 17/02
F16C 33/14
F16C 33/04
C23C 8/26
C23C 8/38
C23C 28/04
(11) EP4200533
(21) EP21769627.7
(47) 21.05.2025
(87) AT2021060271
24.02.2022
(22) 05.08.2021
(54) SLIDING BEARING ELEMENT
(73) Rübig Gesellschaft m.b.H. & Co. KG.
(72) RÜBIG, Bernd
(31) 602562020
(32) 19.08.2020
(33) Austria

(51) F16C 32/04
D01H 4/12
F16C 39/02
(11) EP4124770
(21) EP22184541.5
(47) 21.05.2025
(22) 12.07.2022
(54) AXIAL BEARING AND POLE DISC FOR AN AXIAL BEARING
(73) Rieter AG
(72) Schaeffler, Gernot
(31) 102021119614
(32) 28.07.2021
(33) Germany

(51) F16D 28/00
F16D 23/14
F16D 13/75
(11) EP4257837
(21) EP22871059.6
(47) 21.05.2025
(87) CN2022084766
31.08.2023
(22) 01.04.2022
(54) CONTROL MECHANISM OF CLUTCH
(73) Zhejiang Xinke Transmission Technology Co., Ltd
(72) JIN, Jianhua
(31) 202210166167
(32) 23.02.2022
(33) China

(51) F16D 48/06
(11) EP4219972
(21) EP23154167.3
(47) 21.05.2025
(22) 31.01.2023
(54) CLUTCH BURNISHING
(73) Thermo King LLC
(72) ATHANASAKOPOULOS, Alexandros
WATERS, Scott A
MCCANNELL UNGER, Vincent
NEU, Timothy J
KOCH, Lucas
(31) 202217589406
(32) 31.01.2022
(33) United States of America

(51) F16D 57/00
(11) EP4229312
(21) EP21799192.6

(47) 21.05.2025
(87) EP2021078154
21.04.2022
(22) 12.10.2021
(54) MAGNETORHEOLOGICAL BRAKING DEVICE
(73) INVENTUS Engineering GmbH
(72) BATTLOGG, Stefan
(31) 102020126912
(32) 13.10.2020
(33) Germany

(51) F16F 13/10
(11) EP3290741
(21) EP17188201.2
(47) 21.05.2025
(22) 28.08.2017
(54) HYDRAULIC DAMPER FOR A MOUNT ASSEMBLY
(73) ContiTech Vibration Control GmbH
(72) Snyder, Curtis
Gueno, Eric
(31) 201715682888
201662380682 P
(32) 22.08.2017
29.08.2016
(33) United States of America
United States of America

(51) F16H 1/22
B60K 1/02
(11) EP4336067
(21) EP22194279.0
(47) 21.05.2025
(22) 07.09.2022
(54) A GEARBOX/DRIVETRAIN FOR A VEHICLE
(73) Rimac Technology d.o.o.
(72) Trumbic, Niko
Milek, Luka

(51) F16H 7/06
B61B 13/02
B61B 13/04
B61B 13/12
B61C 11/04
F16H 19/04
F16H 19/06
(11) EP4343172
(21) EP23000111.7
(47) 21.05.2025
(22) 09.08.2023
(54) TRANSPORT SYSTEM
(73) Brehm, Bernhard
Just, Manfred
Fetzner, Roland
(72) Brehm, Bernhard
(31) 102022003475
(32) 21.09.2022
(33) Germany

(51) F16H 25/22
F16H 25/20
F16D 65/16
(11) EP3115645
(21) EP16178011.9
(47) 21.05.2025
(22) 05.07.2016
(54) DUAL-RATE LINEAR ACTUATOR
(73) Goodrich Corporation
(72) KLODE, Harald
(31) 201514792355
(32) 06.07.2015
(33) United States of America

(51) F16H 25/24
H02K 7/06
E05B 81/28
B60N 2/23
F16H 25/20
(11) EP4357642
(21) EP22827504.6
(47) 21.05.2025
(87) CN2022099725
29.12.2022
(22) 20.06.2022
(54) ELECTRIC CABLE DRIVE MECHANISM HAVING SELF-RETURN CAPABILITY
(73) KEIPER Seating Mechanisms Co., Ltd.
(72) ZHANG, Zhihui
CHEN, Jinghui
GUO, Yutong
SHEN, Jiahao
LIAN, Peina
WANG, Qi
CHANG, Jian
(31) 202110715889
202121426492 U
(32) 25.06.2021
25.06.2021
(33) China
China

(51) F16H 37/04
F16H 37/08
F16H 48/36
(11) EP4012226
(21) EP22155122.9
(47) 21.05.2025
(22) 16.10.2018
(54) DRIVELINE INCLUDING A VARIABLE END REDUCER ASSEMBLY
(73) Neapco Intellectual Property Holdings, LLC
(72) Remboski, Donald
Dedo, Jacqueline
(31) 201816159997
201762572634 P
(32) 15.10.2018
16.10.2017
(33) United States of America
United States of America

(51) F16H 48/08
F16H 48/40
F16H 57/037
F16H 57/04
F16H 57/08
B60K 1/00
F16H 57/021
F16H 57/00
F16H 63/34
F16H 57/02
F16H 48/38
(11) EP4310366
(21) EP22769556.6
(47) 21.05.2025
(87) JP2022008044
22.09.2022
(22) 25.02.2022
(54) POWER TRANSMISSION DEVICE
(73) Jatco Ltd.
Nissan Motor Co. Ltd
(72) KOBAYASHI Ryuzaburo
FUKANOKI Kunihiko
KAMIYAMA Akira
(31) 2021046564
(32) 19.03.2021
(33) Japan

(51) F16H 48/10
F16H 48/36
B60K 1/02
(11) EP3988817
(21) EP20856477.3
(47) 21.05.2025
(87) JP2020032607
04.03.2021
(22) 28.08.2020
(54) VEHICLE DRIVING DEVICE
(73) AISIN CORPORATION
Mitsubishi Jidosha Kogyo Kabushiki Kaisha
(72) MIZUTANI Toshihisa
KATAOKA Kenta
OWARI Taiki
OSANAI Hiroaki
SUYAMA Daiki
KATO Hiroshi
YANAGIHARA Yuki
TAKAHASHI Naoki
TERAO Kiminobu
OGASAWARA Takuya
MORIMOTO, Yosuke
(31) 2019157276
(32) 29.08.2019
(33) Japan

(51) F16H 49/00
(11) EP4036441
(21) EP19946901.6
(47) 21.05.2025
(87) JP2019038184
01.04.2021
(22) 27.09.2019
(54) FLAT STRAIN WAVE GEAR DEVICE
(73) Harmonic Drive Systems Inc.
(72) KOBAYASHI, Masaru

(51) F16H 57/01
F16H 61/12
B62M 6/40
(11) EP3710730
(21) EP18795320.3
(47) 21.05.2025
(87) EP2018078270
23.05.2019
(22) 16.10.2018
(54) METHOD FOR MONITORING A TRANSMISSION OF A ELECTRIC BYCICLE, CONTROL UNIT, TRANSMISSION ANALYSIS METHOD AND SERVER DEVICE
(73) Robert Bosch GmbH
(72) DUKART, Anton
KIMMICH, Peter
HINTERKAUSEN, Markus
(31) 102017220245
(32) 14.11.2017
(33) Germany

(51) F16H 57/029
F16H 57/031
F16H 57/033
F16H 57/04

(11) EP3948027
(21) EP20711499.2
(47) 21.05.2025
(87) EP2020025098
01.10.2020
(22) 27.02.2020
(54) TRANSMISSION AND METHOD FOR PRODUCING DIFFERENT TRANSMISSIONS, IN PARTICULAR A RANGE OF TRANSMISSIONS
(73) Sew-Eurodrive GmbH & Co. KG
(72) SCHÜTTERLE, Ingo
SCHWAN, Tobias
FRANK, Daniel
(31) 102019002191
(32) 26.03.2019
(33) Germany

(51) F16H 61/00
F16H 61/688
(11) EP4058691
(21) EP20733739.5
(47) 21.05.2025
(87) EP2020066697
20.05.2021
(22) 17.06.2020
(54) METHOD FOR OPERATING A DUAL CLUTCH TRANSMISSION OF A MOTOR VEHICLE AND MOTOR VEHICLE
(73) Audi AG
(72) SZEPPAT, Enrico
GUNDLACH, Lutz
(31) 102019130482
(32) 12.11.2019
(33) Germany

(51) F16H 61/12
F16H 63/50
(11) EP4211370
(21) EP21785979.2
(47) 21.05.2025
(87) IB2021058193
17.03.2022
(22) 09.09.2021
(54) METHOD FOR DETERMINING AN OPERATIVE SHIFT CONFIGURATION OF A DRIVE MECHANISM OF A GEARBOX OF A SADDLE-RIDE TYPE VEHICLE
(73) PIAGGIO & C. S.P.A.
(72) SOATTI, Piero
PERON, Stivi
(31) 202000021343
(32) 09.09.2020
(33) Italy

(51) F16H 63/34
B60T 13/74
(11) EP3894725
(21) EP19786334.3
(47) 21.05.2025
(87) EP2019077826
18.06.2020
(22) 14.10.2019
(54) LOCK ACTUATOR, AND PARK LOCK COMPRISING SUCH A LOCK ACTUATOR
(73) Solero Technologies Villingen GmbH
(72) SCHULZ, Florian
KAMMERER, Andreas
REVIN, Mikhail
HERMANN, Rolf
(31) 102018132182
19158621
(32) 13.12.2018
21.02.2019
(33) Germany
European Patent Office (EPO)

(51) F16J 15/34
F16C 17/04
(11) EP3862600
(21) EP19869466.3
(47) 21.05.2025
(87) JP2019038155
09.04.2020
(22) 27.09.2019
(54) SLIDING MEMBER
(73) Eagle Industry Co., Ltd.
(72) TOKUNAGA Yuichiro
(31) 2018187003
(32) 01.10.2018
(33) Japan

(51) F16K 11/07
(11) EP4139594
(21) EP21730512.7
(47) 21.05.2025
(87) EP2021064339
06.01.2022
(22) 28.05.2021
(54) VALVE DEVICE
(73) Hydac Fluidtechnik GmbH
(72) SCHNEIDER, Wolfgang Friedrich Wilhelm
TANNER, Roger Daniel
STAMBER-BUR, Marcel
(31) 102020003973
(32) 02.07.2020
(33) Germany

(51) F16K 17/28
E03C 1/02
G05D 7/01
(11) EP3997543
(21) EP20740436.9
(47) 21.05.2025
(87) NL2020050460
21.01.2021
(22) 10.07.2020
(54) DEVICE FOR LIMITING OR KEEPING CONSTANT A FLOWING QUANTITY OF LIQUID
(73) Cenergist Limited
(72) VAN DER UPWICH, Stijn
(31) 2023494
(32) 12.07.2019
(33) Netherlands

(51) F16K 31/04
F16K 31/50
F16K 27/00
F16K 3/30
F16K 37/00
F16K 27/08
C10B 25/10
C10B 55/00
F16K 3/02
(11) EP3969792
(21) EP20804790.2
(47) 21.05.2025
(87) US2020020979
19.11.2020
(22) 04.03.2020
(54) SYSTEMS AND METHODS FOR TORQUE ISOLATION VALVE ACTUATOR
(73) TapcoEnpro, LLC
(72) KRAUSE, Kenneth
BAILEY, Benjamin
(31) 201916414388
(32) 16.05.2019
(33) United States of America

(51) F16L 3/10
(11) EP3686468
(21) EP20152215.8
(47) 21.05.2025
(22) 16.01.2020
(54) A PIPE CLIP FOR ATTACHING A PIPE OR A SIMILAR OBJECT TO A SUPPORT
(73) CoxGeelen B.V.
(72) AARTS, Martijn Anne Johan Lambert
LUX, Gene Twan Edgar
(31) 2022434
(32) 22.01.2019
(33) Netherlands

(51) F16L 3/10
F16L 23/10
F16L 55/115
B22F 12/00
B29C 64/20
B65D 90/54
F16J 13/06
F16J 15/06
F16L 23/22
F16L 55/105
F17C 13/06
(11) EP4179242
(21) EP21742470.4
(47) 21.05.2025
(87) GB2021051707
13.01.2022
(22) 06.07.2021
(54) ARRANGEMENTS FOR BLANKING A COUPLING MEMBER
(73) LPW Technology Ltd
(72) HEALEY, Callum
(31) 202010395
(32) 07.07.2020
(33) United Kingdom

(51) F16L 13/14
F16L 25/01
F16L 33/207
(11) EP3290769
(21) EP17194244.4
(47) 21.05.2025
(22) 31.10.2014
(54) FITTING FOR CONNECTING TO A TUBULAR ELEMENT, TUBING CONNECTION AND A METHOD FOR CONNECTING A FITTING TO A TUBULAR ELEMENT
(73) Conex IPR Limited
(72) Bakhtiari, Mano

(51) F16L 37/084
F16L 37/14
F16L 37/00
F16L 47/00
F16L 15/08

F16L 57/00
(11) EP4261450
(21) EP23163366.0
(47) 21.05.2025
(22) 22.03.2023
(54) FLUID CONNECTION UNIT
(73) Fränkische Rohrwerke Gebr. Kirchner GmbH & Co. KG
(72) FRETER, Ludwig
(31) 102022109283
(32) 14.04.2022
(33) Germany

(51) F16L 55/38
F16L 55/46
E04G 21/04
B08B 9/055
F16L 101/12
(11) EP4357657
(21) EP23204273.9
(47) 21.05.2025
(22) 18.10.2023
(54) VALVE DEVICE, CONSTRUCTION MACHINE AND METHOD
(73) Putzmeister Engineering GmbH
(72) Kandler, Andreas
Briem, Michael
Weimer, Ralf
(31) 102022211187
(32) 21.10.2022
(33) Germany

(51) F16N 11/08
F16N 13/02
F16N 29/00
(11) EP4381220
(21) EP22789908.5
(47) 21.05.2025
(87) EP2022076261
25.05.2023
(22) 21.09.2022
(54) LUBRICANT DISPENSER
(73) Perma-Tec GmbH & Co. KG
(72) ENGELHARDT, Ralf
LENHART, Matthias
(31) 102021129977
(32) 17.11.2021
(33) Germany

(51) F17C 1/06
F16J 12/00
(11) EP3872386
(21) EP19876146.2
(47) 21.05.2025
(87) JP2019039406
30.04.2020
(22) 04.10.2019
(54) PRESSURE VESSEL
(73) Yachiyo Industry Co., Ltd.
(72) IWASE, Wataru
(31) 2018199016
(32) 23.10.2018
(33) Japan

(51) F17C 13/00
(11) EP4198375
(21) EP22211708.7
(47) 21.05.2025
(22) 06.12.2022
(54) LIQUEFIED GAS STORAGE FACILITY COMPRISING A VESSEL AND A DOME STRUCTURE
(73) GAZTRANSPORT ET TECHNIGAZ
(72) MICHAUT, Erwan
HIVERT, Emmanuel
BARDIN, Florian
(31) 2113916
(32) 17.12.2021
(33) France

(51) F17C 13/04
(11) EP4396487
(21) EP22758476.0
(47) 21.05.2025
(87) EP2022071345
09.03.2023
(22) 29.07.2022
(54) SOLENOID VALVE AND HYDROGEN TANK SYSTEM COMPRISING SOLENOID VALVE
(73) Robert Bosch GmbH
(72) SCHAICH, Udo
RAU, Andreas
SOUBARI, Joachim
(31) 102021209468
(32) 30.08.2021
(33) Germany

(51) F17C 13/04
F16K 1/30
F16K 31/363
F16K 31/42
(11) EP4217640
(21) EP21765637.0
(47) 21.05.2025
(87) EP2021073000
31.03.2022
(22) 19.08.2021
(54) TANK DEVICE FOR STORING A GASEOUS MEDIUM, COMPRISING A VALVE DEVICE
(73) Robert Bosch GmbH
(72) SCHAICH, Udo
(31) 102020211865
(32) 23.09.2020
(33) Germany

(51) F17C 13/08
(11) EP3371507
(21) EP16798418.6
(47) 21.05.2025
(87) EP2016075930
11.05.2017
(22) 27.10.2016
(54) PROTECTIVE RING FOR GAS BOTTLES
(73) Schmitt Prof. Möhlmann & Collegen Wirtschaftskanzlei -Insolvenzverwalter Aktiengesellschaft
(72) FRITZSCHE, Hendrik
WERNER, Hans Jürgen
(31) 202015105945 U
(32) 06.11.2015
(33) Germany

(51) F17D 3/00
F17D 1/00
F17D 5/00
G05D 16/20
(11) EP3884204
(21) EP19886118.9
(47) 21.05.2025
(87) CA2019051673
28.05.2020
(22) 21.11.2019
(54) SYSTEM AND METHOD FOR AUTONOMOUS OPERATION OF PIPELINE AND MIDSTREAM FACILITY SYSTEMS
(73) Crux Operations Control Management Limited
(72) KNOTT, Victoria
SHIRT, Roger
OTERO, Fernando
(31) 201862770668 P
(32) 21.11.2018
(33) United States of America

(51) F21K 99/00
F21V 7/00
F21V 13/12
G02B 5/02
H01L 33/50
(11) EP3224529
(21) EP15813182.1
(47) 21.05.2025
(87) US2015062749
02.06.2016
(22) 25.11.2015
(54) LIGHTING DEVICE HAVING A 3D SCATTERING ELEMENT AND OPTICAL EXTRACTOR WITH CONVEX OUTPUT SURFACE
(73) Quarkstar LLC
(72) HAITZ, Roland H.
SCHINAGL, Ferdinand
(31) 201462084358 P
(32) 25.11.2014
(33) United States of America

(51) F21L 4/00
F21V 21/084
F21L 4/04
(11) EP4047261
(21) EP21158833.0
(47) 21.05.2025
(22) 23.02.2021
(54) HEADLAMP STRIP
(73) Zedel
(72) BERREL, Philippe
BORTOLOTTI, Raphaël
LE BOURHIS, Mathieu

(51) F21S 8/06
F21V 33/00
F21W 131/103
(11) EP4416421
(21) EP22800261.4
(47) 21.05.2025
(87) EP2022078085
20.04.2023
(22) 10.10.2022
(54) OUTDOOR LUMINAIRE FOR SUSPENDED MOUNTING WITH SWAY COMPENSATION
(73) Signify Holding B.V.
(72) REUSER, René, Cornelis
VAN RIJSWIJK, Nicolaas, Antonie
(31) 22150397
21202702
(32) 06.01.2022
14.10.2021
(33) European Patent Office (EPO)
European Patent Office (EPO)

(51) F21S 43/14

F21S 43/20
F21S 43/31
F21S 43/40
F21S 43/50
(11) EP3597991
(21) EP18425047.0
(47) 21.05.2025
(22) 21.06.2018
(54) AUTOMOTIVE LIGHT
(73) MARELLI AUTOMOTIVE LIGHTING ITALY S.p.A.
(72) Antonipieri, Michele
Buzzurro, Alessandro

(51) F21S 45/40
F02M 35/02
F02M 35/024
(11) EP3567309
(21) EP19172090.3
(47) 21.05.2025
(22) 01.05.2019
(54) AIR INTAKE DEVICE FOR A MOTOR VEHICLE PROVIDED WITH AN INTERNAL COMBUSTION ENGINE
(73) KTM AG
(72) Contardo, Luca
Guzhov, Anton
(31) 102018111179
(32) 09.05.2018
(33) Germany

(51) F21V 5/00
F21V 5/04
B60Q 3/60
F21S 41/20
G02B 1/00
B82Y 20/00
G02B 5/18
(11) EP3825738
(21) EP20213372.4
(47) 21.05.2025
(22) 20.09.2016
(54) COLLIMATING METALENSES AND TECHNOLOGIES INCORPORATING THE SAME
(73) OSRAM Opto Semiconductors GmbH
President and Fellows of Harvard College
(72) LENEF, Alan
AIETA, Francesco
CAPASSO, Federico
BYRNES, Steve
(31) 201562265799 P
201562222553 P
(32) 10.12.2015
23.09.2015
(33) United States of America
United States of America

(51) F21V 5/00
F21V 7/00
(11) EP3770491
(21) EP20187725.5
(47) 21.05.2025
(22) 24.07.2020
(54) LIGHTING DEVICE
(73) Regent Beleuchtungskörper AG
(72) Fernández, Oscar
Müller, Bernd
(31) 9452019
(32) 24.07.2019
(33) Switzerland

(51) F21V 8/00
G02F 1/13357
G02B 6/00
(11) EP3607245
(21) EP18780515.5
(47) 21.05.2025
(87) US2018023044
11.10.2018
(22) 18.03.2018
(54) DUAL VIEW ZONE BACKLIGHT, DUAL-MODE DISPLAY, AND METHOD
(73) LEIA Inc.
(72) FATTAL, David A.
KREBBERS, Andre
(31) 201762480514 P
(32) 02.04.2017
(33) United States of America

(51) F21V 17/16
F21V 3/06
F21V 14/06
F21S 8/04
F21V 17/02
(11) EP4113003
(21) EP21183312.4
(47) 21.05.2025
(22) 01.07.2021
(54) A LIGHT FIXTURE FOR DIVERSIFIED LIGHTING AND SYSTEM FOR DIVERSIFIED ROOM LIGHTING
(73) PL Sp. z o.o.
(72) WRÓBEL, Robert

(51) F21V 21/04
E04B 9/00
A61L 9/20
A61L 9/22
E04B 9/06
F21V 33/00
F21V 23/04
F21S 8/02
(11) EP4367436
(21) EP22737590.4
(47) 21.05.2025
(87) EP2022066596
12.01.2023
(22) 17.06.2022
(54) A CEILING SUSPENDED LIGHTING UNIT
(73) Signify Holding B.V.
(72) VAN BOMMEL, Ties
HIKMET, Rifat, Ata, Mustafa
(31) 21183918
(32) 06.07.2021
(33) European Patent Office (EPO)

(51) F21V 23/00
F21S 41/30
F21K 9/68
F21Y 115/10
H10H 29/24
H10H 29/856
H10H 29/85
(11) EP3904760
(21) EP19906355.3
(47) 21.05.2025
(87) KR2019014352
02.07.2020
(22) 29.10.2019
(54) LIGHT SOURCE UNIT USING SEMICONDUCTOR LIGHT-EMITTING DEVICE
(73) LG Electronics Inc.
(72) LEE, Kyungho
BYUN, Yangwoo
SONG, Hooyoung
(31) 20180169630
(32) 26.12.2018
(33) Korea (Republic)

(51) F23C 1/08
F23C 5/02
F23D 1/00
F23D 14/24
F23D 14/78
F23D 17/00
F23D 99/00
(11) EP4310394
(21) EP22020352.5
(47) 21.05.2025
(22) 21.07.2022
(54) BURNER ARRANGEMENT FOR SYNTHESIS GAS PRODUCTION
(73) L'AIR LIQUIDE, SOCIÉTÉ ANONYME POUR L'ÉTUDE ET L'EXPLOITATION DES PROCÉDÉS GEORGES CLAUDE
(72) Ulber, Dieter
Weigand, Peter
Schlichting, Holger
Walter, Stefan

(51) F23C 99/00
F23D 14/02
F23D 14/12
F23D 14/16
F23D 14/26
F23G 7/06
(11) EP3278023
(21) EP16713039.2
(47) 21.05.2025
(87) GB2016050826
06.10.2016
(22) 23.03.2016
(54) RADIANT BURNER FOR INCINERATION OF CONTAMINATED GAS
(73) Edwards Limited
(72) SEELEY, Andrew James
PRICE, Duncan Michael
(31) 201505448
(32) 30.03.2015
(33) United Kingdom

(51) F23D 14/82
(11) EP4246043
(21) EP23161656.6
(47) 21.05.2025
(22) 14.03.2023
(54) GAS BURNER ARRANGEMENT, GAS HEATER AND USE
(73) Vaillant GmbH
(72) Badenhop, Thomas
Hopf, Matthias
Reinert, Andreas
Richter, Klaus
(31) 102022106404
(32) 18.03.2022
(33) Germany

(51) F23G 7/06
(11) EP4249802

(21) EP22164241.6
(47) 21.05.2025
(22) 24.03.2022
(54) REGENERATIVE THERMAL OXIDIZER, SYSTEM COMPRISING A REGENERATIVE THERMAL OXIDIZER AND METHOD OF OPERATING A REGENERATIVE THERMAL OXIDIZER
(73) Koch Engineered Solutions GmbH
(72) KLAUS, Wolfgang
LORRA, Michael
SCHWARTING, Gernot

(51) F23G 7/07
(11) EP4086514
(21) EP21172272.3
(47) 21.05.2025
(22) 05.05.2021
(54) SYNERGETIC SYSTEM AND METHOD FOR WASTE TREATMENT
(73) Dürr Systems AB
(72) KÄLLSTRAND, Åke
LARSSON, Lisa

(51) F24C 15/04
F24C 15/00
(11) EP4034815
(21) EP19950929.0
(47) 21.05.2025
(87) TR2019050918
06.05.2021
(22) 02.11.2019
(54) AN OVEN WITH DOOR COOLING ASSEMBLY
(73) Femas Metal San. Ve Tic. A.S.
(72) GOCER, Mehmet Baris
AKKUS, Yahya
DUZGUN, Ogun
EROGLU, Erdem
DURSUN, Abdulbaki

(51) F24C 15/10
B60P 3/36
F24C 15/20
F24C 15/30
(11) EP3762657
(21) EP20708015.1
(47) 21.05.2025
(87) IB2020051436
03.09.2020
(22) 20.02.2020
(54) COOKING SYSTEM FOR A SPACE RESTRICTED ENVIRONMENT
(73) Thetford BV
(72) MAASKANT, Yannick
JORDAN, Martin
MUSAMEH, Mohammad
JENKINS, Simon Scott
HAANS, Victor
WOLTERLINK, Kevin
(31) 201962811584 P
(32) 28.02.2019
(33) United States of America

(51) F24C 15/20
F24C 1/04
F24C 7/06
F24C 15/10
F24C 3/08
F24C 3/12
(11) EP3948085
(21) EP20713234.1
(47) 21.05.2025
(87) EP2020057393
01.10.2020
(22) 18.03.2020
(54) HOB AND METHOD
(73) BSH Hausgeräte GmbH
(72) ACOSTA HERRERO, Luis
GUTIERREZ HUMARA, Melca
JUSTE PALLARES, Jose
LOPEZ ORTIZ, Alberto
PALACIOS VALDUEZA, Luis Antonio
PELAYO ALONSO, Carlos
PLACER MARURI, Emilio
(31) 201930269
(32) 25.03.2019
(33) Spain

(51) F24C 15/32
F24C 15/34
(11) EP4177526
(21) EP22204091.7
(47) 21.05.2025
(22) 27.10.2022
(54) BAKING OVEN WITH RECIRCULATION UNIT
(73) Reisinger, Günter
(72) Reisinger, Günter
(31) 202021105991 U
(32) 03.11.2021
(33) Germany

(51) F24D 10/00
(11) EP3708915
(21) EP20162298.2
(47) 21.05.2025
(22) 11.03.2020
(54) DISTRICT-HEATING SYSTEM AND METHOD FOR INCREASING CONSUMER POWER
(73) HögforsGST Oy
(72) HARTMAN, Antti
(31) 20195176
(32) 11.03.2019
(33) Finland

(51) F24D 11/02
F24F 5/00
F28D 20/02
F24D 19/10
F28D 20/00
(11) EP4141332
(21) EP22192478.0
(47) 21.05.2025
(22) 26.08.2022
(54) METHOD FOR OPERATING AN ENERGY SUPPLY SYSTEM AND ENERGY SUPPLY SYSTEM FOR PROVIDING COOLING CAPACITY AND/OR HEATING POWER
(73) Viessmann Holding International GmbH
(72) Bernd Hafner
Ralf Dott
Jens Schaumann
Stefan Hensel
(31) 102021122516
(32) 31.08.2021
(33) Germany

(51) F24D 19/10
F24H 15/305
(11) EP4071414
(21) EP22163901.6
(47) 21.05.2025
(22) 23.03.2022
(54) METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING A HEAT GENERATOR
(73) Viessmann Holding International GmbH
(72) SKIBA, Paul
BRAND, Adrian
STRUBEL, Jan
(31) 102021203393
(32) 06.04.2021
(33) Germany

(51) F24F 1/0003
G05B 19/00
G05B 21/00
F24F 11/62
F24F 11/58
(11) EP3462096
(21) EP18197252.2
(47) 21.05.2025
(22) 27.09.2018
(54) CONTROL METHOD OF AIR CONDITIONER SYSTEM
(73) LG Electronics Inc.
Pusan National University Industry-University Cooperation Foundation
(72) LEE, Hakrae
KIM, Jinho
PARK, Chulmin
EOM, Donggi
YOON, Seontae
LEE, Kyongdo
LEE, Kwonhyung
KIM, Sukchan
(31) 20170126495
(32) 28.09.2017
(33) Korea (Republic)

(51) F24F 1/0073
F24F 13/28
F24F 1/0057
(11) EP3712516
(21) EP19798515.3
(47) 21.05.2025
(87) CN2019112431
06.08.2020
(22) 22.10.2019
(54) WALL-MOUNTED INDOOR AIR CONDITIONER UNIT
(73) GD Midea Air-Conditioning Equipment Co., Ltd.
Midea Group Co., Ltd.
(72) ZHAO, Weiqiang
AN, Mingbo
(31) 201920179040 U
(32) 31.01.2019
(33) China

(51) F24F 3/14
(11) EP4036487
(21) EP22150661.1
(47) 21.05.2025
(22) 10.01.2022
(54) ELECTROCHEMICAL DEHUMIDIFIER WITH MULTIPLE AIR CONTACTORS
(73) Palo Alto Research Center Incorporated
(72) BENEDICT, Michael
TORRES, Franciso E
BEH, Eugene S
MELES, Aaron

(31) 202117161904
(32) 29.01.2021
(33) United States of America

(51) F24F 5/00
F24F 13/30
(11) EP3931497
(21) EP20762490.9
(47) 21.05.2025
(87) AU2020050169
03.09.2020
(22) 26.02.2020
(54) PRESSURIZED WATER DISTRIBUTION SYSTEM FOR AN EVAPORATIVE COOLER
(73) Seeley International Pty Ltd
(72) HAYNES, Daniel Robert
WOODHOUSE, Finn Gascoigne
PENDERGRAST, Ian Howard
ABEYARATHNA, Lorinda Yvonne
GILBERT, Robert William
HARRIS, Shane Antony
SINCLAIR, Shoji
(31) 201916285743
(32) 26.02.2019
(33) United States of America

(51) F24F 8/108
F24F 8/22
F24F 13/20
F24F 13/28
F24F 7/003
F24F 7/007
F24F 8/80
B01D 46/00
B01D 46/10
(11) EP3945256
(21) EP21187765.9
(47) 21.05.2025
(22) 26.07.2021
(54) PORTABLE AIR CARING APPARATUS
(73) LG Electronics Inc.
(72) KIM, Juhyun
OH, Si Young
KIM, Kidong
CHOI, Seok-Ho
(31) 20200173594
20200093401
(32) 11.12.2020
27.07.2020
(33) Korea (Republic)
Korea (Republic)

(51) F24F 11/36
F25B 49/02
(11) EP4306867
(21) EP22766783.9
(47) 21.05.2025
(87) JP2022006648
15.09.2022
(22) 18.02.2022
(54) REFRIGERATION SYSTEM
(73) Daikin Industries, Ltd.
(72) INOUE, Makoto
(31) 2021038438
(32) 10.03.2021
(33) Japan

(51) F24F 11/64
F24F 11/46
F24F 11/48
F24F 11/61
(11) EP3992538
(21) EP20876505.7
(47) 21.05.2025
(87) CN2020077167
22.04.2021
(22) 28.02.2020
(54) AIR CONDITIONER CONTROL METHOD AND APPARATUS, AND COMPUTER-READABLE STORAGE MEDIUM
(73) Shanghai Meicon Intelligent Construction Co., Ltd.
GD Midea Heating & Ventilating Equipment Co., Ltd.
(72) LI, Yuanyang
(31) 201910986944
(32) 16.10.2019
(33) China

(51) F24F 13/14
F24F 13/08
F24F 1/0011
(11) EP4235051
(21) EP21885122.8
(47) 21.05.2025
(87) CN2021126292
05.05.2022
(22) 26.10.2021
(54) AIR DUCTING COMPONENT AND AIR CONDITIONING SYSTEM WITH THIS COMPONENT
(73) GD Midea Air-Conditioning Equipment Co., Ltd.
Midea Group Co., Ltd.
(72) SONG, Yingjie
LIU, Qiankun
YANG, Fan
ZHANG, Zheyuan
(31) 202110358186
202120677541 U
202120676661 U
202110358232
202011193753
202022484236 U
(32) 01.04.2021
01.04.2021
01.04.2021
01.04.2021
30.10.2020
30.10.2020
(33) China
China
China
China
China
China

(51) F24F 13/20
F24F 13/08
F24F 8/10
F24F 1/0011
H02K 5/04
H02K 7/14
H02K 7/00
F04D 25/08
F24F 1/0018
F24F 13/24
F24F 1/0071
F04D 29/44
F04D 29/16
(11) EP4145057
(21) EP21892139.3
(47) 21.05.2025
(87) KR2021013557
19.05.2022
(22) 05.10.2021
(54) AIR CONDITIONER
(73) Samsung Electronics Co., Ltd.
(72) SEO, Yongho
KIM, Gahyun
KIM, Nakhyun
KIM, Juyoung
(31) 20200150518
(32) 11.11.2020
(33) Korea (Republic)

(51) F24F 13/20
F24F 13/22
F24F 1/0047
(11) EP3842705
(21) EP19852043.9
(47) 21.05.2025
(87) JP2019011717
27.02.2020
(22) 20.03.2019
(54) CEILING EMBEDDED AIR CONDITIONER
(73) Fujitsu General Limited
(72) FUSE, Takuto
SATO, Shota
(31) 2018157749
2018157744
(32) 24.08.2018
24.08.2018
(33) Japan
Japan

(51) F24F 13/20
F24F 13/22
F24F 1/0057
(11) EP3842704
(21) EP19851916.7
(47) 21.05.2025
(87) JP2019011718
27.02.2020
(22) 20.03.2019
(54) AIR CONDITIONER
(73) Fujitsu General Limited
(72) INAGAKI, Eri
NISHIOKA, Shingo
(31) 2018157750
(32) 24.08.2018
(33) Japan

(51) F24H 8/00
F24H 9/00
F24H 9/1836
F24D 3/18
F24H 1/36
(11) EP4361523
(21) EP23206523.5
(47) 21.05.2025
(22) 27.10.2023
(54) CONDENSING BOILER WITH BURNER AND STORAGE FOR HYBRID PLANTS WITH HEAT PUMP
(73) Apen Group S.p.A.
(72) RIGAMONTI, Angelo
VILLA, Nadia
DURANTI, Costantino
(31) 202200022365

(32) 31.10.2022
(33) Italy

(51) F24H 9/02
F24H 9/20
F24H 15/104
G21C 17/01
(11) EP4141344
(21) EP22190678.7
(47) 21.05.2025
(22) 17.08.2022
(54) METHOD FOR INSPECTING AND MONITORING A HEATING DEVICE, USING A SENSOR-GENERATED IMAGE
(73) Vaillant GmbH
(72) Boddenberg, Stefan
Schlichthaber, Frank
(31) 102021121860
(32) 24.08.2021
(33) Germany

(51) F24H 9/18
F24H 1/00
F28D 21/00
F23L 7/00
F22B 27/16
(11) EP4113029
(21) EP21872965.5
(47) 21.05.2025
(87) KR2021013078
31.03.2022
(22) 24.09.2021
(54) WATER HEATER RECEIVING HUMIDIFIED AIR
(73) Kyungdong Navien Co., Ltd.
(72) KWAK, Suk Chul
HWANG, In Soo
(31) 20200125212
(32) 25.09.2020
(33) Korea (Republic)

(51) F24H 9/1809
F24H 15/172
F24H 15/223
F24H 1/20
F24H 9/20
F24H 15/248
(11) EP3305998
(21) EP16799327.8
(47) 21.05.2025
(87) CN2016083408
01.12.2016
(22) 26.05.2016
(54) ELECTRONIC TOILET CAPABLE OF IMPLEMENTING SWITCHING BETWEEN COLD WATER AND HOT WATER, AND CONTROL METHOD
(73) Hanyu Group Joint-stock Co., Ltd.
(72) CHEN, Shuping
SHI, Huashan
LUO, Yong
(31) 201520344987 U
(32) 26.05.2015
(33) China

(51) F24H 15/104
F24H 15/395
F16K 17/00
(11) EP3982057
(21) EP21200626.6
(47) 21.05.2025
(22) 04.10.2021
(54) HOT WATER HEATING DEVICE
(73) Vaillant GmbH
Protherm Production s.r.o.
(72) Kovár, Stanislav
(31) 1722020
(32) 09.10.2020
(33) Slovakia

(51) F25B 1/00
F24F 11/36
F24F 13/20
F24F 13/24
F25B 25/00
F25B 43/00
F25B 49/00
(11) EP4008979
(21) EP20211245.4
(47) 21.05.2025
(22) 02.12.2020
(54) DEVICE FOR SAFELY CARRYING OUT A LEFT-TURNING THERMODYNAMIC CYCLE
(73) Vaillant GmbH
(72) Lingk, Tobias
Krampe-Zadler, Christof
Spahn, Hans-Josef

(51) F25B 13/00
F25B 41/20
F25B 41/26
F25B 49/02
(11) EP4155624
(21) EP22196671.6
(47) 21.05.2025
(22) 20.09.2022
(54) AIR CONDITIONER
(73) LG Electronics, Inc.
(72) CHOI, Woojoo
KIM, Yejin
CHO, Eunjun
RYU, Jihyeong
(31) 20210126522
(32) 24.09.2021
(33) Korea (Republic)

(51) F25B 45/00
F25B 1/00
F24F 11/32
F24F 11/65
(11) EP4145067
(21) EP21795540.0
(47) 21.05.2025
(87) JP2021010723
04.11.2021
(22) 17.03.2021
(54) REFRIGERANT RECOVERY CONTROL DEVICE AND REFRIGERANT RECOVERY CONTROL SYSTEM
(73) Daikin Industries, Ltd.
(72) IYOSHI, Yuuta
YAMANOI, Yoshiki
SAEKI, Kumiko
(31) 2020078297
(32) 27.04.2020
(33) Japan

(51) F25B 49/02
F25B 9/00
F25B 5/02
(11) EP3964772
(21) EP20195068.0
(47) 21.05.2025
(22) 08.09.2020
(54) A METHOD FOR FAULT TOLERANT CONTROL OF A VAPOUR COMPRESSION SYSTEM
(73) Danfoss A/S
(72) ANDREASEN, Glenn
IZADI-ZAMANABADI, Roozbeh

(51) F25B 49/02
F25D 11/00
F25B 27/00
(11) EP3875874
(21) EP20161341.1
(47) 21.05.2025
(22) 05.03.2020
(54) SPEED CONTROL STRATEGIES FOR A CONDENSER FAN IN A REFRIGERATION SYSTEM
(73) Thermo King LLC
(72) DONNELLAN, Wayne
PUNURU, Premchand Reddy
GREENE, Michael
CONDE, James E.

(51) F25D 11/00
B60H 1/32
F25D 23/00
A23B 2/00
(11) EP3984377
(21) EP20834961.3
(47) 21.05.2025
(87) JP2020025884
07.01.2021
(22) 01.07.2020
(54) ELECTRIC FIELD GENERATING DEVICE AND COLD STORAGE PROVIDED WITH SAME
(73) Daikin Industries, Ltd.
(72) INADA, Ryozo
TANAKA, Naohiro
NISHIMOTO, Motomi
MATSUI, Hidenori
(31) 2019124000
(32) 02.07.2019
(33) Japan

(51) F25D 11/02
(11) EP3819568
(21) EP19207120.7
(47) 21.05.2025
(22) 05.11.2019
(54) REFRIGERATING APPLIANCE
(73) ELECTROLUX APPLIANCES AKTIEBOLAG
(72) LAZZARINI, Paolo
PELLEGRINI, Tommaso
PIN, Gilberto

(51) F25D 23/00
F25D 23/10
(11) EP3447414
(21) EP18189982.4
(47) 21.05.2025
(22) 21.08.2018
(54) REFRIGERATION AND/OR FREEZER DEVICE
(73) Liebherr-Hausgeräte Ochsenhausen GmbH
(72) Friedmann, Volker
Schick, Michael
(31) 102017119022

(32) 21.08.2017
(33) Germany

(51) F25D 23/10
(11) EP4067791
(21) EP22160410.1
(47) 21.05.2025
(22) 07.03.2022
(54) LARGE HOUSEHOLD APPLIANCE IN THE FORM OF A REFRIGERATOR
(73) BSH Hausgeräte GmbH
(72) Diebold, Jürgen
Köpf, Johannes
Raab, Alfred
(31) 102021203161
(32) 30.03.2021
(33) Germany

(51) F25D 25/02
(11) EP3805679
(21) EP20203826.1
(47) 21.05.2025
(22) 14.03.2019
(54) REFRIGERATOR
(73) LG Electronics Inc.
(72) KANG, Daekil
(31) 20180030980
(32) 16.03.2018
(33) Korea (Republic)

(51) F25D 27/00
(11) EP3730881
(21) EP20164653.6
(47) 21.05.2025
(22) 20.03.2020
(54) REFRIGERATOR AND/OR FREEZER
(73) Liebherr-Hausgeräte Ochsenhausen GmbH
(72) Schirmer, Marc
Rapp, Stefan
(31) 102019116794
102019107449
(32) 21.06.2019
22.03.2019
(33) Germany
Germany

(51) F25D 29/00
F25D 11/00
F25D 25/02
F25C 5/08
F25C 1/24
F25C 1/18
(11) EP3862709
(21) EP19869811.0
(47) 21.05.2025
(87) KR2019012868
09.04.2020
(22) 01.10.2019
(54) REFRIGERATOR AND METHOD FOR CONTROLLING SAME
(73) LG Electronics Inc.
(72) LEE, Donghoon
LEE, Donghoon
LEE, Wookyong
YEOM, Seungseob
BAE, Yongjun
SON, Sunggyun
PARK, Chongyoung
(31) 20190081719
20190081718
20180142117
20180117785
20180117822
20180117821
20180117819
(32) 06.07.2019
06.07.2019
16.11.2018
02.10.2018
02.10.2018
02.10.2018
02.10.2018
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) F25D 29/00
F25D 11/02
F25D 21/08
F25B 21/02
F25D 11/04
F25B 7/00
F25B 5/00
F25B 49/02
(11) EP3933325
(21) EP20762375.2
(47) 21.05.2025
(87) KR2020002071
03.09.2020
(22) 13.02.2020
(54) REFRIGERATOR CONTROL METHOD
(73) LG Electronics Inc.
(72) YUN, Seokjun
LIM, Hyoungkeun
LEE, Junghun
LEE, Hoyoun
(31) 20190023990
(32) 28.02.2019
(33) Korea (Republic)

(51) F25D 29/00
F25D 17/06
F25D 11/02
F25D 21/00
F25B 21/02
F25D 15/00
F25B 5/02
F25B 5/04
F25B 25/00
F25B 49/02
F25D 11/04
(11) EP3933328
(21) EP20762966.8
(47) 21.05.2025
(87) KR2020002070
03.09.2020
(22) 13.02.2020
(54) METHOD FOR CONTROLLING REFRIGERATOR
(73) LG Electronics Inc.
(72) YUN, Seokjun
LIM, Hyoungkeun
LEE, Junghun
LEE, Hoyoun
(31) 20190024145
(32) 28.02.2019
(33) Korea (Republic)

(51) F25J 1/00
B29C 53/08
B29C 53/60
(11) EP4166877
(21) EP22211356.5
(47) 21.05.2025
(22) 08.10.2020
(54) HEAT EXCHANGE SYSTEM AND METHOD OF ASSEMBLY
(73) Hercules Project Company LLC
(72) VODA, Joseph, E.
GARCIA, Adam, R.
TIEMANN, Kevin, E.
RANELLA, Christopher, J.
DEBRAH, Paul, I.
(31) 201962912246 P
(32) 08.10.2019
(33) United States of America

(51) F27D 5/00
(11) EP4097410
(21) EP21703842.1
(47) 21.05.2025
(87) EP2021051810
05.08.2021
(22) 27.01.2021
(54) TRANSPORTATION TRAY FOR TRANSPORTING AND HEATING CHEMICAL SUBSTANCES
(73) Saint-Gobain IndustrieKeramik Rödental GmbH
(72) DORST, Hans-Ulrich
(31) 102020000510
(32) 28.01.2020
(33) Germany

(51) F28C 3/16
F28D 19/02
F28D 7/16
F28D 13/00
F24S 60/00
F24S 80/20
F24S 90/00
F28D 20/00
(11) EP4018145
(21) EP20853642.5
(47) 21.05.2025
(87) AU2020050874
25.02.2021
(22) 21.08.2020
(54) MOVING-BED PARTICLE HEAT EXCHANGER
(73) Commonwealth Scientific and Industrial Research Organisation
(72) SOO TOO, Yen Chean
GARDNER, Wilson
KIM, Jin-Soo
(31) 2019903064
(32) 22.08.2019
(33) Australia

(51) F28D 1/04
F28D 1/053
F28D 1/02
(11) EP4253890
(21) EP23165096.1
(47) 21.05.2025
(22) 29.03.2023
(54) PHASE-CHANGE HEAT EXCHANGER
(73) Sungrow Power Supply Co., Ltd.
(72) TAN, Lele

ZHENG, Hao
WANG, Xiaohu
SHU, Wentao
YANG, Ye
(31) 202210332718
(32) 31.03.2022
(33) China

(51) F28D 7/10
F28F 9/02
(11) EP3848660
(21) EP20217470.2
(47) 21.05.2025
(22) 29.12.2020
(54) SEALED CONNECTION FOR A CONNECTOR TO A COAXIAL TUBULAR HEAT EXCHANGER
(73) HUTCHINSON
(72) DIEUMEGARD, Bérenger
(31) 2000143
(32) 09.01.2020
(33) France

(51) F28F 3/04
F28F 21/06
F28D 9/00
F28D 21/00
(11) EP3423773
(21) EP17716064.5
(47) 21.05.2025
(87) NL2017050126
08.09.2017
(22) 01.03.2017
(54) RECUPERATOR, PARTS OF WHICH ARE MANUFACTURED BY INJECTION MOULDING
(73) Level Holding B.V.
(72) VELTKAMP, Wessel Bart
HOOGENDOORN, Peter
(31) 2016347
(32) 01.03.2016
(33) Netherlands

(51) F28F 9/02
F28D 1/053
F28D 1/04
F25B 39/00
F25B 13/00
F28D 21/00
(11) EP4155655
(21) EP21808264.2
(47) 21.05.2025
(87) JP2021018888
25.11.2021
(22) 19.05.2021
(54) REFRIGERANT DISTRIBUTOR, HEAT EXCHANGER, AND AIR CONDITIONER
(73) MITSUBISHI ELECTRIC CORPORATION
(72) ONAKA Yoji
MATSUMOTO Takashi
ADACHI Rihito
SAIKUSA Tetsuji
NAKAO Yuki
MORIMOTO Hiroyuki
KIBE Atsushi
(31) PCT/JP2020/020352
(32) 22.05.2020
(33) World Intellectual Property Office (WIPO)

(51) F41A 33/02
(11) EP4067806
(21) EP22166358.6
(47) 21.05.2025
(22) 01.04.2022
(54) SYSTEM WITH SHOOTING DEVICE AND TARGETING APPARATUS
(73) Fröhlich, Simon
(72) Fröhlich, Simon
(31) 102021108364
(32) 01.04.2021
(33) Germany

(51) F41F 3/06
F42B 10/14
F42B 10/62
(11) EP4239276
(21) EP23154582.3
(47) 21.05.2025
(22) 02.02.2023
(54) SUPPORT PLATFORM FOR LAUNCHING OR DROPPING AN UNMANNED FLIGHT OBJECT ONTO A TARGET AND METHOD FOR OPERATING SUCH A SUPPORT PLATFORM
(73) Diehl Defence GmbH & Co. KG
(72) Freter, René
Walzer, Martin
(31) 102022000496
(32) 09.02.2022
(33) Germany

(51) F41H 11/24
(11) EP4237786
(21) EP21785824.0
(47) 21.05.2025
(87) EP2021076538
05.05.2022
(22) 27.09.2021
(54) IMPROVEMENTS IN OR RELATING TO MINE CLEARANCE
(73) Pearson Engineering Limited
(72) TAYLOR, Jonathan
CRONK, Richard
GILROY, Simon
(31) 202017051
(32) 27.10.2020
(33) United Kingdom

(51) F42B 3/08
F42B 3/28
F42B 3/10
F42B 3/24
F42B 3/26
(11) EP4107472
(21) EP21756259.4
(47) 21.05.2025
(87) US2021018181
26.08.2021
(22) 16.02.2021
(54) CANISTER ASSEMBLY WITH PROTECTED CAP WELL AND BOOSTER EXPLOSIVE COMPRISING THE SAME
(73) Dyno Nobel Inc.
(72) MICHNA, Richard Joseph
PLITT, Tyson James
STREBEL, Paul Richard
(31) 202062978595 P
(32) 19.02.2020
(33) United States of America

(51) F42B 10/14
F42B 10/64
(11) EP4354076
(21) EP23201575.0
(47) 21.05.2025
(22) 04.10.2023
(54) AIRCRAFT
(73) Diehl Defence GmbH & Co. KG
(72) Fisch, Peter Gerd
Roth, Jakob
(31) 102022003754
(32) 11.10.2022
(33) Germany

(51) G01B 7/00
G06F 3/0354
G01R 33/07
G06F 1/16
G06F 1/26
(11) EP4279859
(21) EP23741958.5
(47) 21.05.2025
(87) CN2023070462
12.10.2023
(22) 04.01.2023
(54) ACCESSORY IN-PLACE DETECTION SYSTEM
(73) Honor Device Co., Ltd.
(72) ZHANG, Wujia
ZHANG, Youjun
(31) 202210356243
(32) 06.04.2022
(33) China

(51) G01B 9/02
G01N 21/45
G01N 21/78
G01N 21/84
G01N 21/77
G01N 33/558
(11) EP4182630
(21) EP21740564.6
(47) 21.05.2025
(87) EP2021069387
20.01.2022
(22) 13.07.2021
(54) SELF-MIXING INTERFEROMETRY FOR ABSORPTION OR COLOR DETECTION AND APPLICATION IN LATERAL FLOW TESTING
(73) AMS-OSRAM AG
(72) LOUS, Erik Jan
STOCKMEIER, Thomas
(31) 20186067
(32) 15.07.2020
(33) European Patent Office (EPO)

(51) G01B 11/00
G01B 11/26
G01B 11/02
G01B 5/02
G01C 11/02
E02D 29/073
G06F 17/11
(11) EP4368942
(21) EP23842470.9
(47) 21.05.2025
(87) CN2023118204
25.01.2024
(22) 12.09.2023

(54) UNDERWATER MOUNTING POSITIONING METHOD FOR FINAL JOINT IN IMMERSED TUBE TUNNEL
(73) CCCC First Harbor Engineering Co., Ltd.
No.2 Engineering Company Ltd.
of CCCC First Harbor Engineering Company Ltd
Guangdong Laboratory of Artificial Intelligence and Digital Economy (SZ)
(72) SUO, Xuhong
LI, Yunliang
ZHANG, Naishou
YUE, Yuanzheng
WANG, Qiang
NING, Jinjin
LIU, Zhaoquan
YU, Bo
CHEN, Xiao
GUAN, Zexu
ZHANG, Chao
(31) 202321912770 U
202321913304 U
202321922323 U
202310892430
(32) 20.07.2023
20.07.2023
20.07.2023
20.07.2023
(33) China
China
China
China

(51) G01B 11/02
G01B 9/04
G01B 11/06
G02B 21/00
G02B 27/10
(11) EP4006483
(21) EP20940002.7
(47) 21.05.2025
(87) CN2020095524
16.12.2021
(22) 11.06.2020
(54) SPECTRAL CONFOCAL MEASUREMENT DEVICE AND MEASUREMENT METHOD
(73) Aleader Vision Technology Co., Ltd.
(72) WANG, Jinfeng
LUO, Yuan
HE, Jing
KOU, Guanzhong

(51) G01B 11/24
G01N 21/21
G01J 4/00
(11) EP3910285
(21) EP21175735.6
(47) 21.05.2025
(22) 22.09.2010
(54) SCATTEROMETRY MEASUREMENT OF ASYMMETRIC STRUCTURES
(73) Nanometrics Incorporated
(72) RABELLO, Silvio J.
MCGAHAN, William A.
LI, Jie
LIU, Yongdong
(31) 69697410
26031409 P
24943909 P
(32) 29.01.2010
11.11.2009
07.10.2009
(33) United States of America
United States of America
United States of America

(51) G01C 3/08
G01B 11/02
G01C 15/00
G01S 17/08
G01S 17/86
G01C 21/00
(11) EP3527938
(21) EP18157030.0
(47) 21.05.2025
(22) 15.02.2018
(54) DISTANCE MEASURING SYSTEM WITH LAYOUT GENERATION FUNCTIONALITY
(73) Leica Geosystems AG
(72) MAUNZ, Johannes
RENNHARD, Patrick

(51) G01C 9/16
G01C 9/14
(11) EP4063786
(21) EP22162608.8
(47) 21.05.2025
(22) 17.03.2022
(54) TILT ESTIMATION
(73) TVS Motor Company Limited
(72) Suresh, Anandhu
Manoharan, Santhosh
Sharma, Abhishek
Mohan, Barath
Raju, Karanam Venkata Manga
(31) 202141012940
(32) 24.03.2021
(33) India

(51) G01C 11/04
G01C 21/00
G01C 25/00
G06F 18/25
G06T 7/70
G06V 10/75
G06V 10/80
G06V 20/13
G06V 20/17
G06N 20/10
G06N 20/20
G06N 5/01
(11) EP3805700
(21) EP20196990.4
(47) 21.05.2025
(22) 18.09.2020
(54) METHOD, APPARATUS, AND SYSTEM FOR PREDICTING A POSE ERROR FOR A SENSOR SYSTEM
(73) HERE Global B.V.
(72) LAWLOR, David Johnston
MITTAL, Anish
(31) 201916576433
(32) 19.09.2019
(33) United States of America

(51) G01C 13/00
G01V 1/38
G08B 21/02
G01L 7/00
G01V 1/00
G08B 25/00
H04B 13/02
G08B 21/10
(11) EP3959482
(21) EP20795120.3
(47) 21.05.2025
(87) SE2020050404
29.10.2020
(22) 22.04.2020
(54) A DEVICE AND A METHOD FOR DETECTION OF AND WARNING AGAINST TSUNAMIS
(73) Seaward Tsunami Alarm AB
(72) MELIN, Sigurd
(31) 1950499
(32) 24.04.2019
(33) Sweden

(51) G01C 15/00
(11) EP4242584
(21) EP22161744.2
(47) 21.05.2025
(22) 11.03.2022
(54) A REFERENCE FREE CALIBRATION METHOD FOR A POINT CLOUD MEASURING MODULE COMBINED WITH A GEODETIC SINGLE POINT MEASUREMENT UNIT
(73) Leica Geosystems AG
(72) NIKLAUS, Christian
GORDON, Bianca

(51) G01C 15/00
(11) EP3460395
(21) EP18188264.8
(47) 21.05.2025
(22) 09.08.2018
(54) MOVING OBJECT AND APPARATUS FOR RECOGNIZING ARTIFICIAL LANDMARKS COMPRISING INVISIBLE BARCODES
(73) Yujin Robot Co., Ltd.
(72) SHIN, Kyung Chul
PARK, Seong Ju
LEE, Jae Young
CHEON, Moo Woong
(31) 20170126788
20170145577
20170105671
(32) 29.09.2017
02.11.2017
21.08.2017
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) G01C 21/34
(11) EP3851800
(21) EP19860371.4
(47) 21.05.2025
(87) JP2019035585
19.03.2020
(22) 10.09.2019
(54) TRAVEL ROUTE CREATION SYSTEM
(73) Whill, Inc.
(72) FUKUOKA, Muneaki
KATSUMATA, Shunsuke
(31) 2018169678
(32) 11.09.2018
(33) Japan

(51) G01C 21/34

(11) EP4264184
(21) EP21794110.3
(47) 21.05.2025
(87) EP2021078077
23.06.2022
(22) 11.10.2021
(54) METHOD AND APPARATUS FOR THE DETERMINATION OF A DRIVING ROUTE FOR AN AUTOMATICALLY DRIVING VEHICLE
(73) Bayerische Motoren Werke Aktiengesellschaft
(72) DENICH, Christian
QUATTELBAUM, Benjamin
DENICH, Sabrina
(31) 102020133937
(32) 17.12.2020
(33) Germany

(51) G01C 21/36
G01C 21/30
(11) EP3329216
(21) EP16733965.4
(47) 21.05.2025
(87) EP2016065531
02.02.2017
(22) 01.07.2016
(54) DETERMINING ARRANGEMENT INFORMATION FOR A VEHICLE
(73) Volkswagen Aktiengesellschaft
(72) HEIDENREICH, Toni
SPEHR, Jens
(31) 102015214338
(32) 29.07.2015
(33) Germany

(51) G01C 21/36
G02B 27/01
G06T 19/00
(11) EP3640598
(21) EP19168983.5
(47) 21.05.2025
(22) 12.04.2019
(54) CONTENT VISUALIZING METHOD AND APPARATUS
(73) Samsung Electronics Co., Ltd.
(72) LEE, Hee Sae
(31) 20180122382
(32) 15.10.2018
(33) Korea (Republic)

(51) G01D 5/16
G01N 27/12
G01K 7/16
(11) EP3172582
(21) EP15824262.8
(47) 21.05.2025
(87) US2015041577
28.01.2016
(22) 22.07.2015
(54) THIN-FILM RESISTIVE-BASED SENSOR
(73) Brewer Science, Inc.
(72) GIEDD, Ryan E.
KAYASTHA, Vijaya
FURY, Jonathan
COX, Robert Christian
(31) 201562172546 P
201462027753 P
(32) 08.06.2015
22.07.2014
(33) United States of America
United States of America

(51) G01D 5/347
(11) EP4260014
(21) EP21839392.4
(47) 21.05.2025
(87) EP2021085463
23.06.2022
(22) 13.12.2021
(54) DEVICE AND METHOD FOR DETERMINING A REFERENCE CURVE FOR THE ROTATIONAL POSITION OF A ROTATING COMPONENT
(73) Hilti Aktiengesellschaft
(72) LUKIC, Sasha
MITIC, Nenad
RADIVOJEVIC, Djordje
(31) 20213663
(32) 14.12.2020
(33) European Patent Office (EPO)

(51) G01D 5/347
B66B 1/34
(11) EP3828510
(21) EP21150218.2
(47) 21.05.2025
(22) 24.08.2016
(54) OPTICAL ENCODER AND MOTOR ASSEMBLY
(73) Otis Elevator Company
(72) HAN, HakKi
(31) 201662335143 P
201562211974 P
(32) 12.05.2016
31.08.2015
(33) United States of America
United States of America

(51) G01D 11/24
G01D 11/26
G01D 11/30
B33Y 80/00
G01T 1/20
(11) EP4148396
(21) EP22191877.4
(47) 21.05.2025
(22) 24.08.2022
(54) SENSOR ELEMENT SUSPENSION
(73) Baker Hughes Holdings LLC
(72) BAUS, Edward Joseph
KNAUSS, Andrew Edward
ANDERSON, Scott
NEUMANN, Nils
KAO, Conrad
(31) 202117472801
(32) 13.09.2021
(33) United States of America

(51) G01D 11/30
G01S 7/00
H03K 17/945
H03K 17/95
(11) EP4354093
(21) EP23196671.4
(47) 21.05.2025
(22) 11.09.2023
(54) FASTENING DEVICE FOR A SENSOR AND A SENSOR UNIT
(73) Turck Holding GmbH
(72) Makkinga, Alexander Magnus
(31) 102022126588
(32) 12.10.2022
(33) Germany

(51) G01D 11/30
G01S 7/481
H04N 23/51
H04N 23/54
G03B 17/12
(11) EP4109052
(21) EP21756209.9
(47) 21.05.2025
(87) JP2021004946
26.08.2021
(22) 10.02.2021
(54) SENSOR MODULE AND METHOD FOR MANUFACTURING SENSOR MODULE
(73) Sony Semiconductor Solutions Corporation
(72) OWAKI, Hirofumi
(31) 2020024244
(32) 17.02.2020
(33) Japan

(51) G01D 18/00
G01K 11/00
G01K 19/00
G01N 22/04
(11) EP4241049
(21) EP21801508.9
(47) 21.05.2025
(87) EP2021079813
12.05.2022
(22) 27.10.2021
(54) METHOD OF CALIBRATING A MEASURING DEVICE
(73) TEWS Elektronik GmbH & Co. KG
(72) RICHTER, Hendrik
(31) 102020128966
(32) 03.11.2020
(33) Germany

(51) G01D 21/00
G01D 5/14
G01D 9/00
G01D 11/30
H03K 17/95
H03K 17/97
(11) EP4257930
(21) EP23165318.9
(47) 21.05.2025
(22) 30.03.2023
(54) AUTOMATIC MEASUREMENT LOCATION DETECTION OF A SENSOR DATA LOGGER
(73) Testo SE & Co. KGaA
(72) Bach, Sebastian
(31) 102022108279
(32) 06.04.2022
(33) Germany

(51) G01F 1/20
G01F 1/28
(11) EP4323729
(21) EP22720845.1
(47) 21.05.2025
(87) US2022024287
20.10.2022
(22) 11.04.2022
(54) METHOD AND DEVICE FOR MONITORING, DISPLAYING AND REMOTE REPORTING OF HOMOGENEOUS AND NON-

HOMOGENEOUS TURBULENT MATERIAL FLOW STREAMS IN CONFINED CHANNELS AND PIPES
(73) Fluidics Hawaii LLC
(72) DEVERSE, Richard Andrew
CHAVEZ-PARDINI, Mick
(31) 202163258123 P
(32) 12.04.2021
(33) United States of America

(51) G01F 1/68
G01F 15/02
G01F 5/00
(11) EP3811036
(21) EP19743041.6
(47) 21.05.2025
(87) NL2019050340
12.12.2019
(22) 06.06.2019
(54) PRESSURE-INSENSITIVE THERMAL TYPE FLOW METER
(73) Berkin B.V.
(72) HAGELSTEIN, Rob
HEIJNEN, Goijert Lambertus
BOS, Jeroen Wouter
VON KANN, Stefan
(31) 2021082
(32) 08.06.2018
(33) Netherlands

(51) G01F 23/296
G01F 23/80
G01N 9/00
G01F 25/20
G01N 11/16
(11) EP4229365
(21) EP21777673.1
(47) 21.05.2025
(87) EP2021075124
21.04.2022
(22) 13.09.2021
(54) METHOD OF OPERATING A VIBRONIC SENSOR
(73) Endress+Hauser SE+Co. KG
(72) STRITTMATTER, Christian
UPPENKAMP, Kaj
WERNET, Armin
(31) 102020127077
(32) 14.10.2020
(33) Germany

(51) G01J 1/02
G01J 1/08
G01J 1/44
G01S 7/481
G01S 7/4863
G01S 7/4865
G01S 17/08
G01S 17/10
G01S 17/42
G01S 17/89
G01S 17/931
G02B 27/46
H01L 27/144
H01L 27/146
H01L 31/02
H01L 31/0216
H01L 31/0232
H01L 31/107
(11) EP3615901
(21) EP18802192.7
(47) 21.05.2025
(87) US2018032601
22.11.2018
(22) 14.05.2018
(54) OPTICAL IMAGING TRANSMITTER WITH BRIGHTNESS ENHANCEMENT
(73) Ouster, Inc.
(72) PACALA, Angus
FRICHTL, Mark
YOUNGE, Eric
SHU, Marvin
(31) 201762515291 P
201762506445 P
201762506437 P
201762506449 P
(32) 05.06.2017
15.05.2017
15.05.2017
15.05.2017
(33) United States of America
United States of America
United States of America
United States of America

(51) G01J 1/02
G01J 1/42
G01J 1/04
(11) EP4019916
(21) EP20216772.2
(47) 21.05.2025
(22) 23.12.2020
(54) PYRANOMETER
(73) OTT HydroMet B.V.
(72) MES, Joop
KOREVAAR, Marc Albert Nijs
BABAL, Pavel
BERGMANS, Thijs
WILSON, Keith

(51) G01J 1/42
G01J 5/00
G01J 5/60
G01J 5/02
G01J 5/08
(11) EP3825664
(21) EP20208759.9
(47) 21.05.2025
(22) 19.11.2020
(54) SYSTEMS AND METHODS OF DETECTING FLAME OR GAS
(73) Carrier Corporation
(72) RHEAD, Jamie
PLEMMONS, Dayne
SANKARRAJ, Anand Venkatesh
HERMANN, Theodore
(31) 201962939281 P
(32) 22.11.2019
(33) United States of America

(51) G01J 3/10
G01J 3/02
G01J 3/433
G01J 3/42
(11) EP4352472
(21) EP22732499.3
(47) 21.05.2025
(87) EP2022065311
15.12.2022
(22) 07.06.2022
(54) STABILIZED AND MODULATED 2-CHANNEL BROAD-BAND LIGHT SOURCE
(73) trinamiX GmbH
(72) SCHMIDT, Felix
MUELLER, Felix Berno
KAESTEL, David
CALABEK, Martin
ACKU, Uemit
OEGUEN, Celal Mohan
(31) 21178217
(32) 08.06.2021
(33) European Patent Office (EPO)

(51) G01J 3/42
B82Y 15/00
G01J 5/02
G01J 5/08
G01J 5/20
G01N 21/3586
H01Q 9/00
(11) EP4111148
(21) EP21709773.2
(47) 21.05.2025
(87) GB2021050480
02.09.2021
(22) 25.02.2021
(54) TERAHERTZ ELECTROMAGNETIC RADIATION DETECTOR
(73) Oxford University Innovation Limited
(72) JOHNSTON, Michael Benjamin
PENG, Kun
(31) 202002640
(32) 25.02.2020
(33) United Kingdom

(51) G01J 3/42
G01N 21/31
G01J 3/10
G01J 3/02
G01J 3/18
G01J 3/20
G01J 3/22
(11) EP3921613
(21) EP20703157.6
(47) 21.05.2025
(87) EP2020051629
13.08.2020
(22) 23.01.2020
(54) ATOMIC ABSORPTION SPECTROMETER
(73) Analytik Jena GmbH+Co. KG
(72) MOORE, Thomas
BRAUN, Marco
HENTSCHEL, Martin
(31) 102019103035
(32) 07.02.2019
(33) Germany

(51) G01J 3/44
G01J 3/02
G01J 3/18
G01J 3/28
G01N 21/65
(11) EP3743699
(21) EP19702524.0
(47) 21.05.2025
(87) DK2019050027
01.08.2019
(22) 23.01.2019

(54) AN APPARATUS FOR CARRYING OUT RAMAN SPECTROSCOPY
(73) Lightnovo ApS
(72) ILCHENKO, Oleksii
RINDZEVICIUS, Tomas
BOISEN, Anja
SLIPETS, Roman
(31) PA201870852
PA201870804
PA201870044
PCT/DK2018/050306
(32) 21.12.2018
10.12.2018
23.01.2018
20.11.2018
(33) Denmark
Denmark
Denmark
World Intellectual Property Office (WIPO)

(51) G01J 4/04
G01N 21/19
G02B 21/00
G02B 21/06
G02B 21/14
G01N 21/21
(11) EP4300059
(21) EP22758118.8
(47) 21.05.2025
(87) JP2022005014
01.09.2022
(22) 09.02.2022
(54) CIRCULARLY POLARIZED LIGHT ILLUMINATOR, ANALYSIS DEVICE, AND MICROSCOPE
(73) Inter-University Research Institute Corporation National Institutes of Natural Sciences
(72) OKAMOTO, Hiromi
NARUSHIMA, Tetsuya
(31) 2021029181
(32) 25.02.2021
(33) Japan

(51) G01K 1/024
(11) EP4281736
(21) EP22700496.7
(47) 21.05.2025
(87) EP2022050614
28.07.2022
(22) 13.01.2022
(54) CORE TEMPERATURE PROBE AND TEMPERATURE MONITORING SYSTEM
(73) BSH Hausgeräte GmbH
(72) CADEAU, Christophe
(31) 21290002
(32) 25.01.2021
(33) European Patent Office (EPO)

(51) G01K 1/08
G01K 1/14
G01K 13/00
G01K 13/02
(11) EP4127629
(21) EP21715813.8
(47) 21.05.2025
(87) EP2021057441
07.10.2021
(22) 23.03.2021
(54) THERMOMETER FOR CRYOGENIC APPLICATIONS
(73) Endress+Hauser Wetzer GmbH+Co. KG
(72) VAN DER BEEK, Mijndert
SAECKER, Dietmar
FRIES, Michael
(31) 102020109424
(32) 03.04.2020
(33) Germany

(51) G01K 3/00
G01K 5/72
(11) EP4198472
(21) EP22209394.0
(47) 21.05.2025
(22) 24.11.2022
(54) TEMPERATURE-SENSING TAPE BASED UPON BIMETAL SWITCH, AND METHOD OF TEMPERATURE CONTROL
(73) Littelfuse, Inc.
(72) Pineda, Martin G.
Godinez, Sergio Fuentes
Matus, Yuriy Borisovich
(31) 202117551344
(32) 15.12.2021
(33) United States of America

(51) G01K 7/38
(11) EP4014018
(21) EP20761965.1
(47) 21.05.2025
(87) US2020046140
25.02.2021
(22) 13.08.2020
(54) METHOD OF ANALYZING A PRODUCT TO DETERMINE THE DEGREE OF FREEZING
(73) Praxair Technology, Inc.
(72) ISRANI, Sameer H.
DU, Xiaotang
JAMPALA, Soujanya N.
GIRARD, John M.
ZHOU, Keqin
(31) 201962887849 P
(32) 16.08.2019
(33) United States of America

(51) G01L 1/24
G01L 3/12
G01L 3/14
G01L 5/166
G01L 5/24
(11) EP4189351
(21) EP21752045.1
(47) 21.05.2025
(87) EP2021071303
03.02.2022
(22) 29.07.2021
(54) COMPONENT WITH AN INTEGRATED SENSOR DEVICE FOR AN OPTICAL, MULTIAXIS MEASUREMENT OF A FORCE EFFECT
(73) Technische Universität Darmstadt
(72) GROCHE, Peter
AL-BARADONI, Nassr
(31) 102020120192
(32) 30.07.2020
(33) Germany

(51) G01L 5/14
(11) EP4313701
(21) EP22718293.8
(47) 21.05.2025
(87) IB2022052774
29.09.2022
(22) 25.03.2022
(54) TRAILER LANDING GEAR HAVING A FORCE-MEASURING ELEMENT
(73) JOST-Werke Deutschland GmbH
(72) ALGÜERA, José Manuel
SEIDEL, Günter
(31) 102021001553
(32) 25.03.2021
(33) Germany

(51) G01L 19/04
G01L 9/00
G01L 19/00
(11) EP3803308
(21) EP19732157.3
(47) 21.05.2025
(87) US2019033753
28.11.2019
(22) 23.05.2019
(54) PRESSURE TRANSDUCER, SYSTEM AND METHOD
(73) Waters Technologies Corporation
(72) BERTONE, Gary W.
CASTAGNA, Taylor J.
DUMAS, Robert J.
(31) 201862675849 P
(32) 24.05.2018
(33) United States of America

(51) G01M 1/02
G01M 1/04
G01M 1/06
G01M 17/02
(11) EP3633340
(21) EP19197231.4
(47) 21.05.2025
(22) 13.09.2019
(54) DYNAMIC BALANCER WITH A FRAMELESS MOTOR DRIVE
(73) Akron Special Machinery, Inc.
(72) Lint, Charles A.
Rich, Kevin J.
Wegman, Curtiss L.
Laughlin, William P.
(31) 201862731238 P
(32) 14.09.2018
(33) United States of America

(51) G01M 1/34
G01M 1/04
G01M 1/12
G01M 1/22
B23D 61/02
(11) EP4001875
(21) EP21207953.7
(47) 21.05.2025
(22) 12.11.2021
(54) METHOD AND MACHINE FOR BALANCING OF DISC BLADES
(73) C.M.T. UTENSILI S.P.A.
(72) POZZO, Piergiorgio
(31) 202000027248
(32) 13.11.2020
(33) Italy

(51) G01M 3/00
(11) EP4060308
(21) EP22159083.9

(47) 21.05.2025
(22) 28.02.2022
(54) LEAK DETECTION SYSTEM AND METHOD
(73) General Electric Technology GmbH
(72) PONYAVIN, Valery Ivanovich
MENDOZA, Miguel Angel
AVISHETTI, Srinivas
KONATHAM, Rajesh Reddy
(31) 202117204923
(32) 17.03.2021
(33) United States of America

(51) G01M 3/02
G01M 3/18
G01M 3/40
(11) EP4067856
(21) EP19850809.5
(47) 21.05.2025
(87) ES2019070804
03.06.2021
(22) 26.11.2019
(54) DEVICE FOR DETECTING BREAKAGES IN HIGH-PRESSURE PROCESSING BAGS
(73) Hiperbaric, S.A.
(72) LÓPEZ ONDEVILLA, Raul
RUIZ ROMÁN, Ciro
TÁRRAGO MINGO, Santiago
HERNANDO SAIZ, Andrés, Felipe
HERNANDO SAIZ, Francisco, Javier

(51) G01M 5/00
G01K 11/3206
G01K 1/02
(11) EP4075114
(21) EP21168893.2
(47) 21.05.2025
(22) 16.04.2021
(54) METHOD FOR REAL-TIME MONITORING OF STRUCTURAL CHANGES
(73) Universität Stuttgart
(72) HARGER SAKIYAMA, Felipe Isamu
LEHMANN, Frank

(51) G01M 7/02
G01M 7/04
(11) EP4094060
(21) EP21701119.6
(47) 21.05.2025
(87) EP2021051081
29.07.2021
(22) 19.01.2021
(54) MECHANICAL TEST DEVICE AND METHOD FOR TESTING BAR-SHAPED TEST OBJECTS, IN PARTICULAR ROTOR BLADES OF WIND TURBINES
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) ROSEMEIER, Malo
BASTERS, Gregor
(31) 102020200822
(32) 23.01.2020
(33) Germany

(51) G01M 10/00
G09B 23/06
G09B 23/12
(11) EP3745111
(21) EP19176748.2
(47) 21.05.2025
(22) 27.05.2019
(54) DEVICE AND TEST MODULE FOR PERFORMING FLOW ASSAYS
(73) G.U.N.T. Gerätebau GmbH
(72) JESCHKE, Samuel
JAHN, Leo
HECKMANN, Christian
SCHALLER, Michael
JANNSEN, Daniel
ABRAHAM, Detlef

(51) G01M 17/007
G08G 1/16
(11) EP4350320
(21) EP23191941.6
(47) 21.05.2025
(22) 17.08.2023
(54) VEHICLE COLLISION TEST METHOD
(73) TUV SUD Korea LTD.
(72) YUN, Jaewoong
SHIM, Minkyu
PARK, Byunghyun
PARK, Chaegyeong
CHOI, Jahyong
(31) 20220102537
(32) 17.08.2022
(33) Korea (Republic)

(51) G01M 17/02
B60C 25/00
B60C 19/00
B60W 40/13
(11) EP4275031
(21) EP22737334.7
(47) 21.05.2025
(87) US2022070053
14.07.2022
(22) 06.01.2022
(54) SYSTEM AND METHOD FOR TIRE VERTICAL LOAD PREDICTION
(73) Bridgestone Americas Tire Operations, LLC
(72) SAMS, Thomas, A.
(31) 202163134244 P
(32) 06.01.2021
(33) United States of America

(51) G01N 1/30
G01N 1/31
G01N 33/48
G01N 1/28
G01N 1/02
B01L 3/16
G01N 35/00
(11) EP3625539
(21) EP18849016.3
(47) 21.05.2025
(87) AU2018050892
28.02.2019
(22) 22.08.2018
(54) IMPROVEMENTS IN HISTOLOGICAL TISSUE SPECIMEN PROCESSING
(73) Leica Biosystems Melbourne Pty Ltd
(72) SEARS, Gordon
DRUMMOND, Michael, Houston
OH-AINLE, Donnchadh
(31) 201762548638 P
(32) 22.08.2017
(33) United States of America

(51) G01N 1/38
G01N 35/10
(11) EP4004521
(21) EP19780341.4
(47) 21.05.2025
(87) IB2019000795
04.02.2021
(22) 26.07.2019
(54) DIFFERENTIAL DISPENSING METHOD
(73) BIT GROUP FRANCE
(72) BASTON, Florent
LEVEAU, Maxime

(51) G01N 9/24
G01N 29/06
G01N 29/28
(11) EP2643678
(21) EP11842478.7
(47) 21.05.2025
(87) US2011062116
31.05.2012
(22) 23.11.2011
(54) ACOUSTIC MICRO IMAGING DEVICE WITH A SCAN WHILE LOADING FEATURE
(73) Nordson Corporation
(72) KESSLER, Lawrence, W.
ORAVECZ, Michael, G.
KLEINSCHMIDT, Thomas
BILLONE, John
SCHACKMUTH, Bryan, P.
MINKWITZ, Joachim
KOMSKY, Igor
(31) 416610 P
(32) 23.11.2010
(33) United States of America

(51) G01N 11/00
G01N 33/38
G01N 11/02
(11) EP3948218
(21) EP20718573.7
(47) 21.05.2025
(87) EP2020058901
08.10.2020
(22) 30.03.2020
(54) MEASURING THE CONSISTENCY OF FRESH CONCRETE
(73) PERI SE
(72) BÄCHLE, Helmut
STAVES, Henning
BERNARD, Vanessa
BAUMANN, Rüdiger
(31) 102019108780
(32) 03.04.2019
(33) Germany

(51) G01N 15/02
G01N 15/06
G01N 15/14
(11) EP4139651
(21) EP20803620.2
(47) 21.05.2025
(87) EP2020082129
28.10.2021
(22) 13.11.2020
(54) INTEGRATED PARTICULATE MATTER SENSOR WITH CAVITY
(73) Sensirion AG
(72) GÜTLE, Frank
HOPPENAU, Lukas
RÜTHEMANN, Lukas
PUSTAN, David

(31) 20171192
(32) 23.04.2020
(33) European Patent Office (EPO)

(51) G01N 21/15
G01N 21/85
A61B 1/00
B08B 7/02
G01N 21/64
G01N 33/18
G02B 23/24
G02B 27/00
(11) EP4273535
(21) EP23170104.6
(47) 21.05.2025
(22) 26.04.2023
(54) SELF CLEANING OPTICAL PROBE
(73) Inov8 Systems Limited
(72) THABETH, Khalid
ACHESON, Raymond
(31) 202206373
(32) 01.05.2022
(33) United Kingdom

(51) G01N 21/3563
G01N 21/84
B09B 3/70
B09B 101/90
(11) EP4306935
(21) EP23306203.3
(47) 21.05.2025
(22) 13.07.2023
(54) DETERMINATION OF ACIDIFYING POTENTIAL BY INFRARED SPECTROMETRY IN NATURAL SOILS AND EXCAVATION MATERIALS
(73) Eiffage GC Infra Linéaires
(72) BOULANGE, Laurence
DOOM, Florian
(31) 2207289
(32) 15.07.2022
(33) France

(51) G01N 21/3563
G01N 33/24
G01N 21/94
(11) EP4306936
(21) EP23306204.1
(47) 21.05.2025
(22) 13.07.2023
(54) DETERMINATION OF ORGANIC POLLUTANT CONTENT BY INFRARED SPECTROMETRY OF NATURAL SOIL AND EXCAVATION MATERIALS
(73) Eiffage GC Infra Linéaires
(72) DOOM, Florian
BOULANGE, Laurence
(31) 2207284
(32) 15.07.2022
(33) France

(51) G01N 21/47
G01N 21/31
G01N 21/3563
F21V 8/00
(11) EP4345446
(21) EP23200445.7
(47) 21.05.2025
(22) 28.09.2023
(54) DEVICE FOR MULTISPECTRAL IMAGING IN REFLECTION
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
(72) LE PERCHEC, Jérôme
DUPOY, Mathieu
(31) 2210015
(32) 30.09.2022
(33) France

(51) G01N 21/63
G01N 21/17
(11) EP2726853
(21) EP12738549.0
(47) 21.05.2025
(87) FR2012051494
03.01.2013
(22) 28.06.2012
(54) DEVICE FOR MANAGING PULSES IN PUMP-PROBE SPECTROSCOPY
(73) Ecole Polytechnique / DGAR
CNRS Centre National de la Recherche Scientifique
(72) ANTONUCCI, Laura
BONVALET, Adeline
JOFFRE, Manuel
SOLINAS, Xavier
(31) 1155799
(32) 29.06.2011
(33) France

(51) G01N 21/64
B01L 3/00
B01J 19/00
(11) EP3577441
(21) EP18747995.1
(47) 21.05.2025
(87) US2018016189
09.08.2018
(22) 31.01.2018
(54) SYSTEM AND METHOD WITH FIDUCIAL FEATURES IN A HEXAGONAL ARRANGEMENT
(73) Illumina, Inc.
(72) VIECELI, John S.
NEMIROSKI, Alex
BELITZ, Paul
LANGLOIS, Robert
BOWEN, M. Shane
CHAN, Danny Yuan
VENKATESAN, Bala Murali K.
HAN, Hui
SAMIEE, Kevan
TANNER, Stephen
(31) 201701686
(32) 01.02.2017
(33) United Kingdom

(51) G01N 21/64
C12Q 1/68
C12Q 1/686
C12Q 1/6851
(11) EP4185858
(21) EP21755281.9
(47) 21.05.2025
(87) US2021043000
27.01.2022
(22) 23.07.2021
(54) COMPOSITIONS, SYSTEMS AND METHODS FOR BIOLOGICAL ANALYSIS USING DYES
(73) Life Technologies Corporation
(72) BENSON, Scott
MULLAH, Khairuzzaman Bashar
CHANG, Chu-An
MENCHEN, Steven
FREUDENTHAL, Jacob
LEE, Linda
(31) 202062705935 P
(32) 23.07.2020
(33) United States of America

(51) G01N 21/65
H01M 10/48
G08B 17/117
G08B 17/10
G08B 29/14
G08B 29/20
(11) EP4372367
(21) EP23183106.6
(47) 21.05.2025
(22) 03.07.2023
(54) A SYSTEM AND METHOD FOR EVALUATING A COMPOSITE FIRE DETECTOR
(73) Cornex New Energy Co., Ltd.
(72) WANG, Yunxia
WU, Xibin
BU, Xiangnan
JIANG, Yuanfu
ZHOU, Leijun
ZHANG, Yi
(31) 202211458240
(32) 21.11.2022
(33) China

(51) G01N 21/77
G01N 21/41
G01N 21/81
G01N 21/47
(11) EP4055372
(21) EP20807819.6
(47) 21.05.2025
(87) FI2020050731
14.05.2021
(22) 05.11.2020
(54) SPLIT REFRACTING OR SPLIT REFLECTING LIGHT RECEIVED BY CELLULOSE-BASED FILM COMPRISING SURFACE PATTERN
(73) Teknologian Tutkimuskeskus VTT OY
(72) MÄKELÄ, Tapio
HOKKANEN, Ari
(31) 20195952
(32) 05.11.2019
(33) Finland

(51) G01N 21/88
G01N 21/95
G01B 11/245
(11) EP4327080
(21) EP22712919.4
(47) 21.05.2025
(87) EP2022055916
27.10.2022
(22) 08.03.2022
(54) INSPECTION DEVICE FOR CHECKING COMPONENT SURFACES, AND METHOD THEREFOR
(73) GeneSys Elektronik GmbH
(72) BROOKINS, Jonathan
HERRMANN, Lukas
HUBER, David
HUBER, Bertold

(31) 102021110149
(32) 21.04.2021
(33) Germany

(51) G01N 21/95
G01N 33/08
A01K 43/00
(11) EP4348244
(21) EP22731750.0
(47) 21.05.2025
(87) FR2022050985
08.12.2022
(22) 24.05.2022
(54) METHOD FOR CONTROLLING ON THE FLY EGGS PLACED IN CONTAINERS
(73) Egg-Chick Automated Technologies
(72) TRUBUIL, Laura
LHARIDON, Devan
(31) 2105779
(32) 01.06.2021
(33) France

(51) G01N 22/04
(11) EP4455648
(21) EP24171590.3
(47) 21.05.2025
(22) 22.04.2024
(54) MOISTURE SENSOR, METHOD FOR MEASURING MOISTURE AND METHOD FOR PRODUCING A COMPONENT DESIGNED FOR MEASURING MOISTURE
(73) Freistaat Thüringen (Materialforschungs- und -prüfanstalt an der Bauhaus-Universität Weimar)
(72) HELBIG, Dr. Stefan
WAGNER, Dr. Ralf
BONITZ, Frank
KUHNE, Dr. Michael
MÜLLER, Bernd
ULANOV, Alexander
(31) 102023110648
(32) 26.04.2023
(33) Germany

(51) G01N 27/447
C12Q 1/6827
(11) EP3737939
(21) EP19700862.6
(47) 21.05.2025
(87) EP2019050335
11.07.2019
(22) 08.01.2019
(54) METHOD AND USE OF A SINGLE CELL GEL ELECTROPHORESIS FOR SCREENING A SUBJECT FOR A DNA-DAMAGE
(73) 4D Lifetec AG
(72) SCHICHT, Oliver
FAISST, Arne-Christian
(31) 18150558
(32) 08.01.2018
(33) European Patent Office (EPO)

(51) G01N 27/62
G01N 30/04
G01N 30/72
G01N 30/86
(11) EP4006537
(21) EP20844761.5
(47) 21.05.2025
(87) JP2020027967
28.01.2021
(22) 17.07.2020
(54) SPECIMEN ANALYSIS APPARATUS
(73) Hitachi High-Tech Corporation
(72) TAMURA Riku
HASHIMOTO Yuichiro
SUGAWARA Yuka
YASUDA Hiroyuki
(31) 2019136790
(32) 25.07.2019
(33) Japan

(51) G01N 27/623
G01N 33/00
H01J 49/00
G01N 27/62
C07C 69/28
C07C 69/30
C07C 69/67
C07C 69/78
B01D 15/34
C07C 69/33
C07C 69/76
C07C 233/78
G01N 30/04
(11) EP3631442
(21) EP18810535.7
(47) 21.05.2025
(87) US2018034885
06.12.2018
(22) 29.05.2018
(54) FUNCTIONLIZED CALIBRANTS FOR SPECTROMETRY AND CHROMATOGRAPHY
(73) Polymer Factory Sweden AB
(72) GRAYSON, Scott, M.
(31) 201762512570 P
(32) 30.05.2017
(33) United States of America

(51) G01N 29/06
G01N 29/32
G01N 29/44
G01N 29/04
(11) EP4050330
(21) EP20879727.4
(47) 21.05.2025
(87) JP2020039385
29.04.2021
(22) 20.10.2020
(54) PROCESSING SYSTEM, PROCESSING METHOD, PROGRAM, AND STORAGE MEDIUM FOR INSPECTION OF WELDED OBJECTS
(73) KABUSHIKI KAISHA TOSHIBA
(72) TAKAHASHI, Hiromasa
SAITO, Masahiro
(31) 2019193813
(32) 24.10.2019
(33) Japan

(51) G01N 29/24
G01N 29/26
G01N 29/44
G01N 21/17
(11) EP4073503
(21) EP20898781.8
(47) 21.05.2025
(87) US2020064225
17.06.2021
(22) 10.12.2020
(54) OBJECT IDENTIFICATION SYSTEM AND METHOD
(73) Provenance Laboratories LLC
(72) BISHOP-MOSER, Joshua
ABUGOV, Anton
KLACHIN, Alexander
GOLDIN, Anya
(31) 202017116434
201962947230 P
(32) 09.12.2020
12.12.2019
(33) United States of America
United States of America

(51) G01N 30/56
G01N 30/88
(11) EP4090964
(21) EP21701015.6
(47) 21.05.2025
(87) IB2021050312
22.07.2021
(22) 15.01.2021
(54) METHODS TO INCREASE SENSITIVITY OF A LC/MS ANALYSIS
(73) Waters Technologies Corporation
(72) RAINVILLE, Paul
SMITH, Kerri
(31) 202063071750 P
202062962476 P
(32) 28.08.2020
17.01.2020
(33) United States of America
United States of America

(51) G01N 30/86
(11) EP4127707
(21) EP21716177.7
(47) 21.05.2025
(87) EP2021058432
07.10.2021
(22) 31.03.2021
(54) MONITORING OF A CARRY OVER OF AN ANALYTE
(73) F. Hoffmann-La Roche AG
(72) INTELMANN, Daniel
(31) 20167557
(32) 01.04.2020
(33) European Patent Office (EPO)

(51) G01N 33/00
(11) EP4323764
(21) EP22721300.6
(47) 21.05.2025
(87) EP2022059151
20.10.2022
(22) 06.04.2022
(54) METHOD FOR MONITORING THE USE OF A METHANE INHIBITOR
(73) DSM IP Assets B.V.
(72) CELI, Pietro
COVINGTON, James
WALKER, Nicola
(31) 21168204
(32) 13.04.2021
(33) European Patent Office (EPO)

(51) G01N 33/50
C12N 5/071
C12N 5/00
C12N 5/077
(11) EP3717908
(21) EP18882748.9

(47) 21.05.2025
(87) IB2018001535
06.06.2019
(22) 29.11.2018
(54) BIOREACTOR SCREENING PLATFORM FOR MODELLING HUMAN SYSTEMS BIOLOGY AND FOR SCREENING FOR INOTROPIC EFFECTS OF AGENTS ON THE HEART
(73) Novoheart International Limited
(72) TRAN, David, D.
COSTA, Kevin, D.
LI, Ronald, A.
(31) 201862616812 P
201762592083 P
(32) 12.01.2018
29.11.2017
(33) United States of America
United States of America

(51) G01N 33/52
(11) EP4145128
(21) EP22202711.2
(47) 21.05.2025
(22) 22.01.2020
(54) METHOD OF DETERMINING A CONCENTRATION OF AN ANALYTE IN A BODILY FLUID
(73) Roche Diabetes Care GmbH
(72) Aysin, Benhur
Berg, Max
Chittajallu, Siva
(31) 201962939771 P
(32) 25.11.2019
(33) United States of America

(51) G01N 33/53
(11) EP3745128
(21) EP20179689.3
(47) 21.05.2025
(22) 20.12.2013
(54) A CELL MEDIATED IMMUNE RESPONSE ASSAY
(73) Qiagen Sciences LLC
(72) BOYLE, Jeff
KNIGHTS, Ashley
MUNIAN, Carmen
(31) 201261746965 P
13167355
(32) 28.12.2012
10.05.2013
(33) United States of America
European Patent Office (EPO)

(51) G01N 33/542
G01N 33/53
G01N 33/58
(11) EP3924734
(21) EP20703391.1
(47) 21.05.2025
(87) EP2020051268
20.08.2020
(22) 20.01.2020
(54) SELECTIVE OPTICAL DETECTION OF ORGANIC ANALYTES IN LIQUIDS
(73) QANIKDX OÜ
(72) BABITSHENKO, Sergei
JÄRV, Jaak
KUZNETSOV, Aleksei
MASTITSKI, Anton
(31) 201900011 U
(32) 11.02.2019
(33) Estonia

(51) G01N 33/543
(11) EP4053556
(21) EP22160173.5
(47) 21.05.2025
(22) 04.03.2022
(54) MEASUREMENT SAMPLE PREPARATION METHOD, ANALYSIS METHOD, REAGENT, AND REAGENT KIT
(73) SYSMEX CORPORATION
OSAKA UNIVERSITY
National Institute Of Advanced Industrial Science and Technology
(72) Shimaoka, Yuki
Okada, Masaya
Iwanaga, Shigeki
Bando, Kazuki
Fujita, Katsumasa
Nawa, Yasunori
Fujita, Satoshi
(31) 2021035597
2021035593
(32) 05.03.2021
05.03.2021
(33) Japan
Japan

(51) G01N 33/543
(11) EP4332576
(21) EP23202696.3
(47) 21.05.2025
(22) 14.03.2014
(54) SYNERGISTIC ENHANCEMENT OF THE DELIVERY OF NUCLEIC ACIDS VIA BLENDED FORMULATIONS
(73) Translate Bio, Inc.
(72) DEROSA, Frank
SMITH, Lianne
HEARTLEIN, Michael
GUILD, Braydon Charles
(31) 201361789375 P
(32) 15.03.2013
(33) United States of America

(51) G01N 33/569
(11) EP3230740
(21) EP15868614.7
(47) 21.05.2025
(87) IL2015051201
16.06.2016
(22) 10.12.2015
(54) MARKER COMBINATIONS FOR DIAGNOSING INFECTIONS AND METHODS OF USE THEREOF
(73) Memed Diagnostics Ltd.
(72) OVED, Kfir
EDEN, Eran
KRONENFELD, Gali
BOICO, Olga
COHEN-DOTA, Assaf
NAVON, Roy
(31) 201562136725 P
201462090606 P
(32) 23.03.2015
11.12.2014
(33) United States of America
United States of America

(51) G01N 33/68
B01D 15/26
(11) EP4275777
(21) EP23187203.7
(47) 21.05.2025
(22) 28.09.2016
(54) AMYLOID BETA DETECTION BY MASS SPECTROMETRY
(73) Quest Diagnostics Investments LLC
(72) TRAN, Diana
WEBER, Darren
CLARKE, Nigel
(31) 201662277772 P
201562234027 P
(32) 12.01.2016
28.09.2015
(33) United States of America
United States of America

(51) G01N 33/94
A61M 16/00
A61M 11/00
A61M 11/02
A61M 11/04
A61M 11/06
A61K 31/05
A61K 36/185
A24F 40/42
A61J 3/00
A61K 31/352
A61M 15/00
A61M 15/06
(11) EP3908132
(21) EP19836460.6
(47) 21.05.2025
(87) DE2019101064
16.07.2020
(22) 10.12.2019
(54) METHOD FOR QUALITATIVELY AND/OR QUANTITATIVELY DETECTING SUBSTANCES CONTAINED IN A HEMP PLANT AND KIT FOR USE THEREOF
(73) LuxCan Innovation S.A.
(72) SCHMITT, Fritz
(31) 102019000199
102019000018
102019000016
(32) 15.01.2019
07.01.2019
07.01.2019
(33) Germany
Germany
Germany

(51) G01N 33/96
G01N 33/50
G01N 33/72
A61B 10/00
(11) EP3855187
(21) EP19861678.1
(47) 21.05.2025
(87) JP2019035394
26.03.2020
(22) 09.09.2019
(54) ARTIFICIAL FECES, AND METHOD FOR MANAGING ACCURACY OF FECAL OCCULT BLOOD TEST USING SAME
(73) EIKEN KAGAKU KABUSHIKI KAISHA
(72) YAMADA, Miyu
YASUI, Ryota

MIIKE, Akira
(31) 2018175109
(32) 19.09.2018
(33) Japan

(51) G01N 35/00
B25J 15/08
(11) EP4206675
(21) EP22215877.6
(47) 21.05.2025
(22) 22.12.2022
(54) IDENTIFICATION OF SAMPLE CELLS IN A CHROMATOGRAPHY AUTOSAMPLER
(73) Dionex Corporation
Dionex Softron GmbH
(72) HOFFMEYER, Daniel
AL-ESAWI, Husam
METZ, Tobias
RICHARDSEN, Til
HOLLNAGEL, Christoph
(31) 202217680089
202117563151
(32) 24.02.2022
28.12.2021
(33) United States of America
United States of America

(51) G01N 35/00
G01N 1/28
G16H 15/00
G16H 40/40
G01N 1/31
G16H 10/40
G16H 40/20
(11) EP3625566
(21) EP18848903.3
(47) 21.05.2025
(87) AU2018050890
28.02.2019
(22) 22.08.2018
(54) A SYSTEM AND METHOD OF MONITORING TISSUE SAMPLES TO BE PROCESSED BY A TISSUE PROCESSOR
(73) Leica Biosystems Melbourne Pty Ltd
(72) TARBET, Fiona, Mary
OH-AINLE, Donnchadh
(31) 201762548651 P
(32) 22.08.2017
(33) United States of America

(51) G01N 35/00
G01N 27/74
G01N 33/543
G01N 35/04
(11) EP3968029
(21) EP20802846.4
(47) 21.05.2025
(87) JP2020009996
12.11.2020
(22) 09.03.2020
(54) AUTOMATIC ANALYSIS DEVICE PRETREATMENT METHOD
(73) Hitachi High-Tech Corporation
(72) NOGAMI Makoto
MATSUOKA Shinya
EBIHARA Daisuke
HASHIMOTO Yuichiro
(31) 2019088019
(32) 08.05.2019
(33) Japan

(51) G01N 35/00
G01N 35/04
G06V 10/44
G06V 10/50
G06V 10/75
G06V 10/20
(11) EP3701271
(21) EP18807762.2
(47) 21.05.2025
(87) US2018057810
02.05.2019
(22) 26.10.2018
(54) SAMPLE CONTAINER RECOGNITION
(73) Beckman Coulter, Inc.
(72) SAWHNEY, Amit
LIU, Niandong
HAKIRI, Nobuyuki
(31) 201762578236 P
(32) 27.10.2017
(33) United States of America

(51) G01N 35/00
G01N 35/10
B01L 3/00
B01L 7/00
(11) EP4105661
(21) EP22166738.9
(47) 21.05.2025
(22) 02.02.2016
(54) SYSTEM FOR PERFORMING A DIAGNOSTIC TEST AND CARTRIDGE READER
(73) Binx Health Limited
(72) ARLETT, Ben
EDWARDS, Tom
(31) 201501706
(32) 02.02.2015
(33) United Kingdom

(51) G01N 35/02
G01N 35/04
G01N 35/10
G01N 35/00
(11) EP3488248
(21) EP17831837.4
(47) 21.05.2025
(87) US2017042943
25.01.2018
(22) 19.07.2017
(54) AUTOMATED CLINICAL ANALYZER SYSTEM AND METHOD
(73) Siemens Healthcare Diagnostics Inc.
(72) STEIN, David
BARR, Roy
EDWARDS, Mark
MELLARS, Colin
BAO, Thomas J.
CAMMARATA, Charles V.
POLLACK, Benjamin S.
YAGCI, Baris
COHEN, Beri
(31) 201662365314 P
(32) 21.07.2016
(33) United States of America

(51) G01N 35/10
(11) EP3812774
(21) EP19821497.5
(47) 21.05.2025
(87) JP2019011710
26.12.2019
(22) 20.03.2019
(54) AUTOMATIC ANALYSIS DEVICE
(73) Hitachi High-Tech Corporation
(72) SAKAIRI, Susumu
OKUSA, Takenori
KUMAGAI, Takahiro
(31) 2018117588
(32) 21.06.2018
(33) Japan

(51) G01P 21/02
G01P 3/487
B62J 45/412
(11) EP4033255
(21) EP22152884.7
(47) 21.05.2025
(22) 24.01.2022
(54) METHOD FOR CONTROLLING THE DETERMINATION OF A SPEED OF A BICYCLE
(73) Robert Bosch GmbH
(72) Stegmaier, Juergen
Dackermann, Tim
(31) 102021200622
(32) 25.01.2021
(33) Germany

(51) G01R 15/20
(11) EP4471436
(21) EP23176129.7
(47) 21.05.2025
(22) 30.05.2023
(54) OPEN LOOP CURRENT TRANSDUCER
(73) LEM International SA
(72) MOUCHET, Steve

(51) G01R 19/00
G01R 13/02
G01R 1/20
G01R 1/30
A44C 5/00
G01R 29/08
G08B 21/02
(11) EP4111215
(21) EP21759524.8
(47) 21.05.2025
(87) IB2021051547
02.09.2021
(22) 24.02.2021
(54) WRIST-BAND VOLTAGE DETECTOR
(73) Staples, Grant Edward
(72) Staples, Grant Edward
(31) 202062981147 P
(32) 25.02.2020
(33) United States of America

(51) G01R 19/20
G01R 19/00
G01R 15/18
(11) EP4400850
(21) EP24172078.8
(47) 21.05.2025
(22) 15.07.2022
(54) FLUXGATE TRANSDUCER FOR CURRENT SENSING
(73) LEM International SA
(72) BARTHELEMY, Damien
COUTELLIER, Damien
LEKDIM, Atef
(31) 21186819
(32) 20.07.2021

(33) European Patent Office (EPO)

(51) G01R 29/08
(11) EP3811089
(21) EP19734006.0
(47) 21.05.2025
(87) EP2019066266
26.12.2019
(22) 19.06.2019
(54) METHOD AND MEASUREMENT ENVIRONMENT, APPARATUS TO BE TESTED
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) HAUSTEIN, Thomas
LEATHER, Paul Simon Holt
ASKAR, Ramez
RASCHKOWSKI, Leszek
GROSSMANN, Marcus
LANDMANN, Markus
(31) 18204132
18179398
(32) 02.11.2018
22.06.2018
(33) European Patent Office (EPO)
European Patent Office (EPO)

(51) G01R 29/08
G01R 29/10
H01Q 21/00
H04B 17/00
H04B 17/391
G01R 31/28
(11) EP4152015
(21) EP22195915.8
(47) 21.05.2025
(22) 15.09.2022
(54) METHOD AND SYSTEM FOR ALIGNING TEST ENVIRONMENTS
(73) MediaTek Singapore Pte. Ltd.
(72) ZHANG, Shuang
XIAO, Jianfei
WU, Yan
FAN, Lingfei
LI, Deqiang
WANG, Xinqiu
ZHANG, Jianwei
(31) 202211031107
202111096210
(32) 26.08.2022
17.09.2021
(33) China
China

(51) G01R 31/00
H02S 40/32
G01R 31/40
H02M 7/49
(11) EP4279929
(21) EP21920281.9
(47) 21.05.2025
(87) CN2021073255
28.07.2022
(22) 22.01.2021
(54) DETECTION METHOD AND RELATED DEVICE
(73) Huawei Digital Power Technologies Co., Ltd.
(72) XU, Zhiwu
GUO, Haibin
LI, Lin

(51) G01R 31/08
G01R 31/12
G01R 31/50
G01R 31/52
G01R 31/54
G01R 31/55
H02H 1/00
H02H 3/16
H02H 3/34
H02H 3/347
(11) EP3839527
(21) EP20214051.3
(47) 21.05.2025
(22) 15.12.2020
(54) DEVICES FOR DETECTING AN ELECTRICAL ARCING FAULT, ASSOCIATED ELECTRICAL PROTECTION DEVICES
(73) Schneider Electric Industries SAS
(72) RAISIGEL, Hynek
(31) 1914520
(32) 16.12.2019
(33) France

(51) G01R 31/317
G01R 31/3185
(11) EP4042173
(21) EP20792572.8
(47) 21.05.2025
(87) EP2020078417
15.04.2021
(22) 09.10.2020
(54) SYSTEM AND METHOD FOR ACCESS CONTROL OF A PLURALITY OF INSTRUMENTS EMBEDDED IN A SEMICONDUCTOR DEVICE
(73) Larsson, Erik
(72) Larsson, Erik
(31) 1930325
(32) 11.10.2019
(33) Sweden

(51) G01R 31/34
(11) EP4111218
(21) EP20726570.3
(47) 21.05.2025
(87) IT2020000022
02.09.2021
(22) 25.02.2020
(54) MEASURING CIRCUIT OF THE VOLTAGE OF AN ELECTRIC MACHINE, SYSTEM AND PROCESS FOR ESTIMATING THE TEMPERATURE OF THE MAGNETS OF ELECTRIC MACHINES USING SUCH CIRCUIT
(73) Mavel EDT S.p.A.
(72) CHIONO, Denny

(51) G01R 31/36
G01R 31/52
(11) EP4428552
(21) EP24158822.7
(47) 21.05.2025
(22) 21.02.2024
(54) METHOD OF EVALUATING POWER STORAGE DEVICE, ARRANGEMENT, AND METHOD OF PRODUCING POWER STORAGE DEVICE
(73) TOYOTA JIDOSHA KABUSHIKI KAISHA
(72) MIYAZAWA, Kensaku
(31) 2023037362
(32) 10.03.2023
(33) Japan

(51) G01R 31/371
G01R 31/3842
H02J 7/00
H01M 10/42
H01M 10/48
G08C 25/00
H04Q 9/00
G01R 31/396
G01R 31/08
G01R 35/00
(11) EP3916408
(21) EP20762090.7
(47) 21.05.2025
(87) CN2020076545
03.09.2020
(22) 25.02.2020
(54) STORAGE BATTERY MONITORING SYSTEM AND METHOD
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) LUO, Huixiu
LIU, Yu
LOU, Qidong
LI, Qiandeng
(31) 201910142835
(32) 26.02.2019
(33) China

(51) G01R 31/52
G01R 31/28
G01J 5/00
G01J 5/48
G06F 11/00
(11) EP4261555
(21) EP22912791.5
(47) 21.05.2025
(87) CN2022138060
31.08.2023
(22) 09.12.2022
(54) ELECTRIC LEAKAGE DETECTION METHOD FOR ELECTRONIC DEVICE, ELECTRONIC EQUIPMENT AND STORAGE MEDIUM
(73) Honor Device Co., Ltd.
(72) LIU, Dong
ZHAO, Jing
(31) 202210164991
(32) 22.02.2022
(33) China

(51) G01R 31/52
H01M 10/42
H01M 10/48
(11) EP4176483
(21) EP21734805.1
(47) 21.05.2025
(87) EP2021066592
06.01.2022
(22) 18.06.2021
(54) ELECTRICAL DEVICE AND METHOD FOR OPERATING AN ELECTRICAL DEVICE
(73) Robert Bosch GmbH
(72) SEGRET, Mickael
KLEE, Christoph
SEIBERT, Marc-Alexandre
(31) 102020208356
(32) 03.07.2020

(33) Germany

(51) G01R 33/30
(11) EP4328609
(21) EP23192023.2
(47) 21.05.2025
(22) 17.08.2023
(54) NMR SAMPLE TUBE TRANSPORT APPARATUS
(73) Jeol Ltd.
(72) ENDO, Yuki
(31) 2022134803
(32) 26.08.2022
(33) Japan

(51) G01R 33/36
(11) EP3807665
(21) EP19731638.3
(47) 21.05.2025
(87) EP2019065092 19.12.2019
(22) 11.06.2019
(54) INVERSE DISPERSIVE FILTER FOR DYNAMIC RANGE COMPRESSION IN MR
(73) Koninklijke Philips N.V.
(72) REYKOWSKI, Arne
DUENSING, George, Randall
(31) 201862683848 P
(32) 12.06.2018
(33) United States of America

(51) G01R 33/48
G01R 33/565
(11) EP4244641
(21) EP21805459.1
(47) 21.05.2025
(87) EP2021080301 19.05.2022
(22) 02.11.2021
(54) MR IMAGING WITH SPIRAL ACQUISITION
(73) Koninklijke Philips N.V.
(72) FUDERER, Miha
(31) 20206585
(32) 10.11.2020
(33) European Patent Office (EPO)

(51) G01R 33/561
G01R 33/565
(11) EP4332602
(21) EP22193093.6
(47) 21.05.2025
(22) 31.08.2022
(54) METHOD FOR ACQUIRING MAGNETIC RESONANCE IMAGE DATA, AND MAGNETIC RESONANCE APPARATUS
(73) Siemens Healthineers AG
(72) Faust, Jonas
Speier, Peter
Maier, Florian

(51) G01R 33/565
G01R 33/56
G01R 33/561
G01R 33/48
G01R 33/50
(11) EP4107538
(21) EP21702676.4
(47) 21.05.2025
(87) EP2021052483 26.08.2021
(22) 03.02.2021
(54) ITERATIVE RECONSTRUCTION OF GRADIENT ECHO MAGNETIC RESONANCE IMAGES
(73) Koninklijke Philips N.V.
(72) NIELSEN, Tim
MEINEKE, Jan, Jakob
(31) 202062984323 P
20157618
(32) 03.03.2020
17.02.2020
(33) United States of America
European Patent Office (EPO)

(51) G01R 35/00
G01R 19/32
(11) EP3124990
(21) EP16182050.1
(47) 21.05.2025
(22) 29.07.2016
(54) DYNAMIC CALIBRATING CURRENT SENSOR
(73) Hamilton Sundstrand Corporation
(72) HESS, Gary L.
COVINGTON, Scott M.
WIENS, Loyal A.
PETERSEN, Eric
(31) 201514813273
(32) 30.07.2015
(33) United States of America

(51) G01S 3/48
G01S 5/02
G01S 5/04
(11) EP4214529
(21) EP20786091.7
(47) 21.05.2025
(87) SE2020050874 24.03.2022
(22) 18.09.2020
(54) POSITION DETERMINATION OF A WIRELESS DEVICE
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) LINDGREN, Tore
SANDBERG, Sara

(51) G01S 5/00
G01S 5/02
H04W 64/00
H04W 4/02
H04W 88/18
(11) EP3930353
(21) EP20772722.3
(47) 21.05.2025
(87) CN2020078962 24.09.2020
(22) 12.03.2020
(54) APPARATUS AND METHOD FOR POSITIONING USER EQUIPMENT
(73) Huawei Technologies Co., Ltd.
(72) HAO, Jinping
HUANG, Su
CHEN, Lei
YANG, Shuigen
(31) 201910199679
(32) 15.03.2019
(33) China

(51) G01S 5/00
H04W 64/00
(11) EP4107539
(21) EP20842448.1
(47) 21.05.2025
(87) US2020065718 26.08.2021
(22) 17.12.2020
(54) METHODS AND APPARATUS FOR PARTIAL POSITIONING STATE INFORMATION (PSI) OMISSION RULES FOR LOWER LAYER TRANSMISSION
(73) QUALCOMM INCORPORATED
(72) MANOLAKOS, Alexandros
MUKKAVILLI, Krishna Kiran
JI, Tingfang
(31) 20200100084
(32) 19.02.2020
(33) Greece

(51) G01S 7/00
G01S 13/76
H04W 72/0446
H04B 1/44
(11) EP4284087
(21) EP21920795.8
(47) 21.05.2025
(87) CN2021137069 28.07.2022
(22) 10.12.2021
(54) METHOD AND APPARATUS FOR FUSING WIRELESS COMMUNICATION AND WIRELESS SENSING
(73) Datang Mobile Communications Equipment Co., Ltd.
(72) SUO, Shiqiang
GONG, Qiusha
SU, Xin
(31) 202110076227
(32) 20.01.2021
(33) China

(51) G01S 7/02
B60D 1/00
(11) EP4105676
(21) EP21179801.2
(47) 21.05.2025
(22) 16.06.2021
(54) DRIVER ASSISTANCE SYSTEM AND METHOD FOR OPERATING A DRIVER ASSISTANCE SYSTEM
(73) Robert Bosch GmbH
(72) LUKACS, Peter
ERDEI, Bence

(51) G01S 7/35
G01S 13/04
G01S 13/931
(11) EP4239365
(21) EP22160101.6
(47) 21.05.2025
(22) 03.03.2022
(54) RADAR SYSTEM AND CORRESPONDING OPERATING METHOD
(73) NXP B.V.
(72) LAGHEZZA, Francesco
JANSEN, Feike Guus

(51) G01S 7/35
G01S 13/34
G01S 13/44
G01S 3/06
G01S 3/48
G01S 13/931
(11) EP4345493

(21) EP22198193.9
(47) 21.05.2025
(22) 27.09.2022
(54) METHOD AND APPARATUS FOR DETERMINATION OF DIRECTION OF ARRIVAL ANGLE
(73) NXP B.V.
(72) Koppelaar, Arie Geert Cornelis
Bekooij, Marco Jan Gerrit

(51) G01S 7/41
G01S 13/931
G01S 7/292
G01S 7/40
(11) EP4075159
(21) EP22159819.6
(47) 21.05.2025
(22) 02.03.2022
(54) RADAR SYSTEM USING A MACHINE-LEARNED MODEL FOR STATIONARY OBJECT DETECTION
(73) Aptiv Technologies AG
(72) Tyagi, Kanishka
Zhang, Yihang
Kirkwood, John
Zhang, Shan
Song, Sanling
Manukian, Narbik
(31) 202117230877
(32) 14.04.2021
(33) United States of America

(51) G01S 7/48
G01S 17/46
G06V 10/145
G06V 10/60
G06V 20/00
(11) EP3938802
(21) EP20709234.7
(47) 21.05.2025
(87) EP2020056759
24.09.2020
(22) 13.03.2020
(54) DETECTOR FOR IDENTIFYING AT LEAST ONE MATERIAL PROPERTY
(73) trinamiX GmbH
(72) SCHICK, Friedrich
SCHILLEN, Peter
SCHINDLER, Patrick
SCHMIDT, Andre
EBERSPACH, Michael
LENNARTZ, Christian
SEND, Robert
DIESSELBERG, Lars
HENGEN, Heiko
BRUDER, Ingmar
UNGER, Jakob
BONSIGNORE, Christian
(31) 19163250
(32) 15.03.2019
(33) European Patent Office (EPO)

(51) G01S 7/48
G01S 17/48
G01C 3/00
G01S 17/10
G01S 17/36
G01S 17/89
G01S 17/42
(11) EP3227714
(21) EP15866003.5
(47) 21.05.2025
(87) SG2015050477
09.06.2016
(22) 30.11.2015
(54) DEPTH SENSOR MODULE AND DEPTH SENSING METHOD
(73) Heptagon Micro Optics Pte. Ltd.
(72) OGGIER, Thierry
DESCHLER, Mathias
KALOUSTIAN, Stéphane
(31) 18512014
(32) 02.12.2014
(33) Switzerland

(51) G01S 7/481
G01S 7/4863
G01S 7/4865
G01S 7/497
G01S 17/10
G01S 17/931
(11) EP3994481
(21) EP20735152.9
(47) 21.05.2025
(87) EP2020067886
07.01.2021
(22) 25.06.2020
(54) READING DEVICE AND LIDAR MEASURING DEVICE
(73) MicroVision, Inc.
(72) BEUSCHEL, Ralf
(31) 102019209698
(32) 02.07.2019
(33) Germany

(51) G01S 7/481
G01S 17/10
(11) EP4439116
(21) EP24155969.9
(47) 21.05.2025
(22) 06.02.2024
(54) OPTOELECTRONIC SENSOR FOR DETECTING AN OBJECT IN A SURVEILLANCE AREA
(73) SICK AG
(72) Ostojic, Oliver
Hug, Mathias
(31) 102023107903
(32) 28.03.2023
(33) Germany

(51) G01S 7/481
G01S 17/42
G02B 26/10
G02F 1/29
(11) EP3276371
(21) EP17165694.5
(47) 21.05.2025
(22) 10.04.2017
(54) BEAM STEERING DEVICE AND OPTICAL APPARATUS INCLUDING THE SAME
(73) Samsung Electronics Co., Ltd
(72) LEE, Eunkyung
CHUNG, Chilhee
KIM, Jungwoo
SHIN, Dongjae
CHOI, Byounglyong
HA, Kyoungho
(31) 20160097539
(32) 29.07.2016
(33) Korea (Republic)

(51) G01S 7/481
G01V 8/20
(11) EP4215935
(21) EP22152806.0
(47) 21.05.2025
(22) 21.01.2022
(54) OPTICAL SENSOR
(73) Leuze electronic GmbH + Co. KG
(72) Feller, Bernhard
Bortz, Jörg
Gläser, Armin
Nützel, Florian
Haberl, Paul

(51) G01S 7/487
G01S 7/493
G01S 7/4863
G01S 7/4914
G01S 17/894
H04N 25/77
(11) EP3128743
(21) EP15773067.2
(47) 21.05.2025
(87) JP2015060264
08.10.2015
(22) 31.03.2015
(54) DETECTION ELEMENT, LOCK-IN DETECTION DEVICE, SUBSTRATE, AND MANUFACTURING METHOD FOR DETECTION ELEMENT
(73) Nikon Corporation
(72) SARUWATARI, Osamu
AOKI, Shigeru
OKAMOTO, Kazuya
SUGAYA, Isao
OKADA, Masashi
OHKI, Hiroshi
(31) 2014074063
(32) 31.03.2014
(33) Japan

(51) G01S 7/4911
G01S 7/481
G01S 17/34
H01S 3/067
H01S 3/08022
H01S 3/101
H01S 3/102
H01S 3/1112
G01J 3/02
G01J 3/10
G01C 15/00
(11) EP3704768
(21) EP18872568.3
(47) 21.05.2025
(87) US2018059033
09.05.2019
(22) 02.11.2018
(54) LIDAR AND LASER MEASUREMENT TECHNIQUES
(73) AQRONOS, INC.
(72) Huang, Shu-wei
Li, Peizhe
(31) 201762581267 P
(32) 03.11.2017
(33) United States of America

(51) G01S 7/497
G01S 7/481
G02B 26/10
G01S 17/42

(11) EP4130787
(21) EP21779592.1
(47) 21.05.2025
(87) JP2021003474
07.10.2021
(22) 01.02.2021
(54) SENSOR DEVICE
(73) Pioneer Corporation
Pioneer Smart Sensing Innovations Corporation
(72) KASONO Osamu
IZUTA Ryo
(31) 2020062799
(32) 31.03.2020
(33) Japan

(51) G01S 7/497
G01S 17/86
G01S 17/931
G02B 5/08
H01Q 15/18
(11) EP3948336
(21) EP20792094.3
(47) 21.05.2025
(87) US2020026336
22.10.2020
(22) 02.04.2020
(54) APPARATUS FOR JOINT CALIBRATION OF RADAR AND CAMERA SYSTEMS FOR AUTONOMOUS VEHICLE APPLICATIONS
(73) Argo AI, LLC
(72) VU, Duc
REDDY, Dikpal
HARTMAN, Cole
(31) 201916383829
(32) 15.04.2019
(33) United States of America

(51) G01S 7/497
G01S 17/89
(11) EP4235214
(21) EP22158998.9
(47) 21.05.2025
(22) 25.02.2022
(54) LIDAR SNOWFALL SIMULATION METHOD AND SYSTEM FOR ROBUST 3D OBJECT DETECTION
(73) TOYOTA JIDOSHA KABUSHIKI KAISHA
ETH Zurich - The Swiss Federal Institute of Technology Zurich
(72) ABBELOOS, Wim
HAHNER, Martin
SAKARIDIS, Christos
FISHER, Yu
DAI, Dengxin
VAN GOOL, Luc

(51) G01S 7/52
G01S 15/89
A61B 8/00
(11) EP4046577
(21) EP20886437.1
(47) 21.05.2025
(87) CN2020126709
20.05.2021
(22) 05.11.2020
(54) ULTRASONIC DETECTION SYSTEM-BASED METHOD FOR DETECTING BIOLOGICAL SIGNS
(73) Wuxi Hisky Medical Technologies Co., Ltd.
(72) SUN, Shibo
HE, Qiong
XU, Kai
SHAO, Jinhua
SUN, Jin
DUAN, Houli
(31) 201911098005
(32) 12.11.2019
(33) China

(51) G01S 7/521
G01S 7/524
G01S 7/526
G01S 7/529
G01S 15/10
H04R 1/02
H04R 19/00
H04R 19/04
(11) EP4002869
(21) EP20208986.8
(47) 21.05.2025
(22) 20.11.2020
(54) MEMS DEVICE
(73) Infineon Technologies AG
(72) DE MILLERI, Niccolo
BRETTHAUER, Christian
CASPANI, Alessandro
FUSCO, Alessandra

(51) G01S 13/34
G01S 13/931
G08G 1/16
G01S 13/56
G01S 13/58
G01S 13/44
G01S 7/35
(11) EP3859383
(21) EP19865463.4
(47) 21.05.2025
(87) JP2019034652
02.04.2020
(22) 03.09.2019
(54) ELECTRONIC DEVICE, CONTROL METHOD FOR ELECTRONIC DEVICE, AND CONTROL PROGRAM FOR ELECTRONIC DEVICE
(73) Kyocera Corporation
(72) SAHARA, Tooru
OOTSUKI, Yutaka
(31) 2018180775
(32) 26.09.2018
(33) Japan

(51) G01S 13/72
G01S 13/87
G01S 13/931
(11) EP3879306
(21) EP21169450.0
(47) 21.05.2025
(22) 25.09.2019
(54) DETECTION SYSTEM AND METHOD
(73) Aptiv Technologies AG
(72) YU, Wang
LIANG, Ma
(31) 201816154848
201862742646 P
(32) 09.10.2018
08.10.2018
(33) United States of America
United States of America

(51) G01S 13/72
G01S 13/931
G01S 17/66
G01S 17/86
G01S 17/931
G01S 7/295
G01S 13/58
G01S 13/86
(11) EP4220224
(21) EP22153358.1
(47) 21.05.2025
(22) 26.01.2022
(54) METHOD AND DEVICE FOR DETECTING AND TRACKING OBJECTS AND DRIVER ASSISTANCE SYSTEM
(73) Robert Bosch GmbH
(72) Remenyi, Istvan
Karasz, Zoltan

(51) G01S 13/82
G01S 7/00
G01S 7/35
G01S 13/00
G01S 13/87
(11) EP4012448
(21) EP20213605.7
(47) 21.05.2025
(22) 11.12.2020
(54) DOPPLER RANGING SYSTEM
(73) Semtech Corporation
(72) SELLER, Olivier Bernard André
DEVAUCELLE, Christophe

(51) G01S 17/36
G01S 7/483
G01S 17/89
H03K 5/04
A61B 1/00
(11) EP3605150
(21) EP18892482.3
(47) 21.05.2025
(87) JP2018039649
27.06.2019
(22) 25.10.2018
(54) SIGNAL GENERATING DEVICE
(73) Sony Semiconductor Solutions Corporation
(72) YASU, Yohtaro
SHIGYO, Nobuhiko
(31) 2017245948
(32) 22.12.2017
(33) Japan

(51) G01T 1/16
G01T 1/24
(11) EP3320371
(21) EP15894608.7
(47) 21.05.2025
(87) CN2015081126
15.12.2016
(22) 10.06.2015
(54) A DETECTOR FOR X-RAY FLUORESCENCE
(73) Shenzhen Xpectvision Technology Co., Ltd.
(72) CAO, Peiyan
LIU, Yurun

(51) G01T 1/164

(11) EP4045944
(21) EP20789440.3
(47) 21.05.2025
(87) DE2020000222
22.04.2021
(22) 26.09.2020
(54) METHOD FOR THE POSITION AND ENERGY DETERMINATION IN SCINTILLATION DETECTORS
(73) Forschungszentrum Jülich GmbH
(72) LERCHE, Christoph
BI, Wenwei
SHAH, Nadim, Joni
(31) 102019007136
(32) 15.10.2019
(33) Germany

(51) G02B 1/111
G02B 5/20
C09D 5/00
C09D 7/61
C09D 7/63
C09D 7/40
C09D 133/08
G02B 1/14
G02B 5/02
C09D 7/42
(11) EP3734332
(21) EP19800681.9
(47) 21.05.2025
(87) KR2019004093
14.11.2019
(22) 05.04.2019
(54) ANTI-GLARE FILM AND DISPLAY APPARATUS
(73) Xinmei Fontana Holding (Hong Kong) Limited
(72) SEO, Jung Hyun
LEE, Hanna
SEO, Kwangseok
CHANG, Yeongrae
(31) 20180054363
(32) 11.05.2018
(33) Korea (Republic)

(51) G02B 5/08
G02C 7/10
G02B 1/10
G02B 5/28
(11) EP3397995
(21) EP16882698.0
(47) 21.05.2025
(87) US2016069319
06.07.2017
(22) 29.12.2016
(54) OPHTHALMIC LENS
(73) Essilor Laboratories of America, Inc.
(72) SANTAN, Prashant
TARLETON, Newton, M.
(31) 201514985011
(32) 30.12.2015
(33) United States of America

(51) G02B 6/02
H04J 14/02
H01S 3/067
H01S 3/094
H01S 3/16
G02B 6/036
G02B 6/024
H01S 3/0941
H04J 14/04
(11) EP3977185
(21) EP20847919.6
(47) 21.05.2025
(87) CA2020051054
04.02.2021
(22) 31.07.2020
(54) POLARIZATION-MAINTAINING HIGHLY ELLIPTICAL CORE FIBER WITH STRESS-INDUCED BIREFRINGENCE
(73) Huawei Technologies Canada Co., Ltd.
Université Laval
(72) CORSI, Alessandro
LA ROCHELLE, Sophie
CHANG, Junho
(31) 202016943713
201962880928 P
(32) 30.07.2020
31.07.2019
(33) United States of America
United States of America

(51) G02B 6/122
G02B 6/132
G02B 6/136
(11) EP4152060
(21) EP22189557.6
(47) 21.05.2025
(22) 09.08.2022
(54) PHOTONIC INTERCONNECT AND COMPONENTS IN GLASS
(73) Intel Corporation
(72) DARMAWIKARTA, Kristof
PIETAMBARAM, Srinivas V.
IBRAHIM, Tarek A.
MAHALINGAM, Hari
DUONG, Benjamin
NIE, Bai
(31) 202117476357
(32) 15.09.2021
(33) United States of America

(51) G02B 6/27
G02B 6/293
G02B 27/28
G02B 27/09
(11) EP4033280
(21) EP20865440.0
(47) 21.05.2025
(87) CN2020100312
25.03.2021
(22) 05.07.2020
(54) SPECTRAL PROCESSING APPARATUS AND RECONFIGURABLE OPTICAL ADD-DROP MULTIPLEXER
(73) Huawei Technologies Co., Ltd.
(72) ZOU, Bing
YAN, Yunfei
LI, Shimao
(31) 201910877927
(32) 17.09.2019
(33) China

(51) G02B 6/27
G02B 27/01
F21V 8/00
G02B 1/14
H04J 14/06
(11) EP4212929
(21) EP22215231.6
(47) 21.05.2025
(22) 26.08.2019
(54) REFLECTION SUPPRESSION IN NEAR EYE DISPLAYS
(73) Lumus Ltd.
(72) DANZIGER, Yochay
RONEN, Eitan
GELBERG, Jonathan
EISENFELD, Tsion
SHAPIRA, Amir
(31) 201962843610 P
201862722903 P
(32) 06.05.2019
26.08.2018
(33) United States of America
United States of America

(51) G02B 6/42
B81C 1/00
H01L 21/50
H01L 23/10
G02B 6/12
(11) EP3861389
(21) EP19779523.0
(47) 21.05.2025
(87) EP2019077069
09.04.2020
(22) 07.10.2019
(54) WELD PROTECTION FOR HERMETIC WAFER-LEVEL SEALING
(73) Indigo Diabetes N.V.
(72) ORDONEZ ORELLANA, Juan Sebastian
CARDILE, Paolo
DELBEKE, Danaë
(31) 18198990
(32) 05.10.2018
(33) European Patent Office (EPO)

(51) G02B 6/44
(11) EP3869253
(21) EP21151492.2
(47) 21.05.2025
(22) 14.01.2021
(54) CONNECTION STRUCTURE AND OPTICAL CABLE CONNECTION BOX
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) CHEN, Yangquan
XIONG, Wei
PEI, Guohua
ZHANG, Jinjin
YIN, Weiwei
(31) 202020191330 U
(32) 20.02.2020
(33) China

(51) G02B 9/34
G02B 9/58
G02B 13/00
G02B 13/18
(11) EP4198599
(21) EP22168715.5
(47) 21.05.2025
(22) 19.04.2022
(54) IMAGE CAPTURING OPTICAL SYSTEM, IMAGE CAPTURING UNIT AND ELECTRONIC DEVICE
(73) Largan Precision Co. Ltd.
(72) HSUEH, Chun-Che
CHEN, Chun-Yen
CHO, Meng-Kuan
(31) 110147519
(32) 17.12.2021

(33) Taiwan, Chinese Taipei

(51) G02B 9/62
G02B 13/00
(11) EP4258034
(21) EP22189277.1
(47) 21.05.2025
(22) 08.08.2022
(54) OPTICAL IMAGING LENS SYSTEM, IMAGE CAPTURING UNIT AND ELECTRONIC DEVICE
(73) Largan Precision Co. Ltd.
(72) LIN, Yu Jui
HUANG, Hsin-Hsuan
(31) 202263328056 P
(32) 06.04.2022
(33) United States of America

(51) G02B 13/00
G02B 17/08
G03B 17/17
G03B 30/00
H04N 23/55
(11) EP4287609
(21) EP22745107.7
(47) 21.05.2025
(87) CN2022072862
04.08.2022
(22) 20.01.2022
(54) CAMERA MODULE AND ELECTRONIC DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) YANG, Zhuojian
(31) 202110103420
(32) 26.01.2021
(33) China

(51) G02B 21/34
(11) EP3884330
(21) EP20764492.3
(47) 21.05.2025
(87) US2020045178
11.02.2021
(22) 06.08.2020
(54) PHYSICAL CALIBRATION SLIDE
(73) Leica Biosystems Imaging, Inc.
(72) ZOU, Yunlu
(31) 201962883585 P
(32) 06.08.2019
(33) United States of America

(51) G02B 27/01
(11) EP3908875
(21) EP19908439.3
(47) 21.05.2025
(87) US2019068256
16.07.2020
(22) 23.12.2019
(54) MULTIMODAL INPUT PROCESSING FOR VEHICLE COMPUTER
(73) Cerence Operating Company
(72) NGUYEN, Quynh
UNRUH, Erland
McCRAY, Donni
COUVREUR, Christophe
BEN-GIGI, Lior
LENKE, Nils
MONIRI, Mohammad, M.
DOES, Niels
HAMERICH, Stefan
FRANK, Stefan
(31) 201916241025
(32) 07.01.2019
(33) United States of America

(51) G02B 27/01
(11) EP3935439
(21) EP21713844.5
(47) 21.05.2025
(87) US2021020321
30.09.2021
(22) 01.03.2021
(54) OPTICAL SYSTEMS WITH AUTHENTICATION AND PRIVACY CAPABILITIES
(73) Apple Inc.
(72) DODSON, Christopher M.
PFEIFFER, Jonathan B.
(31) 202117171864
202063000650 P
(32) 09.02.2021
27.03.2020
(33) United States of America
United States of America

(51) G02B 27/01
(11) EP4248260
(21) EP21814777.5
(47) 21.05.2025
(87) EP2021082217
27.05.2022
(22) 18.11.2021
(54) HEAD-UP DISPLAY DEVICE
(73) Eyelights
(72) NAGTEGAELE, Patrice
DUFLOT, Romain
(31) 2011887
(32) 19.11.2020
(33) France

(51) G02B 27/01
(11) EP4409351
(21) EP22777674.7
(47) 21.05.2025
(87) FI2022050574
06.04.2023
(22) 01.09.2022
(54) EYEGLASS LENS WITH EYE-TRACKING COMPONENTS
(73) PIXIERAY OY
(72) MELAKARI, Klaus
MELAKARI, Rebecca
MIETTINEN, Ville
EIDEN, Niko
(31) 202117488404
(32) 29.09.2021
(33) United States of America

(51) G02B 27/01
G02B 27/00
(11) EP4348338
(21) EP22730289.0
(47) 21.05.2025
(87) EP2022064206
08.12.2022
(22) 25.05.2022
(54) HEAD-UP DISPLAY
(73) Valeo Comfort and Driving Assistance
(72) HUSSON, Arnaud
MERMILLOD, Pierre
(31) 2105704
(32) 31.05.2021
(33) France

(51) G02B 27/01
G02B 27/28
G02B 27/10
(11) EP3754409
(21) EP19750620.7
(47) 21.05.2025
(87) CN2019074876
15.08.2019
(22) 12.02.2019
(54) AUGMENTED REALITY DEVICE AND OPTICAL SYSTEM USED THEREIN
(73) Matrixed Reality Technology Co., Ltd.
(72) XIAO, Bing
LIANG, Xiaobin
XU, Chi
(31) 201810147328
201810147332
201810147330
201810146915
201810147325
201810147336
201810147326
201810146905
201810146912
201810146751
201810146738
(32) 12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
12.02.2018
(33) China
China
China
China
China
China
China
China
China
China
China

(51) G02B 27/01
G02C 7/02
(11) EP3296793
(21) EP16306192.2
(47) 21.05.2025
(22) 19.09.2016
(54) METHOD OF DETERMINING A CORRECTING OPTICAL FUNCTION TO A VIRTUAL IMAGE
(73) Essilor International
(72) ROUSSEAU, Denis
CALLIER, Benoit
SWITAL, Marion

(51) G02B 27/01
G06F 21/32
G02B 27/00
G06F 3/01
H04N 23/11
(11) EP3567413
(21) EP18757692.1

(47) 21.05.2025
(87) CN2018077280
30.08.2018
(22) 26.02.2018
(54) VIRTUAL REALITY HEAD-MOUNTED APPARATUS
(73) Advanced New Technologies Co., Ltd.
(72) WU, Jun
YIN, Huanmi
ZHANG, Hong
ZENG, Xiaodong
(31) 201710109091
(32) 27.02.2017
(33) China

(51) G02B 27/02
G02B 27/01
G02B 26/10
(11) EP4318081
(21) EP22774555.1
(47) 21.05.2025
(87) JP2022000691
29.09.2022
(22) 12.01.2022
(54) IMAGE PROJECTION DEVICE
(73) QD Laser, Inc.
(72) SUZUKI, Makoto
MORINO, Seiji
(31) 2021200033
2021049848
(32) 09.12.2021
24.03.2021
(33) Japan
Japan

(51) G02B 30/27
H04N 13/305
(11) EP3874324
(21) EP20771743.0
(47) 21.05.2025
(87) US2020048994
11.03.2021
(22) 02.09.2020
(54) OPTICAL FILM ARRANGEMENTS FOR ELECTRONIC DEVICE DISPLAYS
(73) Apple Inc.
(72) KIM, Byoungsuk
HUANG, Yi
QI, Jun
YIN, Victor, H.
KIM, Seung, Wook
SCAPEL, Nicolas, V.
HUANG, Yi-pai
(31) 202017005199
202017005191
202017003816
202062987674 P
201962897078 P
201962897093 P
(32) 27.08.2020
27.08.2020
26.08.2020
10.03.2020
06.09.2019
06.09.2019
(33) United States of America
United States of America
United States of America
United States of America
United States of America

(51) G02B 30/52
G02B 27/01
H04N 13/395
(11) EP3797332
(21) EP18738250.2
(47) 21.05.2025
(87) EP2018067708
02.01.2020
(22) 29.06.2018
(54) DEVICE AND METHOD FOR DISPLAYING A 3D IMAGE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) SETIAWAN, Panji
LIN, Tao

(51) G02C 7/08
G02B 7/04
G02B 27/01
G02B 27/28
G02C 7/12
G02F 1/1347
G02F 1/29
(11) EP4085297
(21) EP20908555.4
(47) 21.05.2025
(87) US2020067494
08.07.2021
(22) 30.12.2020
(54) FAST ELECTROACTIVE LENS SWITCHING SYSTEMS AND METHODS
(73) e-Vision Smart Optics Inc.
(72) VAN HEUGTEN, Anthony
JIANG, Yingfei
(31) 201962954743 P
(32) 30.12.2019
(33) United States of America

(51) G02C 11/06
G10L 25/60
G10L 25/78
G10L 25/93
H03K 7/02
H04R 25/00
(11) EP3335072
(21) EP16835803.4
(47) 21.05.2025
(87) US2016046257
16.02.2017
(22) 10.08.2016
(54) SYSTEM FOR MULTICHANNEL OPTO-MECHANICAL STIMULATION
(73) MED-EL Elektromedizinische Geräte GmbH
(72) MEISTER, Dirk
SHAH, Darshan
(31) 201562203507 P
(32) 11.08.2015
(33) United States of America

(51) G02C 13/00
G01M 11/02
B24B 49/12
(11) EP3332287
(21) EP16754231.5
(47) 21.05.2025
(87) EP2016068617
09.02.2017
(22) 04.08.2016
(54) METHOD FOR DETERMINING A PARAMETER OF AN OPTICAL EQUIPMENT
(73) Essilor International
(72) GUEU, Stéphane
CARRIER, Jean
(31) 15306267
(32) 05.08.2015
(33) European Patent Office (EPO)

(51) G02F 1/01
G02F 1/35
(11) EP3948408
(21) EP20714900.6
(47) 21.05.2025
(87) EP2020056971
01.10.2020
(22) 13.03.2020
(54) ELECTRO-OPTIC MODULATORS AND METHODS FOR MODULATING OPTICAL RADIATION
(73) Sicoya GmbH
(72) BRONZI, Danilo
ÖZDEMIR, Ahmet Mert
(31) 201916366783
(32) 27.03.2019
(33) United States of America

(51) G02F 1/133
E06B 9/24
B60J 3/04
E06B 3/67
G01R 31/00
G09G 3/00
H01F 38/00
H02J 3/12
H05B 41/00
(11) EP3748421
(21) EP19747050.3
(47) 21.05.2025
(87) JP2019002661
08.08.2019
(22) 28.01.2019
(54) LIQUID CRYSTAL LIGHT CONTROL APPARATUS AND METHOD FOR MANUFACTURING SAME
(73) Dai Nippon Printing Co., Ltd.
(72) KUBOTA, Hiroshi
HAGIWARA, Yusuke
HAYASHIDA, Yasunori
(31) 2018013468
(32) 30.01.2018
(33) Japan

(51) G02F 1/1333
(11) EP4109171
(21) EP22181118.5
(47) 21.05.2025
(22) 24.06.2022
(54) LIQUID CRYSTAL WINDOW BONDING AND SEALING
(73) Wicue USA INC.
(72) HAINFELLNER, Martin
LI, Fenghua
(31) 202217848129
202163215307 P
(32) 23.06.2022
25.06.2021
(33) United States of America
United States of America

(51) G02F 1/1333

G02F 1/1362
G09G 3/36
H10D 86/40
H10D 86/60
(11) EP4130858
(21) EP20900705.3
(47) 21.05.2025
(87) CN2020082822
07.10.2021
(22) 01.04.2020
(54) ARRAY SUBSTRATE, AND DISPLAY DEVICE
(73) BOE Technology Group Co., Ltd.
Beijing BOE Display Technology Co., Ltd.
(72) MU, Wenkai
WANG, Shijun
LIU, Yi
FENG, Bo
WANG, Yang
WEI, Zhan
TIAN, Li

(51) G02F 1/1335
G02F 1/1333
G02B 5/30
G06F 1/16
G09F 9/30
G03B 21/00
G03B 21/58
G03B 21/604
H01L 25/075
H01L 27/15
H10K 59/10
H10K 59/80
H10K 102/00
(11) EP3945362
(21) EP21188170.1
(47) 21.05.2025
(22) 28.07.2021
(54) DISPLAY DEVICE
(73) LG Display Co., Ltd.
(72) SONG, JiHun
KWON, Hoiyong
(31) 20200095960
(32) 31.07.2020
(33) Korea (Republic)

(51) G02F 1/1503
C07D 403/06
C07D 213/803
C07D 213/80
C07D 213/26
C07D 213/22
C07D 213/06
C09K 9/02
G02F 1/1516
E06B 3/67
E06B 9/24
G02C 7/10
(11) EP3923064
(21) EP20305643.7
(47) 21.05.2025
(22) 12.06.2020
(54) ELECTROCHROMIC SOLUTION
(73) Essilor International
(72) ARCHAMBEAU, Samuel
BIVER, Claudine
DEBAT BERIT, Fabien
BALLET, Jerôme
CANO, Jean-Paul

(51) G02F 1/33
G06N 10/40
(11) EP4383002
(21) EP22211813.5
(47) 21.05.2025
(22) 06.12.2022
(54) APPARATUS AND METHOD FOR GENERATING OPTICAL TWEEZERS
(73) Universität Stuttgart
Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) Florian, Meinert
Ilzhöfer, Philipp
Pfau, Tilman
Traub, Martin
Adams, Martin
Hoffmann, Hans-Dieter

(51) G03B 17/02
G03B 3/10
G03B 5/02
G03B 30/00
H04N 23/68
H04N 23/55
G03B 5/04
(11) EP4030232
(21) EP20862084.9
(47) 21.05.2025
(87) KR2020012121
18.03.2021
(22) 08.09.2020
(54) LENS DRIVING DEVICE, CAMERA MODULE, AND OPTICAL DEVICE
(73) LG Innotek Co., Ltd.
(72) LEE, Sung Guk
MIN, Sang Jun
(31) 20190164436
20190141616
20190111746
(32) 11.12.2019
07.11.2019
09.09.2019
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) G03B 17/08
G03B 17/56
F16M 13/04
(11) EP4365476
(21) EP24164959.9
(47) 21.05.2025
(22) 06.08.2019
(54) CAMERA AND CAMERA MOUNT
(73) GoPro, Inc.
(72) VITALE, Nicholas
MUHLENKAMP, John George, IV
NGUYEN, Huy Phuong
MARROQUIN, Marco
WOODMAN, Nicholas D.
CROW, Kielan C.
(31) 201962881023 P
201962868099 P
201862786059 P
201862715794 P
(32) 31.07.2019
28.06.2019
28.12.2018
07.08.2018
(33) United States of America
United States of America
United States of America

(51) G03B 17/14
G03B 17/56
(11) EP3971641
(21) EP21195144.7
(47) 21.05.2025
(22) 06.09.2021
(54) INTERMEDIATE ACCESSORY APPARATUS, IMAGE PICKUP APPARATUS, IMAGE PICKUP SYSTEM, AND PROGRAM
(73) CANON KABUSHIKI KAISHA
(72) TADA, Takashi
(31) 2020155594
(32) 16.09.2020
(33) Japan

(51) G03B 17/55
G03B 30/00
H04N 23/52
H04N 23/55
(11) EP3951494
(21) EP20777767.3
(47) 21.05.2025
(87) KR2020004134
01.10.2020
(22) 26.03.2020
(54) HEATING DEVICE AND CAMERA MODULE
(73) LG Innotek Co., Ltd.
(72) PARK, Yong Tae
YU, Beom Suk
LEE, Min Woo
HWANG, Sun Min
(31) 20190035142
20190034139
(32) 27.03.2019
26.03.2019
(33) Korea (Republic)
Korea (Republic)

(51) G03B 21/20
G03B 33/12
F21V 8/00
F21V 9/30
(11) EP3657252
(21) EP19210310.9
(47) 21.05.2025
(22) 20.11.2019
(54) LIGHT SOURCE APPARATUS AND PROJECTOR
(73) Seiko Epson Corporation
(72) Sakata, Hidefumi
Suzuki, Junichi
Komiyama, Shingo
Iwama, Yuichiro
(31) 2018219522
(32) 22.11.2018
(33) Japan

(51) G03F 7/20
H01L 21/67
H01L 21/677
(11) EP3709084
(21) EP20159784.6
(47) 21.05.2025
(22) 27.02.2020

(54) SUBSTRATE PROCESSING APPARATUS AND ARTICLE MANUFACTURING METHOD
(73) CANON KABUSHIKI KAISHA
(72) NISHIMURA, Mitsuhide
KAMINO, Kenichi
MATSUMOTO, Kashu
(31) 2019048747
(32) 15.03.2019
(33) Japan

(51) G03G 9/08
G03G 9/087
G03G 9/093
(11) EP3885833
(21) EP21163908.3
(47) 21.05.2025
(22) 22.03.2021
(54) TONER AND METHOD FOR PRODUCING TONER
(73) CANON KABUSHIKI KAISHA
(72) TOYOIZUMI, Noritaka
(31) 2020053066
(32) 24.03.2020
(33) Japan

(51) G03G 9/09
G03G 9/093
(11) EP3882704
(21) EP21160584.5
(47) 21.05.2025
(22) 03.03.2021
(54) FLUORESCENT PINK TONERS AND RELATED METHODS
(73) Xerox Corporation
(72) QI, Yu
VANDEWINCKEL, Judith
LU, Chunliang
ROBLES-FLORES, Eliud
SHI, Fan
(31) 202016822162
(32) 18.03.2020
(33) United States of America

(51) G03G 15/08
(11) EP3995902
(21) EP21205879.6
(47) 21.05.2025
(22) 02.11.2021
(54) IMAGE FORMING SYSTEM
(73) CANON KABUSHIKI KAISHA
(72) MITSUMATA, Akinori
KAWANAMI, Takeo
HIASA, Shuma
(31) 2020187415
(32) 10.11.2020
(33) Japan

(51) G03G 21/16
(11) EP4369110
(21) EP23205976.6
(47) 21.05.2025
(22) 26.10.2023
(54) IMAGE FORMING APPARATUS
(73) CANON KABUSHIKI KAISHA
(72) SHIBUYA, Ryota
TAKEUCHI, Masaaki
(31) 2023157460
2022178572
(32) 22.09.2023
08.11.2022
(33) Japan

(51) G03H 1/02
G03H 1/08
(11) EP3712709
(21) EP20162706.4
(47) 21.05.2025
(22) 12.03.2020
(54) METHOD AND APPARATUS FOR PROCESSING THREE-DIMENSIONAL HOLOGRAPHIC IMAGE
(73) Samsung Electronics Co., Ltd.
Korea University Research and Business Foundation, Sejong Campus
(72) SONG, Hoon
KIM, Hwi
PARK, Jongha
KIM, Hojung
KIM, Yongkyu
(31) 20190094536
20190031465
(32) 02.08.2019
19.03.2019
(33) Korea (Republic)
Korea (Republic)

(51) G03H 1/04
G03H 1/00
G03H 1/02
(11) EP3552060
(21) EP17825408.2
(47) 21.05.2025
(87) EP2017082012
14.06.2018
(22) 08.12.2017
(54) A METHOD AND AN IMAGING SYSTEM FOR HOLOGRAPHIC IMAGING
(73) IMEC VZW
(72) LIN, Ziduo
YURT, Abdulkadir
STAHL, Richard
VANMEERBEECK, Geert
(31) 16203210
(32) 09.12.2016
(33) European Patent Office (EPO)

(51) G04C 21/06
G04C 21/02
(11) EP3885843
(21) EP20165319.3
(47) 21.05.2025
(22) 24.03.2020
(54) WATCH WITH MECHANICAL OR ELECTRONIC MOVEMENT EQUIPPED WITH A STRIKING MECHANISM
(73) The Swatch Group Research and Development Ltd
(72) FAVRE, Jérôme
PARATTE, Lionel
NAGY, Laurent
BORN, Jean-Jacques

(51) G05B 11/36
G05B 19/418
B25J 9/16
G05B 19/4062
(11) EP3719591
(21) EP18884520.0
(47) 21.05.2025
(87) JP2018037471
06.06.2019
(22) 05.10.2018
(54) MECHANICAL EQUIPMENT CONTROL SYSTEM, MECHANICAL EQUIPMENT CONTROLLER, AND MECHANICAL EQUIPMENT CONTROL METHOD
(73) Kabushiki Kaisha Yaskawa Denki
(72) NAGATA Takeshi
SHOGAKI Takaaki
YOSHIURA Yasufumi
OKUBO Tadashi
KATSUYAMA Kei
(31) 2017228442
(32) 28.11.2017
(33) Japan

(51) G05B 13/02
A47J 31/52
(11) EP3776101
(21) EP19713374.7
(47) 21.05.2025
(87) EP2019056216
10.10.2019
(22) 13.03.2019
(54) DRINK PREPARATION MEANS AND METHOD FOR OPERATING A DRINK PREPARATION MEANS
(73) WMF GmbH
(72) SCHIRRMACHER, Philipp
(31) 102018205153
(32) 05.04.2018
(33) Germany

(51) G05B 19/042
(11) EP4330777
(21) EP22725777.1
(47) 21.05.2025
(87) EP2022061037
03.11.2022
(22) 26.04.2022
(54) VALVE CONTROL DEVICE
(73) GEA Tuchenhagen GmbH
(72) STENDER, Heiko
BUCHMANN, Konstantin
(31) 102021002287
(32) 30.04.2021
(33) Germany

(51) G05B 19/042
G05B 7/02
G05B 9/03
(11) EP4184262
(21) EP22205550.1
(47) 21.05.2025
(22) 04.11.2022
(54) COORDINATING INSERTION AND/OR REMOVAL OF REDUNDANT INPUT/OUTPUT (I/O) COMPONENTS
(73) Rockwell Automation Technologies, Inc.
(72) Stephens, Alex W.
Boroff, Joshua B.
(31) 202117522669
(32) 09.11.2021
(33) United States of America

(51) G05B 19/042
G05B 19/05
(11) EP4148514
(21) EP22195092.6
(47) 21.05.2025
(22) 12.09.2022
(54) INTEGRATED DIAGNOSTIC SYSTEM FOR SPS-BASED TELECONTROL EXTERNAL STATIONS

(73) PHOENIX CONTACT GmbH & Co. KG
(72) Lange, Andreas
Würger, Andreas
(31) 500646
(32) 13.09.2021
(33) Luxembourg

(51) G05B 19/042
G08C 17/02
(11) EP3958070
(21) EP19924803.0
(47) 21.05.2025
(87) CN2019130488
22.10.2020
(22) 31.12.2019
(54) SMART HOME DEVICE CONTROL METHOD, MEDIUM, MOBILE TERMINAL, AND APPARATUS
(73) Midea Group Co., Ltd.
(72) LI, Chenglin
WANG, Huan
YOU, Yuanqing
(31) 201910299379
(32) 15.04.2019
(33) China

(51) G05B 19/05
G06F 13/40
G06F 13/42
(11) EP3521954
(21) EP18158060.6
(47) 21.05.2025
(22) 22.02.2018
(54) A FLEXIBLE EXPANDABLE AUTOMATION DEVICE WITH HOT-SWAPPABLE I/O-UNITS
(73) ABB Schweiz AG
(72) Bellatreche, Abderahmane
Haug, Stefan
Karb, Thomas
Salas-Sanchez, Juan
(31) 18155052
(32) 05.02.2018
(33) European Patent Office (EPO)

(51) G05B 19/4097
(11) EP3702853
(21) EP19160330.7
(47) 21.05.2025
(22) 01.03.2019
(54) METHOD FOR GENERATING CONTROL COMMAND DATA FOR CONTROLLING A CNC-LATHE
(73) AB Sandvik Coromant
(72) LÖF, Ronnie
JOHANSSON, Adam

(51) G05B 19/418
B05B 15/50
(11) EP4290324
(21) EP23159708.9
(47) 21.05.2025
(22) 02.03.2023
(54) AUTOMATIC SKID OFFLINE-CLEANING GUIDANCE AND CONTROL SYSTEM AND METHOD
(73) Chongqing Changan Automobile Co., Ltd.
(72) Chang, Yongsheng
Feng, Sheng
Ma, Zhifei
Yao, Lei
Zhang, Jinsong
Peng, Xiaogang
Li, Song
(31) 202210630815
(32) 06.06.2022
(33) China

(51) G05B 23/02
H04M 11/00
H04Q 9/00
F24F 11/52
(11) EP4113234
(21) EP20921201.8
(47) 21.05.2025
(87) JP2020008035
02.09.2021
(22) 27.02.2020
(54) EQUIPMENT MANAGEMENT DEVICE AND METHOD FOR GENERATING EQUIPMENT MANAGEMENT SCREEN
(73) Carrier Japan Corporation
(72) SAKURAI Koichiro
KAWAI Hidemitsu
IKEDA Ryusuke
YOSHIHARA Hiroto

(51) G05D 1/00
(11) EP3849296
(21) EP19780049.3
(47) 21.05.2025
(87) US2019051044
19.03.2020
(22) 13.09.2019
(54) USING NON-REAL-TIME COMPUTERS FOR AGRICULTURAL GUIDANCE SYSTEMS
(73) AgJunction LLC
(72) KREIDER, Thomas, R.
VILLELA, Mark, Alan
MCMICKELL, Michael, Brett
MCBEATH, Luke, Andrew
(31) 201862731698 P
(32) 14.09.2018
(33) United States of America

(51) G05D 1/00
(11) EP4241151
(21) EP21814688.4
(47) 21.05.2025
(87) EP2021080790
12.05.2022
(22) 05.11.2021
(54) METHOD FOR EFFICIENT ROUTE PLANNING OF VEHICLES IN A SORTING SYSTEM
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) ROIDL, Moritz
EMMERICH, Jan Sören
BENKENSTEIN, Leonie
KLOKOWSKI, Patrick
HAMMERMEISTER, Christian
(31) 102020214005
(32) 08.11.2020
(33) Germany

(51) G05D 1/00
(11) EP4250050
(21) EP23163409.8
(47) 21.05.2025
(22) 22.03.2023
(54) INFORMATION PROCESSING METHOD, INFORMATION PROCESSING DEVICE, AND PROGRAM
(73) Mitsubishi Heavy Industries, Ltd.
(72) YAMADA, Masahiro
CHISHIKI, Yohei
TAKAO, Kenji
(31) 2022049044
(32) 24.03.2022
(33) Japan

(51) G05D 1/00
(11) EP3327533
(21) EP17204451.3
(47) 21.05.2025
(22) 29.11.2017
(54) METHOD AND DEVICE FOR CONTROLLING ROBOTIC CLEANER AND ELECTRONIC DEVICE
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) XIE, Yan
(31) 201611078292
(32) 29.11.2016
(33) China

(51) G05D 1/00
(11) EP3882729
(21) EP20164458.0
(47) 21.05.2025
(22) 20.03.2020
(54) METHOD, COMPUTER PROGRAM, APPARATUS, VEHICLE AND NETWORK COMPONENT FOR DETERMINING A SPEED LIMIT FOR A TELE-OPERATED VEHICLE
(73) Volkswagen AG
(72) Pfadler, Andreas
Jornod, Guillaume
Gonzalez Vazquez, Israel

(51) G05D 1/00
(11) EP3945391
(21) EP21187635.4
(47) 21.05.2025
(22) 26.07.2021
(54) CAUSING A ROBOT TO EXECUTE A MISSION USING A BEHAVIOR TREE AND A LEAF NODE LIBRARY
(73) Aurora Flight Sciences Corporation, a subsidiary of The Boeing Company
(72) SAUNDERS, Jeffery
STRINGER, Benjamin C
(31) 202117148093
202063059397 P
(32) 13.01.2021
31.07.2020
(33) United States of America
United States of America

(51) G05D 1/00
B60T 7/22
B60T 8/32
B60T 7/18
B60T 8/1755
G08G 1/16
(11) EP4168281
(21) EP21826053.7
(47) 21.05.2025
(87) US2021037702
23.12.2021
(22) 16.06.2021

(54) BRAKING AND SIGNALING SCHEMES FOR AUTONOMOUS VEHICLE SYSTEM
(73) Glydways, Inc.
(72) KESSLER, Patrick
(31) 202063041513 P
(32) 19.06.2020
(33) United States of America

(51) G05D 1/00
B60W 30/10
B60W 20/12
B60W 30/095
B60W 30/18
B60W 60/00
G08G 1/16
G01C 21/34
(11) EP4042252
(21) EP20874329.4
(47) 21.05.2025
(87) US2020054358
15.04.2021
(22) 06.10.2020
(54) METHODS AND SYSTEMS FOR TOPOLOGICAL PLANNING IN AUTONOMOUS DRIVING
(73) Volkswagen Group of America Investments, LLC
(72) SEEGMILLER, Neal
CUNNINGHAM, Christopher
HUKKERI, Ramadev, Burigsay
PETROFF, Thomas
COSTA, Albert
(31) 201916597283
(32) 09.10.2019
(33) United States of America

(51) G05D 1/00
B60W 50/06
B60W 30/02
B60W 30/10
(11) EP4099118
(21) EP20921027.7
(47) 21.05.2025
(87) CN2020076678
02.09.2021
(22) 25.02.2020
(54) VEHICLE CONTROL METHOD AND APPARATUS
(73) Shenzhen Yinwang Intelligent Technologies Co., Ltd.
(72) LIU, Yalin
SONG, Xiaolin
CAO, Haotian
CHEN, Xiaohua
CHEN, Qi
TAO, Yongxiang

(51) G05D 1/00
B63C 11/26
B63G 8/14
G01S 5/18
(11) EP4295206
(21) EP22708070.2
(47) 21.05.2025
(87) EP2022053020
25.08.2022
(22) 08.02.2022
(54) UNDERWATER COMMUNICATION AND HOMING SYSTEM
(73) thyssenkrupp Marine Systems GmbH
thyssenkrupp AG
(72) MALLETSCHEK, Andreas
RUNKOWSKE, Holger
PAULSEN, Christian
(31) 102021201480
(32) 17.02.2021
(33) Germany

(51) G05D 1/00
B64C 29/00
G05B 13/02
B64D 31/00
F02C 6/20
F02C 9/00
(11) EP4457138
(21) EP22797510.9
(47) 21.05.2025
(87) IB2022060086
06.07.2023
(22) 20.10.2022
(54) METHOD FOR ESTIMATING THE ROTOR TORQUES OF AN AIRCRAFT CAPABLE OF HOVERING AND CONTROL UNIT FOR AN AIRCRAFT CAPABLE OF HOVERING
(73) Leonardo S.p.A.
(72) TREZZINI, Alberto Angelo
HAIDAR, Ahmad Mohamad
(31) 21217859
(32) 27.12.2021
(33) European Patent Office (EPO)

(51) G05D 1/00
G01C 21/00
(11) EP4281838
(21) EP22701542.7
(47) 21.05.2025
(87) EP2022050501
28.07.2022
(22) 12.01.2022
(54) PLANNING A PATH OF A DRIVERLESS MOBILE ROBOT
(73) KUKA Deutschland GmbH
(72) JOHO, Dominik
KUHNER, Andreas
(31) 102021200600
(32) 22.01.2021
(33) Germany

(51) G05D 1/244
G05D 1/686
B64C 13/18
B64D 45/04
B64D 47/08
G05B 11/36
B64D 45/08
G05D 107/00
G05D 109/25
G05D 111/10
(11) EP4227215
(21) EP22723004.2
(47) 21.05.2025
(87) IB2022050232
19.05.2022
(22) 13.01.2022
(54) AIRCRAFT POSITION CONTROL SYSTEM, AIRCRAFT, AND AIRCRAFT POSITION CONTROL METHOD
(73) Mitsubishi Heavy Industries, Ltd.
(72) KOJIMA, Toru
MORI, Satoshi

(51) G05D 1/246
G05D 1/242
G05D 1/648
G05D 1/698
(11) EP4353422
(21) EP22881195.6
(47) 21.05.2025
(87) KR2022012758
20.04.2023
(22) 25.08.2022
(54) ROBOT, ROBOT SYSTEM AND CONTROLLING METHOD THEREOF
(73) Samsung Electronics Co., Ltd.
(72) KIM, Hyomuk
BAIK, Aron
(31) 20210136679
(32) 14.10.2021
(33) Korea (Republic)

(51) G05D 1/606
G16C 10/00
(11) EP4404016
(21) EP24180489.7
(47) 21.05.2025
(22) 14.11.2018
(54) POTENTIAL AIRCRAFT TRAJECTORY WIND EFFECT COMPUTATION
(73) Gulfstream Aerospace Corporation
(72) PROSSER, Kevin
(31) 201762586022 P
(32) 14.11.2017
(33) United States of America

(51) G05G 1/04
E02F 9/20
G05G 9/047
G05G 1/06
(11) EP3918441
(21) EP20701221.2
(47) 21.05.2025
(87) EP2020051923
06.08.2020
(22) 27.01.2020
(54) IMPROVED JOYSTICK FOR A WORK VEHICLE AND METHOD FOR CONTROLLING THE TEMPERATURE OF SAID JOYSTICK
(73) CNH Industrial Italia S.p.A.
(72) PINTO, Massimo
CAMPANI, Alberto
DATO, Mario Alessio
(31) 201900001217
(32) 28.01.2019
(33) Italy

(51) G06F 1/16
(11) EP4073614
(21) EP20702617.0
(47) 21.05.2025
(87) EP2020052075
05.08.2021
(22) 29.01.2020
(54) FLEXIBLE SUPPORT STRUCTURE FOR A SLIDING FLEXIBLE DISPLAY
(73) Huawei Technologies Co., Ltd.
(72) KESKINEN, Miika
OJANTO, Mika
LI, Xueqiang

(51) G06F 1/16
G06F 1/26
G06F 3/0354

(11) EP4272045
(21) EP20968116.2
(47) 21.05.2025
(87) SG2020050801
07.07.2022
(22) 31.12.2020
(54) BATTERY-OPERATED HANDHELD DEVICE
(73) Razer (Asia-Pacific) Pte. Ltd.
(72) GWEE, Chang Sern
CHIN, Wooi Liang
LIEN, Jian Yao

(51) G06F 1/16
G06F 3/041
H04M 1/02
H10K 59/80
H10K 77/10
H10K 102/00
(11) EP3921879
(21) EP19715066.7
(47) 21.05.2025
(87) EP2019058105
08.10.2020
(22) 29.03.2019
(54) SYMMETRICALLY FOLDABLE DISPLAY STACK FOR ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) HELLE, Saku
ROMO, Jari

(51) G06F 1/16
G06F 3/0482
G06F 3/01
(11) EP4293483
(21) EP23179474.4
(47) 21.05.2025
(22) 13.02.2020
(54) SCREEN CONTROL METHOD, ELECTRONIC DEVICE, AND STORAGE MEDIUM
(73) Huawei Technologies Co. Ltd.
(72) ZHANG, Ziyue
XIONG, Liudong
DING, Ning
ZHANG, Chao
(31) 201910135444
(32) 22.02.2019
(33) China

(51) G06F 1/16
G06T 7/13
G06F 11/32
G06F 3/0481
G06F 3/0484
G06F 3/04847
G06F 3/04883
(11) EP4187349
(21) EP21849460.7
(47) 21.05.2025
(87) KR2021008263
03.02.2022
(22) 30.06.2021
(54) SLIDABLE ELECTRONIC DEVICE AND CONTROL METHOD THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) CHEON, Kawon
YOON, Yeojun
LEE, Soojung
SEO, Jooho
LEE, Seungjoon
LEE, Jaehyuk
KIM, Donghun
KIM, Minsoo
PARK, Seonkeun
CHUNG, Jaewoong
CHOI, Duyeong
(31) 20200094770
(32) 29.07.2020
(33) Korea (Republic)

(51) G06F 1/16
H01R 12/70
H05K 5/02
H05K 7/14
H02J 7/00
G04G 17/00
(11) EP3764195
(21) EP20180872.2
(47) 21.05.2025
(22) 18.06.2020
(54) ELECTRONIC DEVICE AND WEARABLE DEVICE
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) HU, Jianghua
XUE, Yuege
(31) 201921088808 U
(32) 11.07.2019
(33) China

(51) G06F 1/16
H04M 1/02
(11) EP4283145
(21) EP22921760.9
(47) 21.05.2025
(87) CN2022143592
27.07.2023
(22) 29.12.2022
(54) HOOK MECHANISM, SUPPORTING APPARATUS, AND ELECTRONIC DEVICE
(73) Honor Device Co., Ltd.
(72) ZHANG, Yaolei
ZHOU, Guotong
YAN, Bin
ZHANG, Yihe
(31) 202210366995
202210056058
(32) 08.04.2022
18.01.2022
(33) China
China

(51) G06F 1/16
H04M 1/02
F16C 11/04
F16C 11/10
(11) EP4206482
(21) EP22871135.4
(47) 21.05.2025
(87) CN2022114629
13.04.2023
(22) 24.08.2022
(54) ROTARY SHAFT AND TERMINAL DEVICE
(73) Honor Device Co., Ltd.
(72) YANG, Desen
WU, Ling
XU, Zibin
HUO, Guoliang
(31) 202111176779
(32) 09.10.2021
(33) China

(51) G06F 1/16
H04N 23/60
H04N 23/68
H04M 1/72454
G06F 3/04883
G06F 3/04886
(11) EP4170470
(21) EP22164455.2
(47) 21.05.2025
(22) 25.03.2022
(54) CAMERA SHOOTING PROGRAM CONTROL METHOD, ELECTRONIC DEVICE AND STORAGE MEDIUM
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) FAN, Yongkang
Liu, Suyue
YU, Xing
(31) 202111243021
(32) 25.10.2021
(33) China

(51) G06F 1/16
H10K 59/80
H04M 1/02
H10K 102/00
(11) EP3647901
(21) EP19177417.3
(47) 21.05.2025
(22) 29.05.2019
(54) ELECTRONIC DEVICE INCLUDING FOLDABLE DISPLAY
(73) Samsung Electronics Co., Ltd.
(72) KIM, Gidae
KIM, Jungjin
KIM, Jongyoon
BAEK, Moohyun
YOO, Chungkeun
CHOI, Youngsik
LEE, Minsung
(31) 20180063602
(32) 01.06.2018
(33) Korea (Republic)

(51) G06F 1/18
H04L 12/12
H04L 12/40
G06F 1/26
H04L 12/10
(11) EP4131862
(21) EP21902118.5
(47) 21.05.2025
(87) CN2021117575
16.06.2022
(22) 10.09.2021
(54) CONTROL METHOD AND CONTROL APPARATUS FOR COMMUNICATION DEVICE, AND COMMUNICATION SYSTEM AND STORAGE MEDIUM
(73) GD Midea Heating & Ventilating Equipment Co., Ltd.
Midea Group Co., Ltd.
(72) MEI, Lijun
SUN, Liangwei
WU, Tian
LIU, Guofeng
(31) 202011430827
(32) 09.12.2020
(33) China

(51) G06F 1/24
H03K 17/22
G11C 5/14
G11C 7/20
G11C 16/30
(11) EP4078582
(21) EP20901158.4
(47) 21.05.2025
(87) US2020064748
24.06.2021
(22) 14.12.2020
(54) POWER-ON-RESET FOR MEMORY
(73) Micron Technology, Inc.
(72) CAI, Liuchun
(31) 201916722132
(32) 20.12.2019
(33) United States of America

(51) G06F 1/3206
G06F 1/3287
G06F 1/3231
G06F 1/3209
H04W 4/02
H04W 52/02
(11) EP3347792
(21) EP16844848.8
(47) 21.05.2025
(87) US2016044503
16.03.2017
(22) 28.07.2016
(54) COMPUTER ACTIONS BASED ON SENSOR DATA FROM REMOTE DEVICES
(73) Google LLC
(72) GOLDSMITH, Benjamin
CHEN, Jennifer Shien-Ming
KUSCHER, Alexander Friedrich
(31) 201514850880
(32) 10.09.2015
(33) United States of America

(51) G06F 3/01
(11) EP4107603
(21) EP21707314.7
(47) 21.05.2025
(87) FI2021050098
26.08.2021
(22) 12.02.2021
(54) GAZE TRACKING
(73) Seetrue Technologies Oy
(72) TOIVANEN, Miika
LUKANDER, Kristian
BEDNARIK, Roman
BARTCZAK, Piotr
(31) 20205182
(32) 21.02.2020
(33) Finland

(51) G06F 3/01
(11) EP3729239
(21) EP18836910.2
(47) 21.05.2025
(87) IB2018060531
27.06.2019
(22) 21.12.2018
(54) MAPPING METHOD AND SYSTEM FOR MAPPING A REAL ENVIRONMENT
(73) SR Labs S.R.L.
(72) DAL LAGO, Gianluca
DELFIORE, Roberto
(31) 201700149372
(32) 22.12.2017
(33) Italy

(51) G06F 3/01
A61B 3/113
G06F 3/0485
G06F 3/0481
G06F 3/04842
G06F 3/04845
(11) EP4127869
(21) EP21717647.8
(47) 21.05.2025
(87) US2021022413
30.09.2021
(22) 15.03.2021
(54) DEVICES, METHODS, AND GRAPHICAL USER INTERFACES FOR GAZE-BASED NAVIGATION
(73) Apple Inc.
(72) PLA I CONESA, Pol
ORDING, Bas
LEMAY, Stephen O.
BAUERLY, Kristi E.
CHIU, Shih-Sang
RAVASZ, Jonathan
KRIVORUCHKO, Evgenii
(31) 202063131754 P
202063001210 P
(32) 29.12.2020
27.03.2020
(33) United States of America
United States of America

(51) G06F 3/01
G02B 6/26
G02B 6/34
G02F 1/01
G06T 7/20
G02B 27/01
G06F 1/16
G06F 3/04815
G06F 3/0346
G06T 19/00
G06V 20/20
G06V 10/82
G06V 10/764
(11) EP3861387
(21) EP19868676.8
(47) 21.05.2025
(87) US2019054836
09.04.2020
(22) 04.10.2019
(54) RENDERING LOCATION SPECIFIC VIRTUAL CONTENT IN ANY LOCATION
(73) Magic Leap, Inc.
(72) BRODSKY, Jonathan
BUSTO, Javier Antonio
SMITH, Martin Wilkins
(31) 201862742061 P
(32) 05.10.2018
(33) United States of America

(51) G06F 3/01
G06F 3/0346
G06F 3/0481
A61M 21/02
A61B 5/0205
A61B 5/11
A61B 5/16
A61B 5/00
G06F 1/16
H04M 1/72403
H04M 1/72412
A61M 21/00
(11) EP3699733
(21) EP20158049.5
(47) 21.05.2025
(22) 18.02.2020
(54) ELECTRONIC DEVICE INCLUDING MEDITATION APPLICATION
(73) Samsung Electronics Co., Ltd.
(72) Lim, Jinmook
Kang, Seunggu
Kim, Hyogil
Suh, Haebahremahram
Baek, Kumhwa
(31) 20190019441
(32) 19.02.2019
(33) Korea (Republic)

(51) G06F 3/01
G06F 3/0346
G06F 3/04815
G06F 3/04842
G06T 15/20
H04N 5/445
H04N 13/00
H04N 21/422
H04N 21/4223
H04N 21/431
H04N 21/47
H04N 21/81
H04N 21/482
H04N 13/341
H04N 13/279
H04N 13/156
H04N 13/183
H04N 13/366
(11) EP3441851
(21) EP18175389.8
(47) 21.05.2025
(22) 24.09.2010
(54) SYSTEMS AND METHODS FOR NAVIGATING A THREE-DIMENSIONAL MEDIA GUIDANCE APPLICATION
(73) Adeia Guides Inc.
(72) KLAPPERT, Walter R.
WOODS, Thomas Steven
CHILVERS, Henry C.
(31) 571287
571283
(32) 30.09.2009
30.09.2009
(33) United States of America
United States of America

(51) G06F 3/01
G06F 3/041
G06F 3/04815
(11) EP4260164
(21) EP21827210.2
(47) 21.05.2025
(87) GB2021053145
16.06.2022
(22) 02.12.2021
(54) AUGMENTED REALITY WINDOW
(73) BAE SYSTEMS plc
(72) LEADBETTER, James Hugo
(31) 202019489
(32) 10.12.2020
(33) United Kingdom

(51) G06F 3/01
G06F 3/0481
G06T 15/20
G06T 19/00
(11) EP3862851
(21) EP21153155.3
(47) 21.05.2025
(22) 25.01.2021
(54) DISPLAYING A WINDOW IN AN AUGMENTED REALITY VIEW
(73) Lenovo (Singapore) Pte. Ltd.
(72) NICHOLSON, John, Weldon
CROMER, Daryl, C.
LOCKER, Howard
(31) 202016784544
(32) 07.02.2020
(33) United States of America

(51) G06F 3/01
G06F 3/14
G06V 40/20
G06V 40/10
G06V 20/20
G06V 10/44
G09G 5/32
G09G 5/38
G09G 5/377
G09G 5/397
(11) EP4064050
(21) EP20891739.3
(47) 21.05.2025
(87) CN2020128397
03.06.2021
(22) 12.11.2020
(54) DATA PROCESSING METHOD AND APPARATUS, USER EQUIPMENT, AND AUGMENTED REALITY SYSTEM
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) PENG, Dongwei
(31) 201911184860
(32) 27.11.2019
(33) China

(51) G06F 3/01
G06Q 10/0631
G01V 20/00
H04L 67/12
(11) EP3990949
(21) EP20832529.0
(47) 21.05.2025
(87) US2020040072
30.12.2020
(22) 29.06.2020
(54) FIELD DATA ACQUISITION
(73) GeoQuest Systems B.V.
(72) SLETTEMEAS, Tormod
(31) 201962868103 P
(32) 28.06.2019
(33) United States of America

(51) G06F 3/01
G06T 19/00
G02B 27/01
G06F 3/00
G06V 20/20
G02B 27/00
(11) EP3805900
(21) EP19852488.6
(47) 21.05.2025
(87) KR2019000100
27.02.2020
(22) 03.01.2019
(54) WEARABLE DEVICE AND CONTROL METHOD THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) YOON, Chiyul
(31) 20180097266
(32) 21.08.2018
(33) Korea (Republic)

(51) G06F 3/038
F24C 7/08
F24C 3/12
G06F 3/0354
G06F 3/041
G06F 3/0488
(11) EP3839704
(21) EP19884115.7
(47) 21.05.2025
(87) KR2019015310
22.05.2020
(22) 12.11.2019
(54) COOKING DEVICE AND CONTROL METHOD THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) JOO, Youngwoong
YUN, Changsun
(31) 20180141738
(32) 16.11.2018
(33) Korea (Republic)

(51) G06F 3/038
G06F 3/023
G06F 3/0354
H04L 1/18
H04L 5/00
H04W 72/02
H04W 72/04
H04B 1/715
H04L 1/00
H04B 1/7143
H04W 72/0446
H04L 1/1867
H04B 1/7156
(11) EP4172791
(21) EP20942364.9
(47) 21.05.2025
(87) SG2020050364
30.12.2021
(22) 25.06.2020
(54) WIRELESS DATA COMMUNICATION METHOD AND COMPUTER PERIPHERAL DEVICE
(73) Razer (Asia-Pacific) Pte. Ltd.
(72) LEE, Kah Yong
CHAN, Chee Oei

(51) G06F 3/041
G06F 3/044
H10K 59/131
H10K 59/40
H10K 59/65
H10K 59/88
H10K 77/10
H10K 59/12
H10K 59/80
(11) EP3694000
(21) EP20155905.1
(47) 21.05.2025
(22) 06.02.2020
(54) ELECTRONIC PANEL AND ELECTRONIC DEVICE INCLUDING SAME
(73) Samsung Display Co., Ltd.
(72) Park, HyungJun
Kwak, Wonkyu
(31) 20190014485
(32) 07.02.2019
(33) Korea (Republic)

(51) G06F 3/041
G06F 3/048
G06F 3/14
(11) EP4109226
(21) EP22189535.2
(47) 21.05.2025
(22) 23.09.2011
(54) METHOD AND APPARATUS FOR EDITING HOME SCREEN IN TOUCH DEVICE
(73) Samsung Electronics Co., Ltd.
(72) LEE, Sang Ki
YOUN, Su Jung
LIM, Kyoung Ae
SHIM, Su Mi
LIM, Wan Soo
(31) 20100092840
(32) 24.09.2010
(33) Korea (Republic)

(51) G06F 3/044
G06F 1/16
(11) EP4016259
(21) EP20861535.1
(47) 21.05.2025
(87) CN2020113518
11.03.2021
(22) 04.09.2020
(54) TOUCH SENSOR, TOUCH DISPLAY SCREEN, AND ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) WANG, Huan
ZHANG, Junyong
FANG, Gang
(31) 201910840030
(32) 06.09.2019
(33) China

(51) G06F 3/048
G06F 16/25
(11) EP3935483
(21) EP20766534.0
(47) 21.05.2025
(87) US2020019891
10.09.2020
(22) 26.02.2020
(54) INDUSTRY STANDARD INTERFACE FOR MAINTENANCE OF ENTERPRISE SYSTEMS
(73) ADP, Inc.
(72) KLEIN, Eitan
NOAD, Richard
BAR-LEV, Dan
AZOULAY, Norman, Guillaume
(31) 201916295313
(32) 07.03.2019
(33) United States of America

(51) G06F 3/0481
G06F 3/0483
(11) EP4195011
(21) EP21881659.3

(47) 21.05.2025
(87) CN2021111846
28.04.2022
(22) 10.08.2021
(54) CHARACTER DISPLAY METHOD AND APPARATUS, AND ELECTRONIC DEVICE AND COMPUTER-READABLE STORAGE MEDIUM
(73) BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.
(72) ZHUGE, Jingjing
NI, Guangyao
CHEN, Yepeng
SHEN, Yanhao
YANG, Hui
(31) 202011143511
(32) 23.10.2020
(33) China

(51) G06F 3/0481
G06F 3/0488
G06F 3/04817
G06F 3/04883
(11) EP3809248
(21) EP18928621.4
(47) 21.05.2025
(87) CN2018097794
06.02.2020
(22) 31.07.2018
(54) APPLICATION ICON DISPLAY METHOD AND TERMINAL
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) ZHANG, Qing
YAN, Guoqi

(51) G06F 3/0484
G06F 1/16
G06T 15/20
G06T 17/00
G06F 3/04845
(11) EP4047464
(21) EP20890256.9
(47) 21.05.2025
(87) CN2020124485
27.05.2021
(22) 28.10.2020
(54) SCREENSHOT DISPLAY METHOD AND APPARATUS, AND TERMINAL DEVICE
(73) Huawei Technologies Co., Ltd.
(72) YU, Mailin
YE, Yun
(31) 201911155018
(32) 22.11.2019
(33) China

(51) G06F 3/04845
G06F 3/04847
G06F 3/04883
G06T 11/60
H04N 5/222
H04N 23/63
H04N 23/667
H04N 23/60
(11) EP3827334
(21) EP19769316.1
(47) 21.05.2025
(87) US2019049101
19.03.2020
(22) 30.08.2019
(54) USER INTERFACES FOR SIMULATED DEPTH EFFECTS
(73) Apple Inc.
(72) MANZARI, Johnnie B.
BALE, Arathi S.
BAER, Richard L.
SEELY, Richard David
SORRENTINO III, William A.
PIVONKA, Pavel
SOUZA DOS SANTOS, Andre
DYE, Alan C.
IVE, Jonathan P.
(31) PA201870623
201816144629
201862729926 P
(32) 24.09.2018
27.09.2018
11.09.2018
(33) Denmark
United States of America
United States of America

(51) G06F 3/04845
G06V 30/226
G06F 3/14
G06F 3/147
H04L 12/28
G09G 5/377
G09G 5/373
G09G 5/14
G06F 3/0488
(11) EP3882754
(21) EP19907662.1
(47) 21.05.2025
(87) KR2019018572
09.07.2020
(22) 27.12.2019
(54) ELECTRONIC DEVICE AND CONTROLLING METHOD THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) HONG, Joohwan
BAE, Sangjun
JO, Kyuho
LEE, Munkeun
(31) 20190000651
(32) 03.01.2019
(33) Korea (Republic)

(51) G06F 3/0487
G06F 1/16
G06F 3/01
G11B 27/34
H04M 1/02
G06F 3/14
G06F 3/04847
(11) EP3859504
(21) EP19867521.7
(47) 21.05.2025
(87) CN2019099923
02.04.2020
(22) 09.08.2019
(54) MULTIMEDIA FILE PLAYBACK CONTROL METHOD AND TERMINAL DEVICE
(73) VIVO MOBILE COMMUNICATION CO., LTD.
(72) ZHU, Yuxuan
(31) 201811126022
(32) 26.09.2018
(33) China

(51) G06F 3/0488
H04N 5/262
H04N 23/63
H04N 23/698
H04N 23/62
(11) EP3920523
(21) EP20749633.2
(47) 21.05.2025
(87) CN2020073893
06.08.2020
(22) 22.01.2020
(54) PHOTOGRAPHING METHOD AND TERMINAL DEVICE
(73) VIVO MOBILE COMMUNICATION CO., LTD.
(72) ZHAO, Yufei
(31) 201910101415
(32) 31.01.2019
(33) China

(51) G06F 3/06
(11) EP3846017
(21) EP19862183.1
(47) 21.05.2025
(87) CN2019099628
26.03.2020
(22) 07.08.2019
(54) RESOURCE ALLOCATION METHOD AND DEVICE FOR HARD DISKS IN DISTRIBUTED STORAGE SYSTEM
(73) Huawei Cloud Computing Technologies Co., Ltd.
(72) DING, Jingwen
(31) 201811105460
(32) 20.09.2018
(33) China

(51) G06F 3/06
(11) EP4030273
(21) EP20877442.2
(47) 21.05.2025
(87) CN2020121843
22.04.2021
(22) 19.10.2020
(54) DATA STORAGE METHOD AND DEVICE
(73) Huawei Technologies Co., Ltd.
(72) RAO, Zhi
(31) 201910999337
(32) 17.10.2019
(33) China

(51) G06F 3/06
(11) EP4033345
(21) EP20877887.8
(47) 21.05.2025
(87) CN2020120977
22.04.2021
(22) 14.10.2020
(54) DATA ACCESS METHOD, DEVICE, AND FIRST COMPUTER DEVICE
(73) Huawei Technologies Co., Ltd.
(72) LI, Tao
GISSIN, Victor
YU, Haixin
(31) 201910995668
(32) 18.10.2019
(33) China

(51) G06F 3/06
(11) EP4095667
(21) EP21785433.0
(47) 21.05.2025
(87) CN2021081210

14.10.2021
(22) 17.03.2021
(54) DATA MANAGEMENT APPARATUS, DATA MANAGEMENT METHOD, AND DATA STORAGE DEVICE
(73) Huawei Technologies Co. Ltd.
(72) ZHU, Xiaoming
(31) 202010718684
202010271256
(32) 23.07.2020
08.04.2020
(33) China
China

(51) G06F 3/06
G06F 11/10
(11) EP3516496
(21) EP17857809.2
(47) 21.05.2025
(87) CN2017101534
12.04.2018
(22) 13.09.2017
(54) DATA PROTECTION FOR A COLD STORAGE SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) ZHU, Xiaogang
MORTAZAVI, Masood
(31) 201615285128
(32) 04.10.2016
(33) United States of America

(51) G06F 3/06
G06F 11/10
G06F 12/02
(11) EP3992769
(21) EP20847721.6
(47) 21.05.2025
(87) CN2020100795
04.02.2021
(22) 08.07.2020
(54) DATA STORAGE METHOD AND APPARATUS, COMPUTING DEVICE, STORAGE SYSTEM, AND STORAGE MEDIUM
(73) Huawei Technologies Co., Ltd.
(72) HE, Changjun
CHEN, Can
(31) 201910697302
(32) 30.07.2019
(33) China

(51) G06F 3/06
G06F 16/21
G06F 13/16
G06F 13/28
(11) EP3850474
(21) EP19859606.6
(47) 21.05.2025
(87) US2019046454
19.03.2020
(22) 14.08.2019
(54) HYBRID MEMORY SYSTEM INTERFACE
(73) Micron Technology, Inc.
(72) CARACCIO, Danilo
DALLABORA, Marco
BALLUCHI, Daniele
AMATO, Paolo
PORZIO, Luca
(31) 201816128882
(32) 12.09.2018
(33) United States of America

(51) G06F 3/12
B41J 11/00
B41J 3/28
(11) EP3869320
(21) EP20158575.9
(47) 21.05.2025
(22) 20.02.2020
(54) FLATBED PRINTER AND METHOD FOR PRINTING PRINT JOBS ON MEDIA PIECES PLACEABLE ON A FLATBED OF THE FLATBED PRINTER
(73) Canon Production Printing Holding B.V.
(72) GUERMONT, Jérôme O.R.
IACOB, Violeta
VULPE, Radu
BADITA, Raul D.
CHESNIOU, Andrei C.
ALEXANDRU, Ioan M.

(51) G06F 3/12
G06Q 10/08
G06Q 10/0875
G06Q 30/00
G06Q 30/018
(11) EP3797348
(21) EP19724537.6
(47) 21.05.2025
(87) EP2019063133
28.11.2019
(22) 21.05.2019
(54) PRINTING METHOD AND SYSTEM FOR SERIALIZED INFORMATION
(73) Dover Europe Sàrl
(72) VEENMA, Roger
(31) 18173433
(32) 21.05.2018
(33) European Patent Office (EPO)

(51) G06F 3/14
G06F 3/147
(11) EP4078356
(21) EP19828778.1
(47) 21.05.2025
(87) EP2019086875
24.06.2021
(22) 20.12.2019
(54) ELECTRONIC SHELF LABEL WITH INTERACTION INTERFACE ACTIVATION
(73) VusionGroup GmbH
(72) OOSTHOEK, Jan

(51) G06F 3/147
(11) EP3667492
(21) EP20156364.0
(47) 21.05.2025
(22) 13.07.2014
(54) SYSTEM AND METHOD FOR PROMOTING CONNECTIVITY BETWEEN A MOBILE COMMUNICATION DEVICE AND A VEHICLE TOUCH SCREEN
(73) B.N.C. Systems Ltd.
(72) GUTENTAG, Oded
TAVYUMI, Haggay
(31) 201313942094
(32) 15.07.2013
(33) United States of America

(51) G06F 3/16
H04S 3/00
A63F 13/211
A63F 13/212
A63F 13/215
A63F 13/25
A63F 13/428
A63F 13/54
G02B 27/00
G02B 27/01
A63F 13/5255
G06F 21/62
G10L 21/06
H04R 5/033
H04S 7/00
(11) EP3994563
(21) EP20743934.0
(47) 21.05.2025
(87) US2020040705
07.01.2021
(22) 02.07.2020
(54) PRIVACY RESTRICTIONS FOR AUDIO RENDERING
(73) QUALCOMM INCORPORATED
(72) SWAMINATHAN, Siddhartha Goutham
MUNOZ, Isaac Garcia
PETERS, Nils Günther
SALEHIN, S M Akramus
(31) 202016918297
201962870473 P
(32) 01.07.2020
03.07.2019
(33) United States of America
United States of America

(51) G06F 8/10
G06F 8/35
G06F 8/60
G06F 11/36
(11) EP4224309
(21) EP23166646.2
(47) 21.05.2025
(22) 05.08.2016
(54) MODEL INTEGRATION TOOL
(73) Equifax, Inc.
(72) INDURTHIVENKATA, Rajesh
THAKUR, Nandita
VENKATARAMANI, Lalithadevi
SOMAKA, Aparna
ZHANG, Xingjun
TURNER, Matthew
KOSHYARI, Bhawana
NAGARAJAN, Vijay
REID, James
(31) 201562201258 P
(32) 05.08.2015
(33) United States of America

(51) G06F 8/34
G06F 8/35
G06F 8/36
G05B 19/042
(11) EP4345602
(21) EP23187234.2
(47) 21.05.2025
(22) 24.07.2023
(54) PRESENTATION DESIGN TO AUTOMATION DEVICE BINDING
(73) Rockwell Automation Technologies, Inc.
(72) Pierce, Scott A.
Pitrinec, Petr

Vitek, Roman
Paulicek, Martin
Hanzeli, Michal
(31) 202217935615
(32) 27.09.2022
(33) United States of America

(51) G06F 8/36
G06F 8/77
(11) EP3734443
(21) EP19187167.2
(47) 21.05.2025
(22) 19.07.2019
(54) INTELLIGENT APPLICATION PROGRAMMING INTERFACE (API) PROXY DESIGN SYSTEM
(73) SAP SE
(72) VENKATESH, Sandeep
SRIRAM, Aditya
MISHRA, Pallavi
SHARMA, Jyoti
(31) 201916401669
(32) 02.05.2019
(33) United States of America

(51) G06F 8/36
G06F 9/445
G06F 8/71
A63F 13/48
G06F 9/451
G06Q 50/00
H04L 51/046
A63F 13/61
A63F 13/87
A63F 13/792
A63F 13/92
G06Q 30/0207
H04L 51/52
(11) EP3908921
(21) EP20703862.1
(47) 21.05.2025
(87) US2020012735
16.07.2020
(22) 08.01.2020
(54) DYNAMIC APPLICATION CONFIGURATION
(73) Snap Inc.
(72) EIRINBERG, Dylan Shane
JENSEN, John
OSBORNE, Alexander R.
WU, William
(31) 201916408036
201962789823 P
(32) 09.05.2019
08.01.2019
(33) United States of America
United States of America

(51) G06F 8/38
G06F 16/958
G06F 8/34
(11) EP4068086
(21) EP22173703.4
(47) 21.05.2025
(22) 31.08.2015
(54) INTERACTIVE WEB APPLICATION EDITOR
(73) MK Systems USA Inc.
(72) UNTER ECKER, Oliver
WESTMAN, Nickolas
(31) 201414580172
201462048774 P
(32) 22.12.2014
10.09.2014
(33) United States of America
United States of America

(51) G06F 8/41
G06N 3/063
G06F 9/38
G06F 12/0811
G06F 12/0813
G06F 9/50
G06N 3/045
G06N 3/082
(11) EP4128093
(21) EP21782147.9
(47) 21.05.2025
(87) US2021025001
07.10.2021
(22) 30.03.2021
(54) MACHINE LEARNING NETWORK IMPLEMENTED BY STATICALLY SCHEDULED INSTRUCTIONS
(73) Sima Technologies, Inc.
(72) SHAH, Nishit
KOTLER, Reed
DHRUVANARAYAN, Srivathsa
ISKAROUS, Moenes Zaher
PRASAD, Kavitha
CHOBE, Yogesh Laxmikant
ATTIA, Sedny, S. J.
GILLILAND, Spenser Don
TAYLOR, Bradley
(31) 202016846263
202016841601
202016841598
202016840216
(32) 10.04.2020
06.04.2020
06.04.2020
03.04.2020
(33) United States of America
United States of America
United States of America
United States of America

(51) G06F 8/65
G06F 11/14
(11) EP3901764
(21) EP21171046.2
(47) 21.05.2025
(22) 03.10.2017
(54) UPDATE COURIER FOR VEHICULAR COMPUTING DEVICES
(73) Google LLC
(72) RAMIC, Haris
SAUER, Nicholas

(51) G06F 8/65
G06F 11/14
(11) EP4184316
(21) EP23151114.8
(47) 21.05.2025
(22) 06.07.2021
(54) SOFTWARE UPDATE APPARATUS, SOFTWARE UPDATE METHOD, NON-TRANSITORY STORAGE MEDIUM STORING PROGRAM, VEHICLE, AND OTA MASTER
(73) TOYOTA JIDOSHA KABUSHIKI KAISHA
(72) FUKUYO, Satoru
ISHIKAWA, Tomoyasu
SATOH, Yusuke
(31) 2020117848
(32) 08.07.2020
(33) Japan

(51) G06F 8/71
(11) EP4060485
(21) EP22162697.1
(47) 21.05.2025
(22) 17.03.2022
(54) INDUSTRIAL AUTOMATION DISTRIBUTED PROJECT CONTROL WITH MILESTONE ROLLBACK
(73) Rockwell Automation Technologies, Inc.
(72) Stump, Andrew R
Carrara, Anthony
Srinivasan, Eashwer
Josipovic, Srdjan
Gregory, Adam J
Coan, Michael J
(31) 202117207514
(32) 19.03.2021
(33) United States of America

(51) G06F 8/72
G06F 8/71
(11) EP4009162
(21) EP20858958.0
(47) 21.05.2025
(87) CN2020111326
04.03.2021
(22) 26.08.2020
(54) CODE CHANGE METHOD AND DEVICE
(73) Huawei Cloud Computing Technologies Co., Ltd.
(72) LIANG, Guangtai
WU, Tianyong
CHENG, Xiao
WANG, Zeyu
WEI, Zhao
(31) 201910877510
201910792544
(32) 17.09.2019
26.08.2019
(33) China
China

(51) G06F 8/77
G06F 8/36
G06F 8/75
G06F 11/34
G06F 21/52
G06F 21/56
(11) EP4177737
(21) EP22194652.8
(47) 21.05.2025
(22) 08.09.2022
(54) IDENTIFYING APPLICATION PROGRAM INTERFACE USE IN A BINARY CODE
(73) BlackBerry Limited
(72) WURSTER, Glenn Daniel
CHIN, Andrew
GNAHM, Benjamin
(31) 202117520445
(32) 05.11.2021
(33) United States of America

(51) G06F 9/4401
G06F 1/3234

H04L 12/12
(11) EP4300296
(21) EP22181131.8
(47) 21.05.2025
(22) 27.06.2022
(54) COMMUNICATION DEVICE AND OPERATING METHOD
(73) u-blox AG
(72) Quantrill, Adam

(51) G06F 9/4401
G06F 9/455
G06F 9/48
A63F 13/49
A63F 13/71
G06F 21/57
G06F 21/62
(11) EP4055475
(21) EP20808240.4
(47) 21.05.2025
(87) US2020057262
14.05.2021
(22) 26.10.2020
(54) SAVING AND RESTORING VIRTUAL MACHINE STATES AND HARDWARE STATES FOR APPLICATION CONTENT
(73) Microsoft Technology Licensing, LLC
(72) MCNULTY, Mark James
HAUGLIE, Blaine Craig
WOLFTEICH, Paul Joseph
FAHRIG, Thomas
CUTLER, David Neil
(31) 202016774610
201962931624 P
(32) 28.01.2020
06.11.2019
(33) United States of America
United States of America

(51) G06F 9/451
(11) EP4248313
(21) EP21827464.5
(47) 21.05.2025
(87) US2021059987
27.05.2022
(22) 18.11.2021
(54) SYSTEM AND METHOD FOR SELECTIVELY IMPLEMENTING LAYOUT CONFIGURATIONS AMONGST OBJECT GROUPINGS OF A DESIGN UNDER EDIT
(73) Figma, Inc.
(72) KUWAMOTO, Sho
WU, William
WICHARY, Marcin
LIN, Emily
ANDERSSON, Rasmus
RILEE, Kenrick
KLEIN, Nikolas
RASMUSSEN, Kris
(31) 202063115608 P
(32) 18.11.2020
(33) United States of America

(51) G06F 9/451
G01V 1/34
E21B 47/12
E21B 21/01
E21B 7/04
G01V 3/38
G06F 3/0481
E21B 43/26
(11) EP3948530
(21) EP20779106.2
(47) 21.05.2025
(87) US2020024636
01.10.2020
(22) 25.03.2020
(54) GEOLOGIC FORMATION OPERATIONS FRAMEWORK
(73) Geoquest Systems B.V.
(72) FEINSTEIN, Oren
(31) 201962824418 P
(32) 27.03.2019
(33) United States of America

(51) G06F 9/451
G06F 3/048
(11) EP4150449
(21) EP21722262.9
(47) 21.05.2025
(87) EP2021061765
18.11.2021
(22) 04.05.2021
(54) ADAPTABLE GUI FOR DASHBOARD SOFTWARE
(73) BASF Coatings GmbH
(72) KLAHM, Sebastian
(31) 20173995
(32) 11.05.2020
(33) European Patent Office (EPO)

(51) G06F 9/455
G06F 8/656
(11) EP4080358
(21) EP20905775.1
(47) 21.05.2025
(87) CN2020133341
01.07.2021
(22) 02.12.2020
(54) VIRTUAL MACHINE DEPLOYMENT AND HOT-MIGRATION METHODS, VMM UPGRADE METHOD, AND SERVER
(73) ZTE Corporation
(72) ZHANG, Min
LIU, Yi
LI, Yi
(31) 201911355638
(32) 25.12.2019
(33) China

(51) G06F 9/50
(11) EP3676705
(21) EP18758628.4
(47) 21.05.2025
(87) EP2018072966
07.03.2019
(22) 27.08.2018
(54) APPLICATION FUNCTION IN A NETWORK AND CONTROL THEREOF
(73) Koninklijke KPN N.V.
Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO
(72) D'ACUNTO, Lucia
NOOREN, Pieter
DIMITROVSKI, Toni
(31) 17188139
(32) 28.08.2017
(33) European Patent Office (EPO)

(51) G06F 9/54
G06F 12/10
G06F 12/02
(11) EP3690651
(21) EP18866517.8
(47) 21.05.2025
(87) CN2018113510
18.04.2019
(22) 01.11.2018
(54) METHOD AND SYSTEM FOR INTER-PROCESS COMMUNICATION
(73) Huawei Technologies Co., Ltd.
(72) YANG, Qibin
LIU, Senyu
BIE, Xiaohui
(31) 201710954668
(32) 13.10.2017
(33) China

(51) G06F 11/07
G06F 11/30
G06F 21/44
(11) EP4365740
(21) EP23197503.8
(47) 21.05.2025
(22) 14.09.2023
(54) CHIP MONITORING METHOD AND APPARATUS
(73) Horizon Journey (Hangzhou) Artificial Intelligence Technology Co., Ltd.
(72) JIN, Lingfang
(31) 202211364803
(32) 02.11.2022
(33) China

(51) G06F 11/08
G06F 11/16
G06F 11/20
G06F 15/16
G06F 15/177
G06F 11/10
(11) EP3360045
(21) EP16854240.5
(47) 21.05.2025
(87) US2016055553
13.04.2017
(22) 05.10.2016
(54) DATA RECOVERY IN A DISTRIBUTED STORAGE SYSTEM
(73) NetApp, Inc.
(72) JESS, Martin
MOORE, Joseph
HUANG, Ziling
(31) 201514876063
(32) 06.10.2015
(33) United States of America

(51) G06F 11/14
G06F 9/48
(11) EP2676198
(21) EP12707683.4
(47) 21.05.2025
(87) US2012025388
23.08.2012
(22) 16.02.2012
(54) RESTARTING PROCESSES
(73) Ab Initio Technology LLC
(72) DOUROS, Bryan Phil
WHOLEY, Joseph Skeffington III
(31) 201113030998
(32) 18.02.2011
(33) United States of America

(51) G06F 11/14

G06F 11/16
G06F 16/11
G06F 16/27
(11) EP4327208
(21) EP21802557.5
(47) 21.05.2025
(87) US2021055338
27.10.2022
(22) 18.10.2021
(54) SNAPSHOT-BASED DATA CORRUPTION DETECTION
(73) Microsoft Technology Licensing, LLC
(72) BUDOVSKI, Alexander
DIACONU, Cristian
LINGAM, Sandeep
SAENZ, Alejandro Hernandez
PRAKASH, Naveen
REISTETER, Krystyna Ewa
RAMOS, Rogerio
HU, Huanhui
BYRNE, Peter
(31) 202117237707
(32) 22.04.2021
(33) United States of America

(51) G06F 11/20
G06F 11/07
(11) EP3995965
(21) EP19938398.5
(47) 21.05.2025
(87) CN2019097260
28.01.2021
(22) 23.07.2019
(54) METHOD OF ACHIEVING STORAGE SERVICE CONTINUITY IN STORAGE SYSTEM, FRONT-END INTERFACE CARD, AND STORAGE SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) XU, Qiming
CHEN, Can
YANG, Song
ZHOU, Linan
YAN, Dahong
YANG, Juntao

(51) G06F 12/02
G06F 12/14
(11) EP3647959
(21) EP19207036.5
(47) 21.05.2025
(22) 05.11.2019
(54) DATA STORAGE DEVICE AND DATA STORAGE SYSTEM
(73) Samsung Electronics Co., Ltd.
(72) SONG, Byung June
YOON, Song Ho
(31) 20180134091
(32) 05.11.2018
(33) Korea (Republic)

(51) G06F 12/1036
G06F 12/1081
G06F 11/30
(11) EP4235435
(21) EP23175122.3
(47) 21.05.2025
(22) 03.12.2019
(54) LOGGING PAGES ACCESSED FROM I/O DEVICES
(73) Google LLC
(72) MUKHERJEE, Shrijeet Subhabrata
CHANDRA, Prashant
ZBICIAK, Joseph Raymond Michael
CAVILLA, Horacio Andres Lagar
DILLOW, David Alan
(31) 201916551452
201962846377 P
(32) 26.08.2019
10.05.2019
(33) United States of America
United States of America

(51) G06F 12/14
(11) EP4180976
(21) EP20946738.0
(47) 21.05.2025
(87) CN2020106451
03.02.2022
(22) 31.07.2020
(54) MEMORY PROTECTION METHOD AND PROTECTION PROXY CONTROL APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) LIU, Junlong

(51) G06F 12/14
G06F 21/78
(11) EP4339790
(21) EP23196084.0
(47) 21.05.2025
(22) 07.09.2023
(54) STORAGE DEVICE DELETING ENCRYPTION KEY, METHOD OF OPERATING THE SAME, AND METHOD OF OPERATING ELECTRONIC DEVICE INCLUDING THE SAME
(73) Samsung Electronics Co., Ltd.
(72) KIM, Changhwan
SHIN, Mingon
KIM, Jisoo
(31) 20230030721
20220115876
202318356295
(32) 08.03.2023
14.09.2022
21.07.2023
(33) Korea (Republic)
Korea (Republic)
United States of America

(51) G06F 13/00
G06F 12/02
G06F 12/06
G06F 9/30
G06N 3/063
G11C 11/54
(11) EP3729279
(21) EP18890583.0
(47) 21.05.2025
(87) US2018067301
27.06.2019
(22) 21.12.2018
(54) A UNIFIED MEMORY ORGANIZATION FOR NEURAL NETWORK PROCESSORS
(73) T-Head (Shanghai) Semiconductor Co., Ltd.
(72) HAN, Liang
JIANG, Xiaowei
CHEN, Jian
(31) 201815984255
201762610119 P
(32) 18.05.2018
22.12.2017
(33) United States of America
United States of America

(51) G06F 13/16
G11C 7/04
G11C 7/22
G11C 16/10
G11C 16/32
(11) EP3992803
(21) EP21185065.6
(47) 21.05.2025
(22) 12.07.2021
(54) STORAGE DEVICE AND OPERATING METHOD OF STORAGE DEVICE
(73) Samsung Electronics Co., Ltd.
(72) LIM, Jaehwan
KIM, Sung-Wook
KIM, Jae Eun
YOU, Daehun
JUN, Walter
(31) 20200144166
202117360099
(32) 02.11.2020
28.06.2021
(33) Korea (Republic)
United States of America

(51) G06F 13/38
G06F 13/40
(11) EP4280072
(21) EP21925506.4
(47) 21.05.2025
(87) CN2021140164
18.08.2022
(22) 21.12.2021
(54) DATA TRANSMISSION METHOD OF ELECTRONIC DEVICE, ELECTRONIC DEVICE, AND INTERFACE CIRCUIT
(73) Huawei Technologies Co. Ltd.
(72) XU, Yingqi
CHEN, Juntao
TANG, Zhiyong
(31) 202110186512
(32) 10.02.2021
(33) China

(51) G06F 15/173
G06F 9/54
(11) EP3699770
(21) EP20156490.3
(47) 21.05.2025
(22) 10.02.2020
(54) COLLECTIVE COMMUNICATION SYSTEM AND METHODS
(73) Mellanox Technologies, Ltd.
(72) GRAHAM, Richard
LEVI, Lion
BLOCH, Gil
MARCOVITCH, Daniel
BLOCH, Noam
QIN, Yong
BLUMENFELD, Yaniv
ZAHAVI, Eitan
(31) 201962809786 P
(32) 25.02.2019
(33) United States of America

(51) G06F 16/174
(11) EP3828724

(21) EP20201171.4
(47) 21.05.2025
(22) 16.08.2013
(54) DELTA VERSION CLUSTERING AND RE-ANCHORING
(73) Exagrid Systems, Inc.
(72) VANDERSPEK, Adrian
POIRIER, Jamey C.
MAKOSKY, Lucas H.
RAMU, Ashok T.
HECKER, Mark Bennett
HANSEN, Thomas G.
THERRIEN, David G.
(31) 201261683791 P
(32) 16.08.2012
(33) United States of America

(51) G06F 16/188
H04L 67/1097
(11) EP4030724
(21) EP20868383.9
(47) 21.05.2025
(87) CN2020118047
01.04.2021
(22) 27.09.2020
(54) IMAGE FILE MANAGEMENT METHODS, APPARATUSES AND STORAGE MEDIUMS
(73) Huawei Cloud Computing Technologies Co., Ltd.
(72) LUO, Rui
YIN, Wei
(31) 201910918335
(32) 26.09.2019
(33) China

(51) G06F 16/21
G06F 11/34
G06N 20/00
(11) EP4216073
(21) EP21871150.5
(47) 21.05.2025
(87) CN2021113294
31.03.2022
(22) 18.08.2021
(54) DATA MANAGEMENT METHOD, DATA MANAGEMENT APPARATUS, AND STORAGE MEDIUM
(73) ZTE Corporation
(72) ZHENG, Xingquan
WANG, Aijun
YU, Zhen
(31) 202011002790
(32) 22.09.2020
(33) China

(51) G06F 16/22
G06F 16/23
G06F 16/2453
G06F 16/2458
G06F 16/25
G06F 16/27
G06F 16/951
(11) EP3532945
(21) EP17791880.2
(47) 21.05.2025
(87) US2017057033
03.05.2018
(22) 17.10.2017
(54) FACILITATING OPERATIONS ON PLUGGABLE DATABASES USING SEPARATE LOGICAL TIMESTAMP SERVICES
(73) Oracle International Corporation
(72) LI, Yunrui
RAJAMANI, Kumar
(31) 201615339525
(32) 31.10.2016
(33) United States of America

(51) G06F 16/22
G06F 16/901
(11) EP4334821
(21) EP21724667.7
(47) 21.05.2025
(87) EP2021062205
10.11.2022
(22) 07.05.2021
(54) HIERARCHICAL ACCUMULATOR STRUCTURE
(73) Dfinity Stiftung
(72) BREITNER, Joachim
CAMENISCH, Jan
CERULLI, Andrea
DERLER, David
KASHITSYN, Roman
NEVEN, Gregory
WARINSCHI, Bogdan

(51) G06F 16/23
G06Q 40/00
(11) EP4273780
(21) EP23192631.2
(47) 21.05.2025
(22) 14.07.2014
(54) TAILORED MESSAGING
(73) Trading Technologies International, Inc.
(72) BROOKFIELD, Bevan Jacob
(31) 201414329602
201462022736 P
201361845613 P
(32) 11.07.2014
10.07.2014
12.07.2013
(33) United States of America
United States of America
United States of America

(51) G06F 16/2453
G06F 16/901
(11) EP3816814
(21) EP20199237.7
(47) 21.05.2025
(22) 30.09.2020
(54) CRUX DETECTION IN SEARCH DEFINITIONS
(73) SAP SE
(72) MUELLER, Thomas
MEYER, Joerg
(31) 201916671054
(32) 31.10.2019
(33) United States of America

(51) G06F 16/2458
G06F 16/28
G06F 16/2452
(11) EP3864520
(21) EP19706193.0
(47) 21.05.2025
(87) US2019016901
23.07.2020
(22) 06.02.2019
(54) SYSTEMS AND METHODS FOR SPECIFYING OLAP CUBE AT QUERY TIME
(73) Google LLC
(72) GUDMUNDSON, Stephan
TELETIA, Nikhil
LEEDS, Andrew
SISMANIS, John
(31) 201962792640 P
(32) 15.01.2019
(33) United States of America

(51) G06F 16/56
G06F 16/55
G06F 16/583
G06F 16/532
G06N 3/04
G06N 3/08
(11) EP4009196
(21) EP21211612.3
(47) 21.05.2025
(22) 01.12.2021
(54) SYSTEMS AND METHODS FOR FRACTAL-BASED VISUAL SEARCHING
(73) Accenture Global Solutions Limited
(72) SETH, Amiteshwar Dayal
(31) 202117536400
202063120135 P
(32) 29.11.2021
01.12.2020
(33) United States of America
United States of America

(51) G06F 16/90
G06F 9/451
H03M 7/30
(11) EP4371017
(21) EP22747501.9
(47) 21.05.2025
(87) US2022035399
19.01.2023
(22) 29.06.2022
(54) COMPRESSION OF LOCALIZED FILES
(73) Microsoft Technology Licensing, LLC
(72) BURUKHIN, Anatoliy
(31) 202117374544
(32) 13.07.2021
(33) United States of America

(51) G06F 16/9032
G10L 15/22
G06F 3/16
G10L 15/18
(11) EP4047489
(21) EP19948949.3
(47) 21.05.2025
(87) CN2019120612
22.04.2021
(22) 25.11.2019
(54) HUMAN-MACHINE CONVERSATION PROCESSING METHOD
(73) Ai Speech Co., Ltd.
(72) YANG, Xinwei
(31) 201910975502
(32) 14.10.2019
(33) China

(51) G06F 17/16
G06N 3/045
G06N 3/08
G06V 10/44
G06V 10/82

G06V 40/16
G06V 10/764
(11) EP3723006
(21) EP18896329.2
(47) 21.05.2025
(87) CN2018116534
04.07.2019
(22) 20.11.2018
(54) SIGNAL PROCESSING METHOD AND DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) XU, Ruosheng
(31) 201711489008
(32) 29.12.2017
(33) China

(51) G06F 18/25
G06V 10/40
G06V 10/80
G06V 10/82
(11) EP3855357
(21) EP21152723.9
(47) 21.05.2025
(22) 21.01.2021
(54) IMAGE PROCESSING METHOD AND APPARATUS USING NEURAL NETWORK
(73) Samsung Electronics Co., Ltd.
(72) Guo, Tianchu
Zhang, Hui
Liu, Xiabing
Yoo, Byungin
Choi, Changkyu
Han, Jaejoon
Kwak, Youngjun
Liu, Yongchao
(31) 202010071912
20200166879
(32) 21.01.2020
02.12.2020
(33) China
Korea (Republic)

(51) G06F 18/25
G06V 10/80
G06V 10/82
G06V 20/58
(11) EP3783525
(21) EP19193138.5
(47) 21.05.2025
(22) 22.08.2019
(54) METHOD FOR DETECTING AN OBJECT IN SURROUNDINGS OF A VEHICLE, CORRESPONDING SYSTEM AND VEHICLE
(73) Argo AI GmbH
(72) MEERTENS, Roland

(51) G06F 21/10
G06F 21/60
G09B 29/00
G06F 21/79
(11) EP4300330
(21) EP22775596.4
(47) 21.05.2025
(87) JP2022013169
29.09.2022
(22) 22.03.2022
(54) STORAGE MEDIUM PRODUCTION METHOD, DEVICE, AND COMPUTER PROGRAM
(73) Micware Co., Ltd.
ATP Electronics Taiwan Inc.
(72) IMAIDA, Kenta
SEGAWA, Takuma
HIROKAWA, Eishin
LEE, Chien-Pao
HUANG, Hsiu-Hui
(31) 2021047471
(32) 22.03.2021
(33) Japan

(51) G06F 21/32
G06F 1/3234
H04M 1/02
H04M 1/72463
G06F 1/16
G06F 1/3231
G06F 1/3287
G06V 40/16
(11) EP3964984
(21) EP20826633.8
(47) 21.05.2025
(87) CN2020096957
24.12.2020
(22) 19.06.2020
(54) UNLOCKING METHOD AND ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Ziyue
(31) 201910544978
(32) 21.06.2019
(33) China

(51) G06F 21/44
G06F 21/62
G06F 21/60
G06F 21/57
G06F 21/83
G06F 21/71
G06F 21/64
(11) EP3488373
(21) EP17833662.4
(47) 21.05.2025
(87) IB2017054441
01.02.2018
(22) 21.07.2017
(54) SYSTEM FOR AND METHOD OF AUTHENTICATING A COMPONENT OF AN ELECTRONIC DEVICE
(73) Apple Inc.
(72) OLLIVIER, Julien
(31) 201662366281 P
(32) 25.07.2016
(33) United States of America

(51) G06F 21/45
G06F 21/33
H04L 9/40
(11) EP4068720
(21) EP21166387.7
(47) 21.05.2025
(22) 31.03.2021
(54) METHOD FOR ELECTRONICALLY SENDING A PERSONAL IDENTIFICATION CODE
(73) SITS Deutschland GmbH
(72) SCHLOTTKE, Frank

(51) G06F 21/53
G06F 21/57
(11) EP4273722
(21) EP21920365.0
(47) 21.05.2025
(87) CN2021073663
28.07.2022
(22) 25.01.2021
(54) TERMINAL CHIP AND MEASUREMENT METHOD THEREFOR
(73) Huawei Technologies Co. Ltd.
(72) JIA, Jianwei
YIN, Feifei
FENG, Gang
LIU, Yu

(51) G06F 21/55
(11) EP3529733
(21) EP17794849.4
(47) 21.05.2025
(87) US2017057797
03.05.2018
(22) 23.10.2017
(54) METHOD FOR THE CONTINUOUS CALCULATION OF A CYBER SECURITY RISK INDEX
(73) Fortinet, Inc.
(72) SWEENEY, Matthew, S.
POKINES, Benjamin, B.
(31) 201615336307
(32) 27.10.2016
(33) United States of America

(51) G06F 21/57
G06F 21/74
G06F 21/75
G06F 11/36
(11) EP3555791
(21) EP19708883.4
(47) 21.05.2025
(87) GB2019050477
29.08.2019
(22) 21.02.2019
(54) PROGRAMMING TARGET DEVICES
(73) Secure Thingz Limited
(72) POVEY, Haydn
PANCOAST, Steve
WOODRUFF, Timothy John
(31) 201802975
(32) 23.02.2018
(33) United Kingdom

(51) G06F 21/57
G06N 20/00
G06F 8/75
(11) EP4459488
(21) EP24169744.0
(47) 21.05.2025
(22) 11.04.2024
(54) SOURCE CODE DIFFERENTIAL PRUNING-BASED DATASET CREATION
(73) Accenture Global Solutions Limited
(72) RAJKUMAR KANNAN, Karthik
BEN SALEM, Malek
(31) 202318311018
(32) 02.05.2023
(33) United States of America

(51) G06F 21/60
G06F 21/62
(11) EP3736722
(21) EP20157299.7
(47) 21.05.2025
(22) 04.09.2014

(54) SCREEN CAPTURING METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) HUANG, Xi
WU, Huangwei
(51) G06F 21/62
G06F 21/00
G06F 21/51
G06F 21/74
G06F 9/445
H04L 9/32
(11) EP3887979
(21) EP19889203.6
(47) 21.05.2025
(87) CA2019051687
04.06.2020
(22) 26.11.2019
(54) PERSONALIZED AND CRYPTOGRAPHICALLY SECURE ACCESS CONTROL IN OPERATING SYSTEMS
(73) BicDroid Inc.
(72) YU, Xiang
MENG, Jin
YANG, En-Hui
(31) 201862773524 P
(32) 30.11.2018
(33) United States of America
(51) G06F 21/64
(11) EP4134855
(21) EP22177027.4
(47) 21.05.2025
(22) 02.06.2022
(54) BLOCKCHAIN BASED LAYER 2 APPLICATION FOR DELEGATED OFF-CHAIN PAYMENTS USING CRYPTOCURRENCIES
(73) NEC Corporation
(72) Andreina, Sébastien
Schwarz, Maja
Karame, Ghassan
(31) 202117503388
202163232669 P
(32) 18.10.2021
13.08.2021
(33) United States of America
United States of America
(51) G06F 21/64
G06Q 40/12
G06Q 40/03
G06F 16/23
G06Q 10/10
G06Q 20/06
G06Q 30/08
G06Q 40/04
H04L 9/32
H04L 9/40
H04L 9/00
(11) EP4014187
(21) EP20859808.6
(47) 21.05.2025
(87) US2020049602
11.03.2021
(22) 05.09.2020
(54) SYSTEM AND METHOD OF PROVIDING A BLOCKCHAIN-BASED RECORDATION PROCESS
(73) Bosonic, Inc.
(72) INGARGIOLA, Rosario, M.
(31) 201962897030 P
(32) 06.09.2019
(33) United States of America
(51) G06F 21/74
G06F 21/53
(11) EP4273731
(21) EP22894001.1
(47) 21.05.2025
(87) CN2022138807
20.07.2023
(22) 13.12.2022
(54) INFORMATION PROCESSING METHOD AND APPARATUS
(73) Honor Device Co., Ltd.
(72) ZHANG, Peng
(31) 202210051809
(32) 17.01.2022
(33) China
(51) G06F 21/78
G06F 3/06
G06F 21/79
(11) EP4365765
(21) EP23196790.2
(47) 21.05.2025
(22) 12.09.2023
(54) MEMORY SYSTEM
(73) Kioxia Corporation
(72) Haba, Shintaro
(31) 2022176549
(32) 02.11.2022
(33) Japan
(51) G06F 30/10
G06F 30/12
G06Q 30/0601
G06Q 50/00
B29C 64/386
G06F 111/02
G06F 111/16
G06F 113/10
(11) EP3188055
(21) EP16207028.8
(47) 21.05.2025
(22) 27.12.2016
(54) PERSONALIZING PRODUCTS WITH SOCIAL COLLABORATION
(73) Dassault Systèmes
(72) Kaptsan, Igor
Schurgot, Francis L. III
(31) 201514982606
(32) 29.12.2015
(33) United States of America
(51) G06F 30/12
G06F 30/17
G06T 17/20
G06T 17/30
G06T 19/20
G06F 111/16
(11) EP3051446
(21) EP15305153.7
(47) 21.05.2025
(22) 02.02.2015
(54) ENGRAVING A 2D IMAGE ON A SUBDIVISION SURFACE
(73) Dassault Systèmes
(72) Maisonneuve, Richard
(51) G06F 30/13
G06F 111/04
G06N 20/00
(11) EP3432172
(21) EP18184708.8
(47) 21.05.2025
(22) 20.07.2018
(54) PREDICTING USER DESIRABILITY OF A CONSTRUCTIONAL CONNECTION IN A BUILDING INFORMATION MODEL
(73) Bricsys NV
(72) De Keyser, Erik
Gauderis, Tjerk
De Batselier, Luc
(31) 17182328
(32) 20.07.2017
(33) European Patent Office (EPO)
(51) G06F 30/17
G06F 30/20
B33Y 50/00
G06T 19/20
G06F 113/10
(11) EP4022486
(21) EP19766407.1
(47) 21.05.2025
(87) US2019048575
04.03.2021
(22) 28.08.2019
(54) SYSTEMS AND METHOD FOR PROCESSING TOPOLOGY OPTIMIZED GEOMETRIES
(73) Siemens Industry Software Inc.
(72) GAVRANOVIC, Stefan
MUSUVATHY, Suraj Ravi
HARTMANN, Dirk
NANSON, Peter Philip Lonsdale
COLLINS, Richard Charles
DEDHIA, Hiren
(51) G06K 7/10
G06K 19/077
H04B 10/114
G06K 19/06
G06K 7/14
H04B 10/116
(11) EP3955156
(21) EP21187916.8
(47) 21.05.2025
(22) 27.07.2021
(54) BIDIRECTIONAL DATA EXCHANGE ACROSS DEVICES VIA BARCODES
(73) Fedtke, Stephen U.
(72) Fedtke, Stephen U.
(31) 202016942252
(32) 29.07.2020
(33) United States of America
(51) G06K 15/02
(11) EP2973232
(21) EP14764836.4
(47) 21.05.2025
(87) US2014028399
18.09.2014
(22) 14.03.2014
(54) METHOD AND APPARATUS FOR COLOR PRINT MANAGEMENT
(73) Fiery, LLC
(72) CHOULET, Luc
(31) 201313843768
(32) 15.03.2013
(33) United States of America

(51) G06N 3/044
G06N 3/045
G06Q 10/063
G06N 3/08
G01R 31/08
G05B 23/02
G06Q 50/06
(11) EP3791196
(21) EP18917945.0
(47) 21.05.2025
(87) US2018031457
14.11.2019
(22) 07.05.2018
(54) SYSTEM FOR LOCATING FAULT IN POWER DISTRIBUTION NETWORK BASED ON MIXED MODE WAVE RECORDING
(73) Inhand Networks Inc.
(72) ZHANG, Jianliang
DAI, Yibo
YAO, Qiang

(51) G06N 3/045
G06N 3/08
G06V 10/82
G06V 20/56
(11) EP3906500
(21) EP19832122.6
(47) 21.05.2025
(87) EP2019086774
09.07.2020
(22) 20.12.2019
(54) DETERMINING WHETHER IMAGE DATA IS WITHIN A PREDETERMINED RANGE THAT IMAGE ANALYSIS SOFTWARE IS CONFIGURED TO ANALYZE
(73) Robert Bosch GmbH
(72) CHINNI, Krishna
(31) 201916286191
201862786590 P
(32) 26.02.2019
31.12.2018
(33) United States of America
United States of America

(51) G06N 3/045
G06N 3/084
G06V 10/25
G06V 10/26
G06V 10/764
G06V 10/82
G06T 7/00
G06T 7/10
(11) EP4091133
(21) EP21700077.7
(47) 21.05.2025
(87) EP2021050416
22.07.2021
(22) 12.01.2021
(54) METHOD AND SYSTEM FOR AUTOMATICALLY DETECTING ANATOMICAL STRUCTURES IN A MEDICAL IMAGE
(73) Koninklijke Philips N.V.
(72) BHOWMICK, Soumabha
SETH, Subhendu
KRISHNAN, Karthik
FIRTION, Celine
VAJINEPALLI, Pallavi
(31) 20152186
(32) 16.01.2020
(33) European Patent Office (EPO)

(51) G06N 3/0455
G06N 3/088
G06N 3/042
G05B 13/02
(11) EP4402608
(21) EP23754880.5
(47) 21.05.2025
(87) JP2023026484
10.05.2024
(22) 12.07.2023
(54) SYSTEM AND METHOD FOR TRAINING OF NEURAL NETWORK MODEL FOR CONTROL OF HIGH DIMENSIONAL PHYSICAL SYSTEMS
(73) Mitsubishi Electric Corporation
(72) NABI, Saleh
MANSOUR, Hassan
BENOSMAN, Mouhacine
LIU, Yuying
(31) 202218052092
(32) 02.11.2022
(33) United States of America

(51) G06N 3/063
G06N 3/045
(11) EP3633559
(21) EP19197809.7
(47) 21.05.2025
(22) 17.09.2019
(54) INFORMATION PROCESSING APPARATUS, INFORMATION PROCESSING METHOD, NON-TRANSITORY COMPUTER-READABLE STORAGE MEDIUM
(73) CANON KABUSHIKI KAISHA
(72) CHEN, Tsewei
(31) 2018188612
(32) 03.10.2018
(33) Japan

(51) G06N 3/084
G06N 3/045
G06N 3/047
G06N 7/00
(11) EP3825921
(21) EP19211130.0
(47) 21.05.2025
(22) 25.11.2019
(54) METHOD AND DEVICE FOR PROCESSING SENSOR DATA
(73) Robert Bosch GmbH
(72) Kandemir, Melih
Look, Andreas

(51) G06N 3/084
G06T 7/11
G06V 10/44
G06V 10/82
G06V 30/19
G06N 3/045
(11) EP3467711
(21) EP18192815.1
(47) 21.05.2025
(22) 05.09.2018
(54) LEARNING METHOD AND LEARNING DEVICE FOR IMPROVING IMAGE SEGMENTATION AND TESTING METHOD AND TESTING DEVICE USING THE SAME
(73) StradVision, Inc.
(72) KIM, Yongjoong
NAM, Woonhyun
BOO, Sukhoon
SUNG, Myungchul
YEO, Donghun
RYU, Wooju
JANG, Taewoong
JEONG, Kyungjoong
JE, Hongmo
CHO, Hojin
(31) 201715724994
(32) 04.10.2017
(33) United States of America

(51) G06N 3/084
G06V 10/25
G06V 10/44
G06V 10/82
G06F 18/2413
G06N 3/045
G06V 10/764
(11) EP3686782
(21) EP19219859.6
(47) 21.05.2025
(22) 27.12.2019
(54) LEARNING METHOD AND LEARNING DEVICE FOR OBJECT DETECTOR USING TARGET OBJECT ESTIMATING NETWORK AND TARGET OBJECT MERGING NETWORK, AND TESTING METHOD AND TESTING DEVICE USING THE SAME
(73) StradVision, Inc.
(72) KIM, Kye-Hyeon
KIM, Yongjoong
KIM, Insu
KIM, Hak-Kyoung
NAM, Woonhyun
BOO, SukHoon
SUNG, Myungchul
YEO, Donghun
RYU, Wooju
JANG, Taewoong
JEONG, Kyungjoong
JE, Hongmo
CHO, Hojin
(31) 201916254466
(32) 22.01.2019
(33) United States of America

(51) G06N 3/094
G06N 3/045
G06F 21/16
G06F 21/62
G10L 19/018
(11) EP3834107
(21) EP19846855.5
(47) 21.05.2025
(87) KR2019008944
13.02.2020
(22) 19.07.2019
(54) METHOD FOR TRAINING AND TESTING DATA EMBEDDING NETWORK TO GENERATE MARKED DATA BY INTEGRATING ORIGINAL DATA WITH MARK DATA, AND

TRAINING DEVICE AND TESTING DEVICE USING THE SAME
(73) Deeping Source Inc.
(72) KIM, Tae Hoon
(31) 20180093747
(32) 10.08.2018
(33) Korea (Republic)

(51) G06N 3/10
(11) EP4049186
(21) EP20792317.8
(47) 21.05.2025
(87) EP2020078047
29.04.2021
(22) 07.10.2020
(54) METHOD FOR MAKING A NEURAL NETWORK MORE ROBUST AGAINST ADVERSARIAL DISRUPTIONS
(73) VOLKSWAGEN AKTIENGESELLSCHAFT
(72) SCHLICHT, Peter
HÜGER, Fabian
(31) 102019216184
(32) 21.10.2019
(33) Germany

(51) G06N 5/02
G06N 5/04
G06N 5/022
G06N 5/045
G16H 50/20
G16H 50/70
G06N 3/04
G06N 3/08
G06N 5/00
(11) EP4095764
(21) EP22167409.6
(47) 21.05.2025
(22) 08.04.2022
(54) METHODS AND SYSTEMS FOR GENERATING EXAMPLE-BASED EXPLANATIONS OF LINK PREDICTION MODELS IN KNOWLEDGE GRAPHS
(73) Accenture Global Solutions Limited
(72) JANIK, Adrianna
COSTABELLO, Luca
PAI, Sumit
(31) 202117329627
(32) 25.05.2021
(33) United States of America

(51) G06N 10/40
(11) EP3789931
(21) EP20194204.2
(47) 21.05.2025
(22) 02.09.2020
(54) COMPACT LASER DELIVERY TO ATOMIC SYSTEMS
(73) Quantinuum LLC
(72) BOHN, Matthew
NUGENT, Lora
(31) 201962896970 P
(32) 06.09.2019
(33) United States of America

(51) G06N 10/60
G16C 10/00
(11) EP4102416
(21) EP21305788.8
(47) 21.05.2025
(22) 09.06.2021
(54) METHOD FOR FINDING AN OPTIMAL QUANTUM STATE MINIMIZING THE ENERGY OF A HAMILTONIAN OPERATOR WITH A QUANTUM PROCESSOR BY USING A VQE METHOD, METHOD FOR DETERMINING A QUANTUM STATE OF A CHEMICAL COMPOUND AND METHOD FOR DETERMINING PHYSICAL QUANTUM PROPERTIES OF MATERIALS
(73) Bull SAS
(72) AYRAL, Thomas
BESSERVE, Pauline

(51) G06N 20/00
(11) EP3910563
(21) EP21171875.4
(47) 21.05.2025
(22) 03.05.2021
(54) METHOD FOR PERFORMING ON-DEVICE LEARNING OF MACHINE LEARNING NETWORK ON AUTONOMOUS VEHICLE BY USING MULTI-STAGE LEARNING WITH ADAPTIVE HYPER-PARAMETER SETS AND DEVICE USING THE SAME
(73) Stradvision, Inc.
(72) JE, Hongmo
KIM, Yongjoong
YU, Dongkyu
GWEON, SungAn
(31) 202117229350
202063020101 P
(32) 13.04.2021
05.05.2020
(33) United States of America
United States of America

(51) G06N 20/00
G06N 5/01
H03M 7/30
(11) EP3663991
(21) EP18808202.8
(47) 21.05.2025
(87) JP2018027773
07.02.2019
(22) 24.07.2018
(54) DATA AMOUNT COMPRESSION METHOD, DEVICE, PROGRAM AND IC CHIP
(73) Aising Ltd.
(72) IDESAWA Junichi
SUGAWARA Shimon
(31) 2017148316
(32) 31.07.2017
(33) Japan

(51) G06N 20/00
G06N 5/04
G06V 10/774
G06V 10/764
G06V 10/82
G06N 3/0455
(11) EP4283536
(21) EP21929078.0
(47) 21.05.2025
(87) JP2021008581
09.09.2022
(22) 05.03.2021
(54) SIGNAL IDENTIFICATION DEVICE
(73) MITSUBISHI ELECTRIC CORPORATION
(72) YATAKA, Ryoma
SHIRAISHI, Masashi

(51) G06N 20/00
G06N 99/00
G06F 11/14
(11) EP3529754
(21) EP17700272.2
(47) 21.05.2025
(87) EP2017050402
19.07.2018
(22) 10.01.2017
(54) SYSTEMS AND METHODS FOR FAULT TOLERANCE RECOVER DURING TRAINING OF A MODEL OF A CLASSIFIER USING A DISTRIBUTED SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) TALYANSKY, Roman
MELAMED, Zach
PETERFREUND, Natan
WU, Zuguang

(51) G06Q 10/00
G06Q 10/08
(11) EP3491590
(21) EP17835093.0
(47) 21.05.2025
(87) US2017043642
01.02.2018
(22) 25.07.2017
(54) SECURE LOCKERS FOR USE AS ITEM EXCHANGE POINTS
(73) UNITED PARCEL SERVICE OF AMERICA, INC.
(72) DOTTERWEICH, Andrew
COOPER, Jeffrey
(31) 201715658071
201662367498 P
(32) 24.07.2017
27.07.2016
(33) United States of America
United States of America

(51) G06Q 10/00
G06Q 10/08
(11) EP3830768
(21) EP19769250.2
(47) 21.05.2025
(87) IT2019000059
06.02.2020
(22) 25.07.2019
(54) SYSTEM FOR CONTROLLING AND MANAGING A CHAIN OF ENERGY PRODUCTS AND RELATED PROCESS
(73) SGM Energy S.r.l.
Mignano, Vincenzo
(72) MIGNANO, Vincenzo
(31) 201800007756
(32) 02.08.2018
(33) Italy

(51) G06Q 10/06
G06F 8/38
G06F 8/34
(11) EP3822886
(21) EP20207175.9
(47) 21.05.2025
(22) 12.11.2020

(54) WORKFLOW APPLICATION AND USER INTERFACE BUILDER INTEGRATING OBJECTS, RELATIONSHIPS, AND ACTIONS
(73) Palantir Technologies Inc.
(72) Scolnick, Myles
Rahill-Marier, Bianca
Wang, Xinyi
Beckoff, Sarah
Le Pape, Quentin
Springer, Shaun
(31) 201916730073
201962934896 P
(32) 30.12.2019
13.11.2019
(33) United States of America
United States of America

(51) G06Q 10/06
G06Q 10/0637
G06Q 10/0639
G06Q 50/40
(11) EP3929836
(21) EP21179377.3
(47) 21.05.2025
(22) 15.06.2021
(54) TRANSPORTATION SERVICE PLANNING SYSTEM AND TRANSPORTATION SERVICE PLANNING METHOD
(73) Hitachi, Ltd.
(72) HIROI, Kazushige
TSUKADA, Yujin
NUKAGA, Nobuo
(31) 2020110402
(32) 26.06.2020
(33) Japan

(51) G06Q 10/0635
G06F 21/00
G06F 7/00
G06F 3/0486
G06F 11/34
G06Q 10/0633
(11) EP4295292
(21) EP22755636.2
(47) 21.05.2025
(87) IB2022000082
25.08.2022
(22) 22.02.2022
(54) SYSTEM FOR INTERNAL AUDIT AND INTERNAL CONTROL MANAGEMENT AND RELATED METHODS
(73) Intone Networks India Pvt. Ltd.
(72) PANIGRAHI, Ashok
YERUVA, Solomon Reddy
SHAIK, Abdul Khadeer Pasha
ROSHAN, Nakka Rajesh
ERRA, Santosh Raghava Chakravarty
PRUDHVINADH, Madasu
VISHAL, Thirumala Reddy
BATHULA, Naresh
PRADEEP, Challa
REDDY, G. Goutham
MADASU, Prudhvi
(31) 202117181992
(32) 22.02.2021
(33) United States of America

(51) G06Q 10/08
(11) EP3735665
(21) EP18815216.9
(47) 21.05.2025
(87) EP2018084812
11.07.2019
(22) 13.12.2018
(54) MANAGEMENT OF PALLETS OF CONTAINERS OF RECOVERED PRODUCTS
(73) COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN
(72) ANNET, Pierre
LAFOND, Sébastien
RICCIARDI, Jim
SEJOURNE, Jérome
SONGIS, Jean
(31) 1850060
(32) 05.01.2018
(33) France

(51) G06Q 10/08
B65G 1/04
B65G 67/20
(11) EP4201842
(21) EP20950349.9
(47) 21.05.2025
(87) JP2020031704
24.02.2022
(22) 21.08.2020
(54) CONTROL DEVICE, DELIVERY SYSTEM, AND CONTROL METHOD
(73) Fuji Corporation
(72) ODA, Takuya
KAWAGUCHI, Koji
SAWANAMI, Hisato

(51) G06Q 10/0833
G06Q 50/40
B64F 1/36
(11) EP3836055
(21) EP20382655.7
(47) 21.05.2025
(22) 20.07.2020
(54) INTEGRATED SYSTEM FOR INDIVIDUALIZED DELIVERY OF LUGGAGE / BAGGAGE AT AIRPORTS / TRAIN STATIONS, BUSES / PORTS (B2P = BAGGAGE TO PAX)
(73) Gesnaer Consulting SLNE
(72) PÉREZ GIL DE LA SERNA, Juan Manuel

(51) G06Q 10/20
G06F 30/20
G06Q 10/04
G06Q 50/06
G06F 30/27
G06F 119/08
G06F 113/04
G06F 119/06
(11) EP4281895
(21) EP21920190.2
(47) 21.05.2025
(87) CN2021072682
28.07.2022
(22) 19.01.2021
(54) METHOD AND APPARATUS FOR TRAINING MODEL FOR PREDICTING TEMPERATURE RISE OF HEATING ELEMENT IN SWITCHGEAR
(73) ABB SCHWEIZ AG
(72) ZENG, Lusha
GE, Xiushan
ZHENG, Wei

(51) G06Q 20/06
G06Q 20/38
(11) EP4305573
(21) EP22714296.5
(47) 21.05.2025
(87) US2022019927
15.09.2022
(22) 11.03.2022
(54) UNIVERSAL PAYMENT CHANNEL
(73) Visa International Service Association
(72) MINAEI BIDGOLI, Mohammad Mohsen
KUMARESAN, Ranjit
RAGHURAMAN, Srinivasan
ZAMANI, Mahdi
WIJEYEKOON, Arjuna
(31) 202163167489 P
202163159933 P
(32) 29.03.2021
11.03.2021
(33) United States of America
United States of America

(51) G06Q 20/12
G06Q 20/40
G06Q 30/0601
(11) EP3729354
(21) EP18892160.5
(47) 21.05.2025
(87) US2018061184
27.06.2019
(22) 15.11.2018
(54) SYSTEMS AND METHODS FOR USE IN AUTHENTICATING USERS TO ACCOUNTS IN CONNECTION WITH NETWORK TRANSACTIONS
(73) Mastercard International Incorporated
(72) KIRBY, Aaron
BRYSON, Brandon Craig
(31) 201715850216
(32) 21.12.2017
(33) United States of America

(51) G06Q 20/20
G06Q 30/06
G07G 1/00
G06V 20/52
(11) EP4085370
(21) EP20909044.8
(47) 21.05.2025
(87) IL2020051344
08.07.2021
(22) 29.12.2020
(54) SYSTEM AND METHOD FOR FAST CHECKOUT USING A PORTABLE COMPUTERIZED DEVICE
(73) Shopic Technologies Ltd.
(72) KRAVITZ, Eran Menahem
GOLAN, Raz Aharon
(31) 201962954722 P
(32) 30.12.2019
(33) United States of America

(51) G06Q 20/32
G06Q 20/20
G06Q 20/18
G06Q 20/12
G06Q 20/38
G06K 17/00
G06F 3/048
(11) EP3526753

(21) EP17884625.9
(47) 21.05.2025
(87) KR2017014995
28.06.2018
(22) 19.12.2017
(54) ELECTRONIC PAYMENT METHOD AND ELECTRONIC DEVICE FOR SUPPORTING THE SAME
(73) Samsung Electronics Co., Ltd.
(72) WOO, Moon Young
KIM, Ik Hyun
CHOI, Bo Kun
(31) 20160173604
(32) 19.12.2016
(33) Korea (Republic)

(51) G06Q 20/32
G06Q 20/40
(11) EP3683750
(21) EP20151819.8
(47) 21.05.2025
(22) 14.01.2020
(54) FACE-RECOGNITION FOR A VALUE TRANSFER
(73) Visa International Service Association
(72) Boncimino, Christopher, Dennis
(31) 201962793218 P
(32) 16.01.2019
(33) United States of America

(51) G06Q 30/00
H04H 60/71
H04N 21/488
H04N 21/81
(11) EP3933739
(21) EP21183030.2
(47) 21.05.2025
(22) 01.07.2021
(54) CODEC FOR TRANSMISSION OF SPORTING EVENTS
(73) Sporttotal Technology GmbH
(72) SCHLEICHER, Marco
DÜRR, Tobias
FREY, Alexander
BUSCHNER, Maximilian
(31) 102020117371
(32) 01.07.2020
(33) Germany

(51) G06Q 30/02
H04N 21/44
H04N 21/81
G06F 16/70
G06F 16/738
(11) EP4345651
(21) EP24157734.5
(47) 21.05.2025
(22) 02.12.2022
(54) IMAGE GUIDED VIDEO THUMBNAIL GENERATION FOR E-COMMERCE APPLICATIONS
(73) eBay, Inc.
(72) SOLMAZ, Berkan
(31) 202117545497
(32) 08.12.2021
(33) United States of America

(51) G06Q 30/06
G06Q 10/08
G06Q 30/00
G06Q 30/012
G06Q 10/0833
G06Q 30/0601
H04L 67/306
H04L 69/40
(11) EP3711012
(21) EP18878505.9
(47) 21.05.2025
(87) US2018060632
23.05.2019
(22) 13.11.2018
(54) REAL-TIME EVENT MANAGEMENT SYSTEM FOR MOBILE DEVICES
(73) Likewize Corp.
(72) MILLINGTON, Mariela
RAJAMANICKAM, Ranga
HARPER, John
BODNAREK, Clay
(31) 201816186928
201762585763 P
(32) 12.11.2018
14.11.2017
(33) United States of America
United States of America

(51) G06Q 40/02
(11) EP3803766
(21) EP19732179.7
(47) 21.05.2025
(87) US2019034913
12.12.2019
(22) 31.05.2019
(54) A SECURE DECENTRALIZED SYSTEM UTILIZING SMART CONTRACTS, A BLOCKCHAIN, AND/OR A DISTRIBUTED FILE SYSTEM
(73) Capital One Services, LLC
(72) LEE, Jonathan
FRENSCH, Steve
GREIG, Ethan
NALEPA, Anna-Maria
JIAN, Zheng
(31) 201815997271
(32) 04.06.2018
(33) United States of America

(51) G06Q 40/08
(11) EP4367624
(21) EP22747629.8
(47) 21.05.2025
(87) EP2022068591
12.01.2023
(22) 05.07.2022
(54) MACHINE LEARNING-BASED, PREDICTIVE, DIGITAL UNDERWRITING SYSTEM, DIGITAL PREDICTIVE PROCESS AND CORRESPONDING METHOD THEREOF
(73) Swiss Reinsurance Company Ltd.
(72) EVEN, Yannick
BALDASSARRE, Luca
AHMED, Farooque
WANG, Guan
(31) 0700192021
(32) 05.07.2021
(33) Switzerland

(51) G06Q 40/08
G06F 11/34
G06F 11/30
G06F 21/84
(11) EP4318364
(21) EP22790914.0
(47) 21.05.2025
(87) CN2022086507
27.10.2022
(22) 13.04.2022
(54) INSURANCE VERIFICATION METHOD AND APPARATUS FOR ELECTRONIC DEVICE
(73) ANT SHENGXIN (SHANGHAI) INFORMATION TECHNOLOGY CO., LTD.
(72) LI, Xiaorui
(31) 202110441291
(32) 23.04.2021
(33) China

(51) G06Q 50/14
G06Q 30/06
G06Q 10/02
(11) EP3786875
(21) EP20189592.7
(47) 21.05.2025
(22) 15.09.2014
(54) AMENITY, SPECIAL SERVICE AND FOOD/BEVERAGE SEARCH AND PURCHASE BOOKING SYSTEM
(73) Fishberg, Keith
(72) Fishberg, Keith
(31) 201461992714 P
201461936869 P
201361877941 P
(32) 13.05.2014
06.02.2014
13.09.2013
(33) United States of America
United States of America
United States of America

(51) G06T 1/00
(11) EP4035117
(21) EP20768634.6
(47) 21.05.2025
(87) EP2020075837
01.04.2021
(22) 16.09.2020
(54) METHOD AND SYSTEM FOR COLOUR VIDEO PROCESSING
(73) Rovco Limited
(72) HILL, Lyndon
WALLACE, Iain Andrew
(31) 19199264
(32) 24.09.2019
(33) European Patent Office (EPO)

(51) G06T 1/20
G06F 9/38
G06T 1/60
G06T 15/00
G06T 15/80
G06F 8/41
(11) EP3803777
(21) EP19811113.0
(47) 21.05.2025
(87) US2019023933
05.12.2019
(22) 25.03.2019
(54) COMPILER-ASSISTED TECHNIQUES FOR MEMORY USE REDUCTION IN GRAPHICS PIPELINE
(73) Advanced Micro Devices, Inc.
(72) JIN, Guohua

BURNS, Richard A.
MARTIN, Todd
TOMMASI, Gianpaolo
(31) 201815992239
(32) 30.05.2018
(33) United States of America

(51) G06T 3/4038
(11) EP4062359
(21) EP20816099.4
(47) 21.05.2025
(87) EP2020081594
27.05.2021
(22) 10.11.2020
(54) VIDEO STITCHING METHOD AND SYSTEM
(73) Telecom Italia S.p.A.
(72) MOGGIO, Fabrizio
REALE, Nicola
VARESIO, Andrea
VECCHIETTI, Marco
(31) 201900021399
(32) 18.11.2019
(33) Italy

(51) G06T 5/40
G06T 5/00
G06K 7/14
G06T 5/92
G06V 10/28
(11) EP4042367
(21) EP20793474.6
(47) 21.05.2025
(87) IB2020059470
15.04.2021
(22) 08.10.2020
(54) APPARATUS AND METHODS FOR PREPROCESSING IMAGES HAVING ELEMENTS OF INTEREST
(73) 3M Innovative Properties Company
(72) YUNGERS, Christopher R.
CHRISTOPHERSON, Nathan A.
GANDRUD, Jonathan D.
JOHNSON, Justin M.
FALKNOR, Subhalakshmi M.
(31) 201962913979 P
(32) 11.10.2019
(33) United States of America

(51) G06T 5/40
G06T 5/92
(11) EP4437489
(21) EP22814437.4
(47) 21.05.2025
(87) EP2022081695
01.06.2023
(22) 14.11.2022
(54) OPTIMIZING THE DISPLAYING OF HDR IMAGES
(73) Koninklijke Philips N.V.
(72) NIJLAND, Rutger
(31) 21210769
(32) 26.11.2021
(33) European Patent Office (EPO)

(51) G06T 5/50
G06T 5/60
H04N 23/60
H04N 23/741
H04N 23/743
(11) EP4399674
(21) EP21814735.3
(47) 21.05.2025
(87) EP2021081609
19.05.2023
(22) 15.11.2021
(54) HIGH DYNAMIC RANGE IMAGING DEVICE AND METHOD OF GENERATING A HIGH DYNAMIC RANGE IMAGE
(73) Huawei Technologies Co. Ltd.
University of Zurich
(72) GEORGOULIS, Stamatios
MESSIKOMMER, Nico
TULYAKOV, Stepan
ERBACH, Julius
BOCCHICCHIO, Alfredo
GEHRIG, Daniel
LI, Yuanyou
SCARAMUZZA, Davide

(51) G06T 5/50
H04N 23/68
(11) EP3888348
(21) EP19798684.7
(47) 21.05.2025
(87) EP2019081170
04.06.2020
(22) 13.11.2019
(54) METHOD OF OBTAINING A DIGITAL IMAGE
(73) Lumileds Holding B.V.
(72) VAN DER SIJDE, Arjen
PFEFFER, Nicola
(31) 18208930
(32) 28.11.2018
(33) European Patent Office (EPO)

(51) G06T 5/60
(11) EP4118615
(21) EP20716743.8
(47) 21.05.2025
(87) EP2020059078
07.10.2021
(22) 31.03.2020
(54) A DEVICE AND METHOD FOR IMAGE PROCESSING
(73) Huawei Technologies Co., Ltd.
(72) CHEN, Liang
SLABAUGH, Gregory
LIU, Liu
FU, Zhongqian
LI, Zeju

(51) G06T 5/77
G06T 7/00
(11) EP3698317
(21) EP18796563.7
(47) 21.05.2025
(87) US2018055956
25.04.2019
(22) 15.10.2018
(54) TECHNIQUES FOR DETECTING SPATIAL ANOMALIES IN VIDEO CONTENT
(73) Netflix, Inc.
(72) BHATTACHARYA, Subhabrata
PRAKASH, Adithya
PURI, Rohit
(31) 201816143386
201762573617 P
(32) 26.09.2018
17.10.2017
(33) United States of America
United States of America

(51) G06T 7/00
(11) EP4293614
(21) EP22752620.9
(47) 21.05.2025
(87) JP2022003415
18.08.2022
(22) 28.01.2022
(54) WORKPIECE DISPLAY ASSISTANCE DEVICE, WORKPIECE DISPLAY ASSISTANCE METHOD, AND WORKPIECE DISPLAY ASSISTANCE PROGRAM
(73) Amada Co., Ltd.
(72) TAKATSU Satoshi
KASAI Yuuki
KUBOTA Teruyuki
(31) 2021020689
(32) 12.02.2021
(33) Japan

(51) G06T 7/00
G06T 7/11
(11) EP4022562
(21) EP20757919.4
(47) 21.05.2025
(87) EP2020073614
04.03.2021
(22) 24.08.2020
(54) IMAGE PROCESSING FOR STROKE CHARACTERIZATION
(73) Koninklijke Philips N.V.
(72) PATIL, Ravindra
ANAND, Shreya
CHAUDHURY, Sudipta
BUSSA, Nagaraju
(31) 19194438
(32) 29.08.2019
(33) European Patent Office (EPO)

(51) G06T 7/00
G06T 7/11
(11) EP4040384
(21) EP21155982.8
(47) 21.05.2025
(22) 09.02.2021
(54) METHOD, DEVICE AND A SYSTEM FOR DETERMINING PRESENCE OF APPENDICITIS
(73) Siemens Healthineers AG
(72) CHANDOLIA, Hemant
M, Muniraju

(51) G06T 7/00
G06T 7/11
(11) EP3682419
(21) EP18855601.3
(47) 21.05.2025
(87) US2018050737
21.03.2019
(22) 12.09.2018
(54) FEW-SHOT LEARNING BASED IMAGE RECOGNITION OF WHOLE SLIDE IMAGE AT TISSUE LEVEL
(73) NantOmics, LLC
(72) SONG, Bing
JABER, Mustafa
(31) 201762557737 P
(32) 12.09.2017

(33) United States of America
(51) G06T 7/00
H01M 10/42
(11) EP4401034
(21) EP23734130.0
(47) 21.05.2025
(87) CN2023082429
06.06.2024
(22) 20.03.2023
(54) BATTERY CELL ELECTRODE SHEET INSPECTION METHOD AND APPARATUS, AND ELECTRONIC DEVICE
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) WANG, Zhihong
(31) 202211516676
(32) 30.11.2022
(33) China
(51) G06T 7/11
G06T 7/13
G01S 13/86
G01S 13/931
G01S 15/931
G08G 1/16
(11) EP3852081
(21) EP19882588.7
(47) 21.05.2025
(87) JP2019041448
14.05.2020
(22) 23.10.2019
(54) VEHICLE-MOUNTED CONTROL DEVICE
(73) Hitachi Astemo, Ltd.
(72) ICHINOSE Masanori
KURIYAMA Akira
NISHIMURA Haruki
(31) 2018209810
(32) 07.11.2018
(33) Japan
(51) G06T 7/11
G06T 7/136
G06T 7/00
G06K 5/02
G06K 7/14
(11) EP3862913
(21) EP19869212.1
(47) 21.05.2025
(87) JP2019037463
09.04.2020
(22) 25.09.2019
(54) PRINTING INSPECTION DEVICE
(73) HITACHI INDUSTRIAL EQUIPMENT SYSTEMS CO., LTD.
(72) SATO, Takashi
WATANABE, Muneaki
KURIHARA, Hiroko
(31) 2018186328
(32) 01.10.2018
(33) Japan
(51) G06T 7/246
G06T 7/277
G01C 21/00
G01C 21/16
(11) EP3633616
(21) EP19166616.3
(47) 21.05.2025
(22) 01.04.2019
(54) METHOD AND APPARATUS FOR OUTPUTTING POSE INFORMATION
(73) Samsung Electronics Co., Ltd.
(72) Kang, Kangchul Woo
Moon, Moonhyewon
Jung, Jungkyungboo
Hong, Hongsunghoon
Jung, Junghwiryong
(31) 20180116785
(32) 01.10.2018
(33) Korea (Republic)
(51) G06T 7/33
(11) EP3669326
(21) EP18762933.2
(47) 21.05.2025
(87) IB2018056189
21.02.2019
(22) 16.08.2018
(54) ULTRASOUND BONE REGISTRATION WITH LEARNING-BASED SEGMENTATION AND SOUND SPEED CALIBRATION
(73) MAKO Surgical Corp.
(72) MOCTEZUMA DE LA BARRERA, José Luis
SALEHI, Mehrdad
PREVOST, Raphael
WEIN, Wolfgang
(31) 201762546158 P
(32) 16.08.2017
(33) United States of America
(51) G06T 7/33
G06T 7/73
(11) EP3989168
(21) EP21203076.1
(47) 21.05.2025
(22) 18.10.2021
(54) DYNAMIC SELF-CALIBRATING OF AUXILIARY CAMERA OF LASER SCANNER
(73) Faro Technologies, Inc.
(72) PARIAN, Jafar
KAABI, Hani
(31) 202117492801
202063105505 P
(32) 04.10.2021
26.10.2020
(33) United States of America
United States of America
(51) G06T 7/579
G06T 5/60
(11) EP4303815
(21) EP22871774.0
(47) 21.05.2025
(87) CN2022116309
30.03.2023
(22) 31.08.2022
(54) IMAGE PROCESSING METHOD, ELECTRONIC DEVICE, STORAGE MEDIUM, AND PROGRAM PRODUCT
(73) Honor Device Co., Ltd.
(72) CHEN, Bing
(31) 202111139841
(32) 27.09.2021
(33) China
(51) G06T 7/73
G06N 3/04
G06V 10/82
(11) EP4163873
(21) EP22175221.5
(47) 21.05.2025
(22) 24.05.2022
(54) METHOD AND APPARATUS WITH GLOBAL LOCALIZATION
(73) Samsung Electronics Co., Ltd.
(72) MOON, Hyewon
KIM, Jiyeon
SON, Minjung
(31) 20210133117
(32) 07.10.2021
(33) Korea (Republic)
(51) G06T 11/00
(11) EP4198902
(21) EP21215485.0
(47) 21.05.2025
(22) 17.12.2021
(54) METHOD AND SYSTEM FOR MOTION COMPENSATION IN CT RECONSTRUCTION
(73) Siemens Healthineers AG
(72) Schöndube, Harald
Steinich, Nora
Sunnegaardh, Johan
(51) G06T 11/00
A61B 6/03
(11) EP3913580
(21) EP21185434.4
(47) 21.05.2025
(22) 17.11.2017
(54) SYSTEMS AND METHODS FOR REAL-TIME IMAGING
(73) Elekta Limited
(72) LACHAINE, Martin Emile
(31) 201615357193
(32) 21.11.2016
(33) United States of America
(51) G06T 11/00
G01N 21/55
G06T 15/50
G01J 3/50
G06T 15/04
G06Q 30/0601
(11) EP4172945
(21) EP21734000.9
(47) 21.05.2025
(87) EP2021066887
06.01.2022
(22) 21.06.2021
(54) USES OF A BI-DIRECTIONAL TEXTURE FUNCTION
(73) BASF Coatings GmbH
(72) LANFER, Benjamin
REISLOH, Philipp
GUTJAHR, Mark
TROST, Florina
LU, Weiran
WEGNER, Jens
(31) 20182808
(32) 29.06.2020
(33) European Patent Office (EPO)
(51) G06T 11/60
G06F 40/109
(11) EP3910598
(21) EP20765721.4
(47) 21.05.2025
(87) CN2020076698

10.09.2020
(22) 26.02.2020
(54) GRAPHIC TYPESETTING METHOD AND RELATED DEVICE
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Yundie
HU, Liang
HUANG, Liwei
(31) 201910156945
(32) 01.03.2019
(33) China

(51) G06T 15/00
G06T 1/20
G06T 15/80
(11) EP4100924
(21) EP21751077.5
(47) 21.05.2025
(87) US2021016440
12.08.2021
(22) 03.02.2021
(54) SPATIAL PARTITIONING IN A MULTI-TENANCY GRAPHICS PROCESSING UNIT
(73) Advanced Micro Devices, Inc.
(72) LEATHER, Mark
MANTOR, Michael
(31) 202017091957
202062970028 P
(32) 06.11.2020
04.02.2020
(33) United States of America
United States of America

(51) G06T 15/08
(11) EP3879498
(21) EP20161937.6
(47) 21.05.2025
(22) 09.03.2020
(54) METHOD OF RENDERING A VOLUME AND A SURFACE EMBEDDED IN THE VOLUME
(73) Siemens Healthineers AG
(72) PETKOV, Kaloian
VETTER, Christoph
SHAH, Rishabh

(51) G06V 10/20
G06V 10/50
G06V 10/70
(11) EP3107038
(21) EP16175212.6
(47) 21.05.2025
(22) 20.06.2016
(54) METHOD AND APPARATUS FOR DETECTING TARGETS
(73) The Boeing Company
(72) KWON, Hyukseong
KIM, Kyungnam
OWECHKO, Yuri
(31) 201514743297
(32) 18.06.2015
(33) United States of America

(51) G06V 10/44
G06V 10/764
G06V 10/80
G06V 10/82
G06V 20/59
G06V 40/10
G06F 18/25
(11) EP3796209
(21) EP19197820.4
(47) 21.05.2025
(22) 17.09.2019
(54) METHOD AND SYSTEM FOR DETERMINING AN ACTIVITY OF AN OCCUPANT OF A VEHICLE
(73) Aptiv Technologies AG
(72) WEYERS, Patrick
BARTH, Alexander
SCHIEBENER, David

(51) G06V 10/82
G06V 10/44
G06V 10/764
G06V 10/774
G06V 20/70
(11) EP3411828
(21) EP17747065.5
(47) 21.05.2025
(87) IB2017000134
10.08.2017
(22) 01.02.2017
(54) IMAGE CLASSIFICATION AND LABELING
(73) See-Out Pty Ltd.
(72) MAU, Sandra
SIVAPALAN, Sabesan
(31) 201662289902 P
(32) 01.02.2016
(33) United States of America

(51) G06V 20/69
G06V 10/82
C12Q 1/18
(11) EP4377914
(21) EP22760681.1
(47) 21.05.2025
(87) EP2022071396
02.02.2023
(22) 29.07.2022
(54) METHOD AND SYSTEM FOR PREDICTION OF MICROORGANISM GROWTH USING ARTIFICIAL INTELLIGENCE
(73) Bacteromic Sp. z o.o.
(72) DEBSKI, Pawel
KUREK, Krystian
BORTKIEWICZ, Michal
SZELUGA, Justyna
(31) 21188827
(32) 30.07.2021
(33) European Patent Office (EPO)

(51) G06V 20/70
G06V 20/20
G06T 11/60
(11) EP3783500
(21) EP20199900.0
(47) 21.05.2025
(22) 18.09.2015
(54) SCHEMES FOR RETRIEVING AND ASSOCIATING CONTENT ITEMS WITH REAL-WORLD OBJECTS USING AUGMENTED REALITY AND OBJECT RECOGNITION
(73) Sony Interactive Entertainment Inc.
(72) Black, Glenn
(31) 201414565236
201414565204
201462057223 P
201462057219 P
(32) 09.12.2014
09.12.2014
29.09.2014
29.09.2014
(33) United States of America
United States of America
United States of America
United States of America

(51) G06V 30/164
G06V 30/40
G06V 10/36
G06V 10/44
G06V 30/18
G06V 30/182
G06V 10/764
H04N 1/58
G06T 5/00
H04N 1/409
G06T 5/70
G06T 5/60
(11) EP4332916
(21) EP23187831.5
(47) 21.05.2025
(22) 26.07.2023
(54) IDENTIFICATION AND REMOVAL OF NOISE FROM DOCUMENT
(73) Highradius Corporation
(72) BANSAL, Mohit
AHMAD, Rehan
SRIVASTAVA, Harshita
CHIRAG SHAH, Shrey
(31) 202217873954
(32) 26.07.2022
(33) United States of America

(51) G06V 40/00
G06V 40/13
(11) EP4062317
(21) EP20825336.9
(47) 21.05.2025
(87) US2020061683
27.05.2021
(22) 20.11.2020
(54) FINGERPRINT SENSOR SYSTEM INCLUDING METAMATERIAL
(73) QUALCOMM INCORPORATED
(72) KITCHENS, Jack Conway
SCHNEIDER, John Keith
GOJEVIC, Stephen Michael
BRELOFF, Evan Michael
MIRANTO, James Anthony
BROOKS, Emily Kathryn
JOHN ARCHIBALD, Fitzgerald
STOIANOV, Alexei
KUMAR, Raj
SREERAM, Sai Praneeth
LNU, Nirma
D'SOUZA, Sandeep Louis
BUCHAN, Nicholas Ian
LU, Yipeng
TSENG, Chin-Jen
PANCHAWAGH, Hrishikesh Vijaykumar
(31) 201916691416
(32) 21.11.2019
(33) United States of America

(51) G06V 40/12
(11) EP4100870
(21) EP21702677.2
(47) 21.05.2025

(87) EP2021052500
12.08.2021
(22) 03.02.2021
(54) METHOD AND DEVICE FOR IDENTIFYING A PERSON FROM A BIOMETRIC DATUM
(73) Imprimerie Nationale
(72) FALADE, Joannes
CREMER, Sandra
ROSENBERGER, Christophe
(31) 2001172
(32) 06.02.2020
(33) France

(51) G06V 40/12
G06T 7/11
(11) EP3254232
(21) EP16723153.9
(47) 21.05.2025
(87) IB2016000569
11.08.2016
(22) 29.01.2016
(54) SYSTEMS AND METHODS FOR PERFORMING FINGERPRINT BASED USER AUTHENTICATION USING IMAGERY CAPTURED USING MOBILE DEVICES
(73) Veridium IP Limited
(72) SIMPSON, Andrew
MATHER, Jonathan, Francis
OTHMAN, Asem
TYSON, Richard
(31) 201614988833
201514819639
201562112961 P
(32) 06.01.2016
06.08.2015
06.02.2015
(33) United States of America
United States of America
United States of America

(51) G07C 9/00
G07C 9/25
G07C 9/26
G06F 21/32
H04W 12/00
H04W 4/02
H04W 4/80
(11) EP3921813
(21) EP20753166.6
(47) 21.05.2025
(87) FI2020050074
13.08.2020
(22) 07.02.2020
(54) METHOD FOR CONTROLLING AN ACCESS DEVICE
(73) Flow Technologies Oy
(72) KERONEN, Seppo
(31) 20195092
(32) 08.02.2019
(33) Finland

(51) G07C 9/20
G07C 9/28
(11) EP3965076
(21) EP20194555.7
(47) 21.05.2025
(22) 04.09.2020
(54) METHOD OF CONTROLLING ACCESS
(73) Honeywell International Inc.
(72) SWIERSZCZ, Tomasz

(51) G07D 11/14
G07D 11/16
G07D 11/22
(11) EP4035133
(21) EP20792534.8
(47) 21.05.2025
(87) EP2020076657
01.04.2021
(22) 24.09.2020
(54) APPARATUS FOR HANDLING NOTES OF VALUE
(73) Diebold Nixdorf Systems GmbH
(72) DÜSTERHUS, Richard
SCHNIEDERMANN, Gerhard
(31) 102019125994
(32) 26.09.2019
(33) Germany

(51) G07F 7/08
G07F 11/00
G06Q 20/20
G07F 9/00
(11) EP4305608
(21) EP22719335.6
(47) 21.05.2025
(87) IB2022052218
15.09.2022
(22) 11.03.2022
(54) STORAGE CABINET, METHODS AND USES THEREOF
(73) RK.AI-Serviços de Processamento de Images e Análise de Dados Lda.
(72) COELHO PINTO, Ana Alexandra
PEREIRA RIBEIRO, Paulo André
TEIXEIRA NEVES PEREIRA FERNANDO, Carlos Miguel
MONTEIRO RODRIGUES, Sérgio Lino
(31) 2021117112
(32) 11.03.2021
(33) Portugal

(51) G07F 17/32
(11) EP3893210
(21) EP21167352.0
(47) 21.05.2025
(22) 08.04.2021
(54) ELECTRONIC DEPLETING POOL LOTTERY
(73) Veikkaus Oy
(72) Aalto, Markku
(31) 20205378
(32) 09.04.2020
(33) Finland

(51) G07F 17/32
A63F 3/00
A63F 9/24
(11) EP4295929
(21) EP23208560.5
(47) 21.05.2025
(22) 24.01.2017
(54) GAME TOKEN MANAGEMENT SYSTEM
(73) Angel Playing Cards Co., Ltd.
(72) SHIGETA, Yasushi
(31) 2016030443
(32) 01.02.2016
(33) Japan

(51) G08B 13/14
G08B 21/02
G06Q 10/08
(11) EP4131193
(21) EP21190182.2
(47) 21.05.2025
(22) 06.08.2021
(54) CARGO MONITORING, TRACKING AND RECOVERY SYSTEM
(73) Optio Technologies LLC
(72) Duvall II, William R.

(51) G08B 13/19
G08B 21/22
G08B 13/196
H04N 7/18
(11) EP4115401
(21) EP21709012.5
(47) 21.05.2025
(87) EP2021055536
10.09.2021
(22) 05.03.2021
(54) SELECTING A LIGHT SOURCE FOR ACTIVATION BASED ON A TYPE AND/OR PROBABILITY OF HUMAN PRESENCE
(73) Signify Holding B.V.
(72) VAN DE SLUIS, Bartel, Marinus
ALIAKSEYEU, Dzmitry, Viktorovich
BORRA, Tobias
(31) 20161412
(32) 06.03.2020
(33) European Patent Office (EPO)

(51) G08G 1/005
G08G 1/16
A43B 3/00
G08G 1/07
G08G 1/087
H04W 4/021
H04W 4/02
H04W 4/40
H04W 4/44
G08B 21/00
(11) EP3803826
(21) EP19731052.7
(47) 21.05.2025
(87) US2019034130
05.12.2019
(22) 28.05.2019
(54) INTELLIGENT ELECTRONIC FOOTWEAR AND CONTROL LOGIC FOR EXECUTING AUTOMATED FOOTWEAR FEATURES
(73) NIKE Innovate C.V.
(72) ANDON, Christopher
COBBETT, Jamian R.
MALHOTRA, Vikram
PHAM, Hien Tommy
(31) 201816220403
201816114632
201862678796 P
(32) 14.12.2018
28.08.2018
31.05.2018
(33) United States of America
United States of America
United States of America

(51) G08G 1/01
G01V 3/12
G01S 5/02

(11) EP4186049
(21) EP20746145.0
(47) 21.05.2025
(87) EP2020070643
27.01.2022
(22) 22.07.2020
(54) METHOD AND COMPUTER SYSTEM DETERMINING A REPRESENTATION OF A PARAMETER
(73) Telefonaktiebolaget LM ERICSSON (PUBL)
(72) CATOVIC, Armin

(51) G08G 1/01
G08G 1/16
H04W 4/02
H04W 4/021
H04W 4/40
H04W 4/44
H04W 4/46
B60W 30/095
B60W 40/04
B60W 50/14
H04L 67/50
H04L 67/52
H04L 67/54
H04L 67/55
(11) EP4193344
(21) EP21755024.3
(47) 21.05.2025
(87) GB2021051991
10.02.2022
(22) 02.08.2021
(54) PROXIMITY MONITORING
(73) Microlise Limited
(72) RYAN, Kirk R.
(31) 202012354
(32) 07.08.2020
(33) United Kingdom

(51) G08G 1/16
B60W 30/12
B60W 30/182
B60W 30/14
B60W 50/14
B60W 50/00
(11) EP4257444
(21) EP23187621.0
(47) 21.05.2025
(22) 30.03.2020
(54) DRIVING ASSISTANCE METHOD AND DRIVING ASSISTANCE DEVICE
(73) NISSAN MOTOR CO., LTD.
(72) ITO, Atsushi
NAKAMURA, Shohei
(31) 2019092443
(32) 15.05.2019
(33) Japan

(51) G08G 1/16
G06V 20/58
G06V 20/56
(11) EP4414966
(21) EP23156309.9
(47) 21.05.2025
(22) 13.02.2023
(54) METHOD FOR DETECTING A NON-MARKED PARKING SPACE FOR A VEHICLE, DATA PROCESSING APPARATUS, COMPUTER PROGRAM AND COMPUTER-READABLE STORAGE MEDIUM
(73) Volvo Car Corporation
(72) ALQAWASMEH, Mohammad

(51) G08G 1/16
G08G 1/0962
H04W 4/48
H04W 4/40
(11) EP3764338
(21) EP18909093.9
(47) 21.05.2025
(87) IB2018000325
12.09.2019
(22) 09.03.2018
(54) VEHICLE BEHAVIOR PREDICTION METHOD AND VEHICLE BEHAVIOR PREDICTION DEVICE
(73) NISSAN MOTOR CO., LTD.
Renault s.a.s
(72) YAMAGUCHI, Shotaro
FANG, Fang

(51) G08G 3/02
(11) EP3926604
(21) EP19915094.7
(47) 21.05.2025
(87) JP2019005688
20.08.2020
(22) 15.02.2019
(54) COLLISION RISK CALCULATION METHOD, COLLISION RISK CALCULATION DEVICE, AND COLLISION RISK CALCULATION PROGRAM
(73) FUJITSU LIMITED
(72) WATANABE, Isamu

(51) G08G 5/00
H04B 7/185
(11) EP3816970
(21) EP20203975.6
(47) 21.05.2025
(22) 26.10.2020
(54) SYSTEMS AND METHODS FOR DISTRIBUTED AVIONICS PROCESSING
(73) Honeywell International Inc.
(72) SUNDARAMURTHY, Vishwas
SIRIPURAPU, Venkata Lakshmi
PANDEY, Vivek Kumar
DESU, Damodara Venkata Hanumantha Rao
PRABHU, Prashant
BHIXAVATIMATH, Manjunath
(31) 201911044179
202017067276
(32) 31.10.2019
09.10.2020
(33) India
United States of America

(51) G09B 7/04
(11) EP3789987
(21) EP20194736.3
(47) 21.05.2025
(22) 04.09.2020
(54) TRACKING CONCEPTS AND PRESENTING CONTENT IN A LEARNING SYSTEM
(73) Obrizum Group Ltd.
(72) AGLEY, Chibeza, Chintu
CHADWICK, Matthew, Jonathan
FINK, Juergen
ACHOURI, Sarra
(31) 201962896458 P
(32) 05.09.2019
(33) United States of America

(51) G09B 9/00
F41G 3/26
F41A 33/00
(11) EP4193347
(21) EP21762906.2
(47) 21.05.2025
(87) US2021045022
10.02.2022
(22) 06.08.2021
(54) MOVABLE SIGHT FRAME ASSEMBLY FOR A WEAPON SIMULATOR
(73) Raytheon Company
(72) TOY, Gregory, K.
ESPLIN, Roger, C.
VELEZ, Christopher, A.
(31) 202016988288
(32) 07.08.2020
(33) United States of America

(51) G09B 19/24
(11) EP3731214
(21) EP20168203.6
(47) 21.05.2025
(22) 11.03.2014
(54) SYSTEMS AND METHODS PROVIDING AN ENHANCED USER EXPERIENCE IN A REAL-TIME SIMULATED VIRTUAL REALITY WELDING ENVIRONMENT
(73) Lincoln Global, Inc.
(72) PETERS, Carl
POSTLETHWAITE, Deanna
WALLACE, Matthew Wayne
(31) 201313792280
(32) 11.03.2013
(33) United States of America

(51) G09F 3/02
G09F 3/10
G09F 3/00
A61B 5/15
A61B 5/153
B01L 3/00
(11) EP3170170
(21) EP15742167.8
(47) 21.05.2025
(87) US2015039714
21.01.2016
(22) 09.07.2015
(54) BIOLOGICAL SAMPLE CONTAINMENT SYSTEM AND LABEL
(73) Becton, Dickinson and Company
(72) PROVENCHER, Eric John
RUSS, Craig Owen
YOO, Bo Yon Lillian
(31) 201462025696 P
(32) 17.07.2014
(33) United States of America

(51) G09F 9/30
G06F 1/16
G06F 3/0488
H04M 1/02
(11) EP3779937
(21) EP18920783.0
(47) 21.05.2025

(87) CN2018088760
05.12.2019
(22) 28.05.2018
(54) FOLDABLE DISPLAY DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) HUANG, Bo
LI, Xiaolong
MAO, Weihua
ZHANG, Hui
WU, Bo
ZHA, Peng

(51) G09F 9/30
G09F 9/33
H04M 1/02
(11) EP4080493
(21) EP21744744.0
(47) 21.05.2025
(87) CN2021071287
29.07.2021
(22) 12.01.2021
(54) ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) CHEN, Bo
(31) 202010191174
202010066004
(32) 18.03.2020
20.01.2020
(33) China
China

(51) G10D 3/04
G10D 1/08
(11) EP4000061
(21) EP20757427.8
(47) 21.05.2025
(87) US2020043006
28.01.2021
(22) 22.07.2020
(54) SADDLE AND BRIDGE FOR REDUCING LONGITUDINAL WAVES IN A STRING INSTRUMENT
(73) Taylor-Listug, Inc. D/B/A Taylor Guitars
(72) POWERS, Andrew Taylor
(31) 201962876217 P
(32) 19.07.2019
(33) United States of America

(51) G10H 1/44
G10H 3/12
G10H 1/00
(11) EP3786942
(21) EP20182134.5
(47) 21.05.2025
(22) 25.06.2020
(54) MUSICAL INSTRUMENT TUNING
(73) Yousician Oy
(72) RYYNÄNEN, Matti
KLAPURI, Anssi
(31) 201916554917
(32) 29.08.2019
(33) United States of America

(51) G10K 1/071
A63F 3/00
(11) EP4174842
(21) EP22197268.0
(47) 21.05.2025
(22) 23.09.2022
(54) ACOUSTIC SIGNALING DEVICE
(73) Amigo Spiel + Freizeit GmbH
(72) ULBRICH, Joachim
(31) 102021128121
(32) 28.10.2021
(33) Germany

(51) G10L 15/16
G10L 25/30
G10L 25/51
G10L 25/78
G10L 15/06
G10L 15/04
G05B 23/02
G05B 19/418
(11) EP4226364
(21) EP21733233.7
(47) 21.05.2025
(87) JP2021017609
14.04.2022
(22) 27.04.2021
(54) SYSTEM AND METHOD FOR PRODUCING METADATA OF AN AUDIO SIGNAL
(73) Mitsubishi Electric Corporation
(72) MORITZ, Niko
WICHERN, Gordon
HORI, Takaaki
LE ROUX, Jonathan
(31) 202017064986
(32) 07.10.2020
(33) United States of America

(51) G10L 15/22
G06F 3/16
G03B 21/00
H04N 21/20
H04N 9/12
G06F 3/0485
H04N 9/31
H04N 21/41
H04N 21/422
H04N 21/472
G10L 15/28
G10L 15/30
(11) EP3629324
(21) EP19161914.7
(47) 21.05.2025
(22) 11.03.2019
(54) INTELLIGENT VOICE SYSTEM AND METHOD FOR CONTROLLING PROJECTOR BY USING THE INTELLIGENT VOICE SYSTEM
(73) Coretronic Corporation
(72) DAI, JI-CHENG
LIN, MING-CHENG
CHEN, YU-MENG
KAN, WEI-HSIN
(31) 201811196308
201862737126 P
(32) 15.10.2018
27.09.2018
(33) China
United States of America

(51) G10L 15/22
G06F 3/16
H04L 12/28
G10L 25/84
(11) EP3944231
(21) EP19926004.3
(47) 21.05.2025
(87) CN2019123811
29.10.2020
(22) 06.12.2019
(54) VOICE RECOGNITION DEVICES AND WAKE-UP RESPONSE METHOD THEREFOR
(73) Guangdong Midea White Home Appliance Technology Innovation Center Co., Ltd.
Midea Group Co., Ltd.
(72) HE, Ruicheng
(31) 201910343067
(32) 26.04.2019
(33) China

(51) G10L 15/22
G06F 3/16
H04L 51/02
G10L 21/0208
(11) EP3611724
(21) EP18784958.3
(47) 21.05.2025
(87) CN2018082508
18.10.2018
(22) 10.04.2018
(54) VOICE RESPONSE METHOD AND DEVICE, AND SMART DEVICE
(73) Beijing Orion Star Technology Co., Ltd.
(72) CHEN, Junyu
JIA, Lei
LIU, Yuanyuan
PENG, Shouye
(31) 201710230096
(32) 10.04.2017
(33) China

(51) G10L 15/22
H04R 29/00
H04R 1/40
H04R 3/00
G10L 21/0208
G10L 15/08
H04S 7/00
G10L 21/0216
H04R 27/00
(11) EP4297438
(21) EP23200723.7
(47) 21.05.2025
(22) 24.09.2019
(54) VOICE DETECTION OPTIMIZATION BASED ON SELECTED VOICE ASSISTANT SERVICE
(73) Sonos, Inc.
(72) SOTO, Kurt Thomas
SMITH, Connor Kristopher
SLEITH, Charles Conor
(31) 201816141875
(32) 25.09.2018
(33) United States of America

(51) G10L 15/26
G02B 27/01
G06F 3/01
(11) EP4392968
(21) EP22757771.5
(47) 21.05.2025
(87) US2022038854
02.03.2023
(22) 29.07.2022
(54) EYEWEAR WITH TRANSLATION FROM SPEECH SIGNALS TO IMAGES OF MOVEABLE LIPS FOR OVERLAY ON A DISPLAY

(73) Snap Inc.
(72) MCMAHON, Kathleen Worthington
(31) 202117408820
(32) 23.08.2021
(33) United States of America

(51) G10L 17/20
G06F 21/32
(11) EP4399706
(21) EP21814740.3
(47) 21.05.2025
(87) EP2021081627
19.05.2023
(22) 15.11.2021
(54) METHOD AND APPARATUS FOR VOICE SPOOFING DETECTION IN NOISY ENVIRONMENT
(73) Huawei Technologies Co. Ltd.
(72) POGORELIK, Oleg

(51) G10L 19/00
G06N 3/045
G06N 3/0464
G06N 3/0475
G06N 3/048
G06N 3/094
G10L 25/30
(11) EP4330962
(21) EP21755954.1
(47) 21.05.2025
(87) EP2021072091
03.11.2022
(22) 06.08.2021
(54) DECODER
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) AHMED, Ahmed Mustafa Mahmoud
PIA, Nicola
BÜTHE, Jan
KORSE, Srikanth
GUPTA, Kishan
MULTRUS, Markus
FUCHS, Guillaume
(31) 21170782
(32) 27.04.2021
(33) European Patent Office (EPO)

(51) G10L 19/008
G10L 19/00
(11) EP3985664
(21) EP19933131.5
(47) 21.05.2025
(87) JP2019051597
17.12.2020
(22) 27.12.2019
(54) AUDIO SIGNAL RECEIVING AND DECODING METHOD, AUDIO SIGNAL ENCODING AND TRANSMITTING METHOD, AUDIO SIGNAL DECODING METHOD, AUDIO SIGNAL ENCODING METHOD, AUDIO SIGNAL RECEIVING DEVICE, AUDIO SIGNAL TRANSMITTING DEVICE, DECODING DEVICE, ENCODING DEVICE, PROGRAM, AND RECORDING MEDIUM
(73) NIPPON TELEGRAPH AND TELEPHONE CORPORATION
(72) MORIYA, Takehiro
KAMAMOTO, Yutaka
SUGIURA, Ryosuke
(31) PCT/JP2019/023425
(32) 13.06.2019
(33) World Intellectual Property Office (WIPO)

(51) G10L 19/008
G10L 25/06
(11) EP4235655
(21) EP23162751.4
(47) 21.05.2025
(22) 11.06.2018
(54) TIME DELAY ESTIMATION METHOD AND DEVICE
(73) Huawei Technologies Co. Ltd.
(72) SHLOMOT, Eyal
LI, Haiting
MIAO, Lei
(31) 201710515887
(32) 29.06.2017
(33) China

(51) G10L 19/03
G10L 19/26
G10L 19/025
(11) EP3602548
(21) EP18714689.9
(47) 21.05.2025
(87) EP2018025084
04.10.2018
(22) 29.03.2018
(54) APPARATUS AND METHOD FOR POST-PROCESSING AN AUDIO SIGNAL USING PREDICTION BASED SHAPING
(73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
(72) DISCH, Sascha
UHLE, Christian
HERRE, Jürgen
PROKEIN, Peter
GAMPP, Patrick
KARAMPOURNIOTIS, Antonios
HAVENSTEIN, Julia
HELLMUTH, Oliver
RICHTER, Daniel
(31) 17183135
17164332
(32) 25.07.2017
31.03.2017
(33) European Patent Office (EPO)
European Patent Office (EPO)

(51) G10L 19/08
G10L 25/90
G10L 19/005
(11) EP3903308
(21) EP20738546.9
(47) 21.05.2025
(87) US2020013301
16.07.2020
(22) 13.01.2020
(54) HIGH RESOLUTION AUDIO CODING
(73) Huawei Technologies Co., Ltd.
(72) GAO, Yang
(31) 201962791822 P
(32) 13.01.2019
(33) United States of America

(51) G10L 19/16
G10L 19/24
G10L 21/038
G10L 19/035
(11) EP4328909
(21) EP24150177.4
(47) 21.05.2025
(22) 10.03.2016
(54) DECODING AUDIO BITSTREAMS WITH ENHANCED SPECTRAL BAND REPLICATION METADATA IN AT LEAST ONE FILL ELEMENT
(73) Dolby International AB
(72) VILLEMOES, Lars
PURNHAGEN, Heiko
EKSTRAND, Per
(31) 201562133800 P
15159067
(32) 16.03.2015
13.03.2015
(33) United States of America
European Patent Office (EPO)

(51) G10L 21/038
H04R 25/00
H04R 1/10
H04R 5/04
(11) EP4303873
(21) EP22182783.5
(47) 21.05.2025
(22) 04.07.2022
(54) PERSONALIZED BANDWIDTH EXTENSION
(73) GN Audio A/S
(72) LUND, Rasmus Kvist
MOWLAEE, Pejman

(51) G11C 7/20
G11C 7/10
G11C 11/4093
(11) EP4325496
(21) EP22760639.9
(47) 21.05.2025
(87) CN2022104758
28.12.2023
(22) 08.07.2022
(54) DATA RECEIVING CIRCUIT, DATA RECEIVING SYSTEM AND STORAGE APPARATUS
(73) Changxin Memory Technologies, Inc.
(72) LIN, Feng
(31) 202210726636
(32) 23.06.2022
(33) China

(51) G11C 7/22
G11C 7/10
G11C 29/50
G11C 29/02
(11) EP4325503
(21) EP22838627.2
(47) 21.05.2025
(87) CN2022109993
11.01.2024
(22) 03.08.2022
(54) MEMORY, CONTROL APPARATUS, CLOCK PROCESSING METHOD, AND ELECTRONIC DEVICE
(73) Changxin Memory Technologies, Inc.
(72) CHENG, Jingwei
(31) 202210806176
(32) 08.07.2022
(33) China

(51) G11C 8/08
G11C 8/14
(11) EP4322166

(21) EP22834830.6
(47) 21.05.2025
(87) CN2022104755
28.12.2023
(22) 08.07.2022
(54) WORD-LINE DRIVER AND STORAGE APPARATUS
(73) Changxin Memory Technologies, Inc.
(72) WANG, Luguang
(31) 202210730432
(32) 24.06.2022
(33) China

(51) G11C 8/16
G11C 15/04
(11) EP4216219
(21) EP23159961.4
(47) 21.05.2025
(22) 07.04.2020
(54) TWO-PORT TERNARY CONTENT ADDRESSABLE MEMORY
(73) United Microelectronics Corp.
(72) HUANG, Chun-Hsien
LUNG, Ching-Cheng
KUO, Yu-Tse
WANG, Shu-Ru
TSENG, Chun-Yen
(31) 201910408706
(32) 16.05.2019
(33) China

(51) G11C 11/4091
H03K 19/21
G11C 7/06
G11C 7/10
G11C 8/16
G11C 11/405
H03K 19/20
G11C 11/4097
(11) EP3847648
(21) EP19858156.3
(47) 21.05.2025
(87) US2019047497
12.03.2020
(22) 21.08.2019
(54) LOGICAL OPERATIONS USING A LOGICAL OPERATION COMPONENT
(73) Lodestar Licensing Group LLC
(72) HUSH, Glen E.
(31) 201816120739
(32) 04.09.2018
(33) United States of America

(51) G11C 16/34
G11C 16/04
G11C 16/16
G11C 29/44
G06F 11/30
G11C 29/00
G11C 29/04
(11) EP3520112
(21) EP17857111.3
(47) 21.05.2025
(87) US2017049179
05.04.2018
(22) 29.08.2017
(54) MANAGING SOLID STATE DRIVE DEFECT REDUNDANCIES AT SUB-BLOCK GRANULARITY
(73) Intel Corporation
(72) RAMALINGAM, Anand S.
KHAN, Jawad B.
KALAVADE, Pranav
(31) 201615280725
(32) 29.09.2016
(33) United States of America

(51) G11C 17/16
G11C 17/18
(11) EP4181141
(21) EP22184860.9
(47) 21.05.2025
(22) 14.07.2022
(54) PROGRAM CONTROL CIRCUIT FOR ANTIFUSE-TYPE ONE TIME PROGRAMMING MEMORY CELL ARRAY
(73) eMemory Technology Inc.
(72) CHANG, Chia-Fu
WANG, Po-Ping
PENG, Jen-Yu
(31) 202217842835
202163279184 P
(32) 17.06.2022
15.11.2021
(33) United States of America
United States of America

(51) G16B 20/00
(11) EP3765017
(21) EP19766942.7
(47) 21.05.2025
(87) US2019022615
19.09.2019
(22) 15.03.2019
(54) METHODS USING NUCLEIC ACID SIGNALS FOR REVEALING BIOLOGICAL ATTRIBUTES
(73) The Board of Trustees of the Leland Stanford Junior University
(72) CURTIS, Christina
KUNDAJE, Anshul, Bharat
PROBERT, Chris
(31) 201862666464 P
201862643550 P
(32) 03.05.2018
15.03.2018
(33) United States of America
United States of America

(51) G16B 45/00
G16B 10/00
G16H 50/20
(11) EP4026138
(21) EP20758219.8
(47) 21.05.2025
(87) EP2020073270
11.03.2021
(22) 20.08.2020
(54) USING NETWORK ANALYSIS AS A TOOL FOR TREATING HUMAN SKIN DYSBIOSIS
(73) Unilever IP Holdings B.V.
(72) CHU, Chung-Ching
PU, Mingming
XU, Yining
(31) PCT/CN2019/103965
19203373
(32) 02.09.2019
15.10.2019
(33) World Intellectual Property Office (WIPO)
European Patent Office (EPO)

(51) G16H 10/60
G16H 50/30
G16H 50/70
A61B 5/00
G16H 50/00
G06Q 50/22
G06F 16/35
G06F 16/45
G06F 16/906
G06N 3/044
G06N 3/045
G06N 3/08
G06N 7/01
(11) EP4069058
(21) EP19949943.5
(47) 21.05.2025
(87) IN2019050919
29.04.2021
(22) 15.12.2019
(54) A MATERNAL AND INFANT HEALTH INSIGHTS & COGNITIVE INTELLIGENCE (MIHIC) SYSTEM AND SCORE TO PREDICT THE RISK OF MATERNAL, FETAL AND INFANT MORBIDITY AND MORTALITY
(73) Cognitivecare India Labs LLP
(72) PERI, Venkat Narasimham
ATTILI, Venkata Satya Suresh
SHAH, Santosh Yogendra
SISTA, Venkatesh Srinivas
NELATURI, Naresh
TELTUMBADE, Manoj Ramesh
RANI, Satya Pavitra
(31) 201941042550
(32) 20.10.2019
(33) India

(51) G16H 20/17
A61B 5/00
A61B 5/03
A61N 1/30
A61N 1/32
(11) EP3909056
(21) EP20703608.8
(47) 21.05.2025
(87) US2020012548
16.07.2020
(22) 07.01.2020
(54) PROGRAMMABLE THERAPEUTIC AGENT DELIVERY FROM EYE MOUNTED DEVICE
(73) Verily Life Sciences LLC
(72) GUTIERREZ, Christian
(31) 201962790310 P
(32) 09.01.2019
(33) United States of America

(51) G16H 20/40
G16H 40/63
G16H 50/70
(11) EP3559950
(21) EP17822267.5
(47) 21.05.2025
(87) EP2017083691
28.06.2018
(22) 20.12.2017
(54) FACILITATING PULMONARY AND SYSTEMIC HEMODYNAMICS CROSS-REFERENCE TO RELATED APPLICATIONS

(73) Koninklijke Philips N.V.
(72) KAHLERT, Joachim
CIUHU, Calina
KUENEN, Maarten Petrus Joseph
BEZEMER, Rick
HUIJBREGTS, Laurentia Johanna
(31) 201662436465 P
(32) 20.12.2016
(33) United States of America

(51) G16H 30/40
G16H 40/67
(11) EP3683799
(21) EP20150896.7
(47) 21.05.2025
(22) 09.01.2020
(54) MEDICAL IMAGING APPARATUS AND METHOD OF CONTROLLING THE SAME, AND SERVER AND METHOD OF CONTROLLING THE SAME
(73) Samsung Electronics Co., Ltd.
(72) Seo, Seongeun
Kim, Sungnam
Lee, Jiyoon
(31) 20190006825
(32) 18.01.2019
(33) Korea (Republic)

(51) G16H 40/20
G06Q 10/08
G06Q 10/087
G06Q 20/20
G07F 11/00
G07F 17/00
(11) EP3977473
(21) EP20746387.8
(47) 21.05.2025
(87) US2020035262
03.12.2020
(22) 29.05.2020
(54) DISTRIBUTION AND INVENTORY SYSTEM AND METHODS OF USING THE SAME
(73) Ethicon. Inc.
(72) CHILA, Matthew
SYBY, Jonathan Addeo
ON, Allen Keith
WADE, David Mickle
PIEDRA, Matteo Josue
LAU, Lewis Arthur
(31) 201962854003 P
(32) 29.05.2019
(33) United States of America

(51) G16H 40/63
G16H 20/17
A61M 5/142
(11) EP3970160
(21) EP19817729.7
(47) 21.05.2025
(87) EP2019085161
26.11.2020
(22) 13.12.2019
(54) METHOD FOR SETTING AN OPERATIONAL PARAMETER IN A MEDICAL DEVICE
(73) Fresenius Vial SAS
(72) WOLFF, Rémy
MAZAS, Benjamin
(31) 19305632
(32) 17.05.2019
(33) European Patent Office (EPO)

(51) G16H 50/20
G16H 50/70
(11) EP3893248
(21) EP20461527.2
(47) 21.05.2025
(22) 09.04.2020
(54) METHOD FOR CREATING A PREDICTIVE MODEL FOR PREDICTING GLAUCOMA RISK IN A SUBJECT, METHOD FOR DETERMINING GLAUCOMA RISK IN A SUBJECT USING SUCH PREDICTIVE MODEL, DEVICE FOR PREDICTING GLAUCOMA RISK IN A SUBJECT, COMPUTER PROGRAM AND COMPUTER READABLE MEDIUM
(73) Instytut Chemii Bioorganicznej PAN
Wasilewicz, Robert Henryk
(72) WASILEWICZ, Robert Henryk
MAZUREK, Cezary
PUKACKI, Juliusz
SWIERCZYNSKI, Hubert

(51) G21C 19/42
C22B 3/06
C22B 3/38
C22B 60/02
C22B 60/04
G21C 19/46
(11) EP4332991
(21) EP23189246.4
(47) 21.05.2025
(22) 02.08.2023
(54) PROCESS FOR THE REMOVAL OF URANIUM (VI) AND AN ACTINIDE (IV) FROM AN ORGANIC SOLUTION BY OXALIC PRECIPITATION
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
Centre National de la Recherche Scientifique
UNIVERSITE DE MONTPELLIER
Ecole Nationale Supérieure de Chimie de Montpellier
(72) MEYER, Daniel
BERTRAND, Muriel
BOURGEOIS, Damien
DURAIN, Julie
(31) 2208845
(32) 02.09.2022
(33) France

(51) G21K 7/00
G21K 1/06
(11) EP3355315
(21) EP16848678.5
(47) 21.05.2025
(87) JP2016078070
30.03.2017
(22) 23.09.2016
(54) X-RAY MICROSCOPE
(73) Osaka University
(72) MATSUYAMA, Satoshi
YAMADA, Jumpei
(31) 2015188850
(32) 25.09.2015
(33) Japan

(51) H01B 13/012
B29C 33/30
B29C 44/12
B29C 44/58
B29C 44/60
B29C 33/40
B29C 33/20
B29C 33/26
B29C 33/50
(11) EP4298647
(21) EP22710013.8
(47) 21.05.2025
(87) EP2022054707
01.09.2022
(22) 24.02.2022
(54) MANUFACTURING MOULD FOR MANUFACTURING A CABLE HARNESS, SYSTEM, AND METHOD
(73) Yazaki Systems Technologies GmbH
(72) NAVARRO MÁLAGA, Aldo
(31) 102021104405
(32) 24.02.2021
(33) Germany

(51) H01C 7/00
H01C 17/065
H01C 17/28
H01C 1/142
G01K 7/22
H01C 7/02
H01C 7/04
(11) EP3742459
(21) EP19738373.0
(47) 21.05.2025
(87) JP2019000906
18.07.2019
(22) 15.01.2019
(54) THERMISTOR ELEMENT AND MANUFACTURING METHOD FOR SAME
(73) Mitsubishi Materials Corporation
(72) YONEZAWA Takehiro
FUJIWARA Kazutaka
(31) 2018004419
(32) 15.01.2018
(33) Japan

(51) H01F 1/00
H01F 1/06
B22F 1/054
B22F 1/16
B22F 9/20
C22C 38/00
B82Y 25/00
(11) EP4216238
(21) EP23162454.5
(47) 21.05.2025
(22) 06.10.2017
(54) IRON-BASED NANOPARTICLES AND GRAINS
(73) Regents of the University of Minnesota
(72) WANG, Jian-Ping
MA, Bin
LIU, Jinming
WU, Yiming
JIANG, YanFeng
(31) 201662405661 P
(32) 07.10.2016
(33) United States of America

(51) H01F 7/08
H01F 7/16
H02K 33/16

H01H 33/666
(11) EP3365900
(21) EP16809906.7
(47) 21.05.2025
(87) FR2016052707
27.04.2017
(22) 20.10.2016
(54) LINEAR ACTUATOR WITH IMPROVED MAGNETIC STABILITY AND STRIPPING FORCE
(73) Moving Magnet Technologies
(72) LOUSSERT, Guillaume
RIOS-QUESADA, Javier
BIWERSI, Stéphane
DELBAERE, Michaël
(31) 1560004
(32) 20.10.2015
(33) France

(51) H01F 27/26
H01F 27/28
H01F 38/26
(11) EP4078631
(21) EP20839129.2
(47) 21.05.2025
(87) EP2020088028
05.08.2021
(22) 30.12.2020
(54) VOLTAGE TRANSFORMER
(73) HSP Hochspannungsgeräte GmbH
(72) KNAB, Wolfgang
(31) 102020201100
(32) 30.01.2020
(33) Germany

(51) H01F 41/02
H01F 1/057
(11) EP4156213
(21) EP22190798.3
(47) 21.05.2025
(22) 17.08.2022
(54) MANUFACTURING METHOD OF A HIGH TEMPERATURE RESISTANT MAGNET
(73) Yantai Dongxing Magnetic Materials Inc.
(72) WANG, Chuanshen
PENG, Zhongjie
YANG, Kunkun
DING, Kaihong
(31) 202111120165
(32) 24.09.2021
(33) China

(51) H01F 41/02
H01F 1/057
(11) EP4156214
(21) EP22194858.1
(47) 21.05.2025
(22) 09.09.2022
(54) MANUFACTURING METHOD OF A LOW-HEAVY RARE EARTH MAGNET
(73) Yantai Dongxing Magnetic Materials Inc.
(72) Wang, Chuanshen
Peng, Zhongjie
Yang, Kunkun
Ding, Kaihong
(31) 202111121038
(32) 24.09.2021
(33) China

(51) H01F 41/09
(11) EP4174886
(21) EP22203287.2
(47) 21.05.2025
(22) 24.10.2022
(54) METHOD AND MACHINE TO MANUFACTURE A COIL AROUND A COMPONENT OF AN ARTICLE
(73) G.D SOCIETA' PER AZIONI
(72) BOLDRINI, Fulvio
(31) 202100027428
(32) 26.10.2021
(33) Italy

(51) H01G 4/38
H01G 4/40
H01G 4/232
H01G 2/06
(11) EP3306631
(21) EP17194769.0
(47) 21.05.2025
(22) 04.10.2017
(54) ELECTRONIC DEVICE
(73) Kemet Electronics Corporation
(72) McConnell, John E.
Renner, Garry L.
Bultitude, John
Hill, R. Allen
Miller, Galen W.
(31) 201715670247
201615285210
(32) 07.08.2017
04.10.2016
(33) United States of America
United States of America

(51) H01H 13/83
H05K 5/00
G08C 17/02
G06K 19/077
G06K 19/07
(11) EP3607573
(21) EP18781478.5
(47) 21.05.2025
(87) US2018024507
11.10.2018
(22) 27.03.2018
(54) REMOTE CONTROL WITH CONFIGURABLE BUTTONS
(73) Roku, Inc.
(72) STRAUSS, William Daniel
DE HAAS, Scott Edward
GARNER, Gregory Mack
PETERS, Jeffrey John
WOOD, Anthony
(31) 201715477275
(32) 03.04.2017
(33) United States of America

(51) H01H 33/59
H01H 9/54
(11) EP4036949
(21) EP22153050.4
(47) 21.05.2025
(22) 24.01.2022
(54) A HYBRID DC CIRCUIT BREAKER
(73) Eaton Electrical Ltd.
(72) LEUSENKAMP, Martin Bernardus Johannes
(31) 202120268285 U
202110123898
(32) 29.01.2021
29.01.2021
(33) China
China

(51) H01H 33/66
(11) EP4290547
(21) EP22177901.0
(47) 21.05.2025
(22) 08.06.2022
(54) DIELECTRIC SHIELDING HEAT SINK
(73) ABB SCHWEIZ AG
(72) SAUER, Manfred

(51) H01H 33/66
(11) EP4336536
(21) EP22194045.5
(47) 21.05.2025
(22) 06.09.2022
(54) A CONTACT ASSEMBLY FOR AN ELECTRICAL CIRCUIT BREAKER
(73) Hitachi Energy Ltd
(72) MATHAE, Jean Louis Gérard
SUNDQVIST, Per Algot

(51) H01H 37/54
H01H 37/00
(11) EP3796359
(21) EP20196506.8
(47) 21.05.2025
(22) 16.09.2020
(54) TEMPERATURE-DEPENDENT SWITCH
(73) Hofsaess, Marcel P.
(72) Hofsaess, Marcel P.
(31) 102019125453
(32) 20.09.2019
(33) Germany

(51) H01H 50/36
H01H 50/18
H01H 51/06
(11) EP3979289
(21) EP19931182.0
(47) 21.05.2025
(87) KR2019010552
03.12.2020
(22) 20.08.2019
(54) DIRECT CURRENT RELAY AND MANUFACTURING METHOD THEREFOR
(73) LS Electric Co., Ltd.
(72) YOO, Jungwoo
(31) 20190063321
(32) 29.05.2019
(33) Korea (Republic)

(51) H01H 71/10
H01H 9/08
(11) EP4060708
(21) EP20886473.6
(47) 21.05.2025
(87) CN2020128874
20.05.2021
(22) 14.11.2020
(54) PLUG-IN CIRCUIT BREAKER
(73) Zhejiang Chint Electrics Co., Ltd.
(72) LU, Kejun
GU, Xiangyi
YANG, An
ZHU, Jun
GUO, Shaojun
(31) 201911122568
(32) 15.11.2019
(33) China

(51) H01J 3/02
H01J 1/88
H01J 1/34
H01J 3/38
H01J 37/073
G21K 5/00
(11) EP3951831
(21) EP20854443.7
(47) 21.05.2025
(87) JP2020029447
25.02.2021
(22) 31.07.2020
(54) PHOTOCATHODE KIT, ELECTRON GUN, AND ELECTRON BEAM APPLICATION DEVICE
(73) Photo Electron Soul Inc.
(72) SHIKANO, Haruka
SATO, Daiki
WATANABE, Reiki
MORIYA, Tomoaki
IIJIMA, Hokuto
(31) 2019150764
(32) 20.08.2019
(33) Japan

(51) H01J 37/34
H01J 37/32
C23C 14/35
C23C 14/00
(11) EP3872838
(21) EP21168192.9
(47) 21.05.2025
(22) 02.02.2016
(54) MAGNETRON SPUTTERING APPARATUS AND METHOD OF USING THE SAME
(73) Cardinal CG Company
(72) HARTIG, Klaus
(31) 201562111318 P
(32) 03.02.2015
(33) United States of America

(51) H01J 49/42
H01J 49/06
H01J 49/00
H01J 49/02
(11) EP4004967
(21) EP20747140.0
(47) 21.05.2025
(87) IB2020056924
28.01.2021
(22) 22.07.2020
(54) INCREASED DYNAMIC RANGE FOR THE ATTENUATION OF AN ION BEAM
(73) DH Technologies Development Pte. Ltd.
(72) COLLINGS, Bruce
MARTIN, Pascal
(31) 201962877542 P
(32) 23.07.2019
(33) United States of America

(51) H01L 21/265
H10D 12/01
H10D 12/00
H10D 62/53
H10D 62/60
(11) EP4113624
(21) EP22180870.2
(47) 21.05.2025
(22) 24.06.2022
(54) SEMICONDUCTOR DEVICE AND RELATED CHIP AND PREPARATION METHOD
(73) Huawei Technologies Co., Ltd.
(72) YANG, Wentao
DAI, Loucheng
SONG, Chaofan
HUANG, Boning
LIU, Zhihua
(31) 202110721082
(32) 28.06.2021
(33) China

(51) H01L 21/48
H01L 23/373
H05K 1/05
H05K 3/20
H05K 3/00
H05K 3/34
(11) EP4131356
(21) EP21774126.3
(47) 21.05.2025
(87) JP2021012169
30.09.2021
(22) 24.03.2021
(54) INSULATED CIRCUIT BOARD MANUFACTURING METHOD
(73) Mitsubishi Materials Corporation
(72) SAKANIWA, Yoshiaki
OHASHI, Toyo
(31) 2020053650
(32) 25.03.2020
(33) Japan

(51) H01L 21/48
H01L 23/498
H01L 23/538
H01L 23/14
H01L 23/00
(11) EP3832701
(21) EP20210546.6
(47) 21.05.2025
(22) 30.11.2020
(54) A METHOD OF MANUFACTURING SEMICONDUCTOR DEVICES AND CORRESPONDING SEMICONDUCTOR DEVICE
(73) STMicroelectronics S.r.l.
(72) ZIGLIOLI, Federico Giovanni
PINTUS, Alberto
MAGNI, Pierangelo
(31) 201900022632
(32) 02.12.2019
(33) Italy

(51) H01L 21/56
(11) EP4338198
(21) EP21943463.6
(47) 21.05.2025
(87) CN2021097503
08.12.2022
(22) 31.05.2021
(54) METHOD OF MANUFACTURING ACTIVE RECONSTRUCTED WAFERS
(73) Huawei Technologies Co., Ltd.
(72) MULLER, Philippe
LIU, Zhe
CHEN, Zanfeng

(51) H01L 21/60
H01L 23/488
(11) EP4181189
(21) EP21927490.9
(47) 21.05.2025
(87) CN2021112029
01.09.2022
(22) 11.08.2021
(54) SEMICONDUCTOR STRUCTURE AND PREPARATION METHOD THEREFOR
(73) Changxin Memory Technologies, Inc.
(72) ZUO, Mingxing
(31) 202110212890
(32) 25.02.2021
(33) China

(51) H01L 21/762
H01L 21/308
(11) EP3756213
(21) EP19757672.1
(47) 21.05.2025
(87) US2019019005
29.08.2019
(22) 21.02.2019
(54) APPARATUS WITH OVERLAPPING DEEP TRENCH AND SHALLOW TRENCH AND METHOD OF FABRICATING THE SAME WITH LOW DEFECT DENSITY
(73) Texas Instruments Incorporated
(72) LILLIBRIDGE, Thomas, Edward
(31) 201815901449
(32) 21.02.2018
(33) United States of America

(51) H01L 23/26
H01L 23/053
H01L 23/31
H01L 25/07
H01L 23/049
H01L 23/00
(11) EP3806142
(21) EP19201817.4
(47) 21.05.2025
(22) 08.10.2019
(54) SEMICONDUCTOR MODULE AND METHOD FOR PRODUCING THE SAME
(73) Infineon Technologies AG
(72) UHLIG, Johannes

(51) H01L 23/367
H01L 23/433
(11) EP3667719
(21) EP19215947.3
(47) 21.05.2025
(22) 13.12.2019
(54) SEMICONDUCTOR PACKAGES
(73) Samsung Electronics Co., Ltd.
(72) KIM, Jihwang
SHIM, Jongbo
LEE, Jangwoo
KONG, Yungcheol
HYUN, Younghoon
(31) 20180161564
(32) 14.12.2018
(33) Korea (Republic)

(51) H01L 23/373
H01L 23/498
H01L 23/538
H01L 25/07
H01L 23/00
H01L 25/16
(11) EP3863045

(21) EP20155372.4
(47) 21.05.2025
(22) 04.02.2020
(54) POWER SEMICONDUCTOR MODULE ARRANGEMENT AND METHOD FOR PRODUCING THE SAME
(73) Infineon Technologies AG
(72) MICHALSKI, Sebastian
SCHNIETZ, Mark

(51) H01L 23/48
(11) EP4181187
(21) EP21947876.5
(47) 21.05.2025
(87) CN2021117523
05.01.2023
(22) 09.09.2021
(54) SEMICONDUCTOR STRUCTURE AND MANUFACTURING METHOD THEREOF
(73) Changxin Memory Technologies, Inc.
(72) CHUANG, Ling-Yi
(31) 202110746013
(32) 01.07.2021
(33) China

(51) H01L 23/522
H01L 23/528
H10D 86/40
H10D 86/60
(11) EP3850664
(21) EP19772791.0
(47) 21.05.2025
(87) GB2019052524
19.03.2020
(22) 10.09.2019
(54) ELECTRONIC CIRCUIT AND METHOD OF MANUFACTURE
(73) Pragmatic Semiconductor Limited
(72) COBB, Brian
(31) 201814677
(32) 10.09.2018
(33) United Kingdom

(51) H01L 25/00
H01L 23/48
H01L 23/498
H01L 21/48
H01L 21/683
(11) EP4235762
(21) EP23173505.1
(47) 21.05.2025
(22) 19.12.2013
(54) SEMICONDUCTOR PACKAGE AND METHOD FOR FABRICATING A BASE FOR THE SEMICONDUCTOR PACKAGE
(73) MediaTek Inc.
(72) LIN, Tzu-Hung
HSU, Wen-Sung
YU, Ta-Jen
CHANG, Andrew C.
(31) 201213721983
(32) 20.12.2012
(33) United States of America

(51) H01L 25/065
H01L 25/07
H01L 23/12
H01L 23/00
H01L 23/13
H01L 23/31
H01L 23/36
H01L 23/498
H01L 23/538
H01L 25/10
H01L 25/00
(11) EP3688801
(21) EP17927569.8
(47) 21.05.2025
(87) US2017054038
04.04.2019
(22) 28.09.2017
(54) PACKAGE ON ACTIVE SILICON SEMICONDUCTOR PACKAGES
(73) INTEL Corporation
(72) GOMES, Wilfred
GANESAN, Sanka
INGERLY, Doug
SANKMAN, Robert
BOHR, Mark
MALLIK, Debendra

(51) H01L 25/07
H01L 23/64
H01L 23/498
H01L 23/00
H02M 7/00
(11) EP4243070
(21) EP22161568.5
(47) 21.05.2025
(22) 11.03.2022
(54) POWER MODULE AND METHOD FOR MANUFACTURING A POWER MODULE
(73) Hitachi Energy Ltd
(72) FISCHER, Fabian
ROESCH, Andreas
PAQUES, Gontran

(51) H01L 25/075
H01L 25/16
H01L 27/12
H01L 27/15
G02F 1/1362
H01L 33/44
H01L 33/60
H01L 33/50
(11) EP3896734
(21) EP19896415.7
(47) 21.05.2025
(87) KR2019007162
18.06.2020
(22) 13.06.2019
(54) DISPLAY DEVICE AND METHOD FOR MANUFACTURING SAME
(73) Samsung Display Co., Ltd.
(72) KONG, Tae Jin
KIM, Myeong Hee
LEE, Hee Keun
(31) 20180161079
(32) 13.12.2018
(33) Korea (Republic)

(51) H01L 25/16
H01L 21/66
H10D 86/40
H10D 86/60
G09G 3/00
(11) EP3837718
(21) EP19898217.5
(47) 21.05.2025
(87) KR2019017629
25.06.2020
(22) 12.12.2019
(54) DISPLAY MODULE AND MANUFACTURING METHOD OF DISPLAY MODULE
(73) Samsung Electronics Co., Ltd.
(72) JUNG, Youngki
KIM, Jinho
SHIN, Sangmin
LEE, Changjoon
(31) 20190141754
20180165563
(32) 07.11.2019
19.12.2018
(33) Korea (Republic)
Korea (Republic)

(51) H01L 27/12
H01L 21/77
H01L 23/31
G02F 1/1345
(11) EP3382759
(21) EP16887726.4
(47) 21.05.2025
(87) CN2016108072
03.08.2017
(22) 30.11.2016
(54) BONDING STRUCTURE, FLEXIBLE PANEL WITH BONDING STRUCTURE AND FABRICATING METHOD THEREFOR
(73) Kunshan New Flat Panel Display Technology Center Co., Ltd.
(72) ZHANG, Xiuyu
WANG, Baoyou
DANG, Pengle
DING, Liwei
ZHANG, Xiaobao
ZHU, Hui
(31) 201610052071
(32) 26.01.2016
(33) China

(51) H01L 27/146
H04N 25/771
H04N 25/50
H04N 25/77
(11) EP4070540
(21) EP20828360.6
(47) 21.05.2025
(87) JP2020044946
10.06.2021
(22) 02.12.2020
(54) SOLID-STATE IMAGING DEVICE AND ELECTRONIC DEVICE
(73) Sony Semiconductor Solutions Corporation
(72) TASHIRO, Yoshiaki
(31) 2019218404
(32) 02.12.2019
(33) Japan

(51) H01L 27/15
H01L 33/50
(11) EP4042482
(21) EP20780223.2
(47) 21.05.2025
(87) EP2020077472
15.04.2021
(22) 01.10.2020
(54) METHOD FOR PRODUCING AN OPTOELECTRONIC DEVICE
(73) Aledia

(72) BOISTARD, Maxime
GIBERT, Philippe
MAYER, Frédéric
POURQUIER, Eric
SCARINGELLA, Sylvia
TALLET, Clémence
(31) 1911133
(32) 08.10.2019
(33) France

(51) H01L 29/778
H01L 21/338
H01L 29/812
H01L 23/48
H01L 23/66
H03F 1/56
H01L 29/423
(11) EP4276886
(21) EP21917475.2
(47) 21.05.2025
(87) JP2021000403
14.07.2022
(22) 07.01.2021
(54) SEMICONDUCTOR DEVICE, AMPLIFIER AND METHOD FOR PRODUCING SEMICONDUCTOR DEVICE
(73) FUJITSU LIMITED
(72) TAKAHASHI, Tsuyoshi
KAWAGUCHI, Kenichi

(51) H01L 31/05
H01L 31/18
(11) EP4358157
(21) EP23204370.3
(47) 21.05.2025
(22) 18.10.2023
(54) INCREASING DENSIFICATION OF SOLAR MODULES BY MAXIMIZED STACKED INTERCONNECTION
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
(72) SOULAS, Romain
CHAMBION, Bertrand
(31) 2210864
(32) 20.10.2022
(33) France

(51) H01L 33/00
(11) EP3985744
(21) EP19931500.3
(47) 21.05.2025
(87) CN2019091167
17.12.2020
(22) 13.06.2019
(54) MASS TRANSFER METHOD FOR LIGHT-EMITTING DIODES
(73) BOE Technology Group Co., Ltd.
(72) DONG, Xue
YUAN, Guangcai
LV, Zhijun
LI, Haixu
LIANG, Zhiwei
WANG, Huijuan
WANG, Ke
CAO, Zhanfeng
MAI, Hsuanwei

(51) H01L 33/02
H01L 33/36
H01L 33/22
H01L 33/62
H01L 33/10
H01L 33/00
H01L 33/38
H01L 33/20
(11) EP3474337
(21) EP17815692.3
(47) 21.05.2025
(87) KR2017006473
28.12.2017
(22) 20.06.2017
(54) SEMICONDUCTOR DEVICE
(73) Suzhou Lekin Semiconductor Co., Ltd.
(72) PARK, Su Ik
SUNG, Youn Joon
KIM, Min Sung
LEE, Yong Gyeong
LEE, Eun Dk
(31) 20160115894
20160087728
20160076586
(32) 08.09.2016
11.07.2016
20.06.2016
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) H01L 33/08
H01L 33/36
H01L 33/32
H01L 27/15
H01L 33/38
(11) EP4244904
(21) EP21892522.0
(47) 21.05.2025
(87) US2021051175
19.05.2022
(22) 21.09.2021
(54) III-NITRIDE MULTI-WAVELENGTH LED ARRAYS WITH ETCH STOP LAYER
(73) Lumileds LLC
(72) ARMITAGE, Robert
WILDESON, Isaac
(31) 202117190781
202063112920 P
(32) 03.03.2021
12.11.2020
(33) United States of America
United States of America

(51) H01M 4/04
B26F 1/12
F26B 3/30
H01M 10/04
F26B 13/00
(11) EP3641023
(21) EP19807482.5
(47) 21.05.2025
(87) KR2019000126
28.11.2019
(22) 04.01.2019
(54) NOTCHING APPARATUS AND METHOD FOR SECONDARY BATTERY
(73) LG Energy Solution, Ltd.
(72) WOO, Sang Jin
PARK, Sin Young
KANG, Tae Won
PARK, Ji Soo
PARK, Dong Hyeuk
(31) 20180058577
(32) 23.05.2018
(33) Korea (Republic)

(51) H01M 4/139
H01M 4/04
H01M 4/36
H01M 4/38
H01M 4/62
H01M 10/052
(11) EP4138156
(21) EP21898477.1
(47) 21.05.2025
(87) KR2021016823
02.06.2022
(22) 17.11.2021
(54) METHOD FOR MANUFACTURING CATHODE FOR LITHIUM-SULFUR BATTERY
(73) LG Energy Solution, Ltd.
LG Electronics, Inc.
(72) KWACK, Hobeom
KIM, Yun Kyoung
SONG, Hyun Min
KIM, Yoon Hyun
KIM, Jeong Won
SHIN, Dongseok
(31) 20200160370
(32) 25.11.2020
(33) Korea (Republic)

(51) H01M 4/36
H01M 4/38
H01M 4/134
H01M 4/1395
H01M 4/62
H01M 10/052
H01M 4/02
(11) EP3872900
(21) EP19915579.7
(47) 21.05.2025
(87) CN2019129886
08.07.2021
(22) 30.12.2019
(54) SILICON-BASED LITHIUM-STORAGE MATERIAL AND PREPARATION METHOD THEREFOR
(73) Shanghai Shanshan Tech Co., Ltd.
(72) MA, Fei
LIU, Dongdong
WU, Zhihong
WEI, Liangqin
LI, Fengfeng

(51) H01M 4/36
H01M 4/525
H01M 4/505
(11) EP4071854
(21) EP20952779.5
(47) 21.05.2025
(87) CN2020114539
17.03.2022
(22) 10.09.2020
(54) ELECTRODE ACTIVE COMPOSITION AND PREPARATION METHOD THEREOF, ELECTRODE, BATTERY AND APPARATUS
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) GUAN, Yingjie
LIU, Yongchao
HUANG, Qisen

LIU, Na
LIANG, Chengdu

(51) H01M 4/36
H01M 4/525
H01M 4/62
H01M 10/052
C01G 53/00
C01B 35/12
C01G 53/04
H01M 10/0525
(11) EP3629403
(21) EP18867816.3
(47) 21.05.2025
(87) KR2018012447
25.04.2019
(22) 19.10.2018
(54) LITHIUM SECONDARY BATTERY POSITIVE ELECTRODE ACTIVE MATERIAL, METHOD FOR PREPARING SAME, AND LITHIUM SECONDARY BATTERY POSITIVE ELECTRODE AND LITHIUM SECONDARY BATTERY COMPRISING SAME
(73) LG Chem, Ltd.
(72) JU, Seo Hee
(31) 20170136890
(32) 20.10.2017
(33) Korea (Republic)

(51) H01M 4/36
H01M 4/587
H01M 4/48
H01M 4/38
H01M 4/13
H01M 4/139
H01M 4/62
H01M 10/0525
H01M 4/02
(11) EP4243123
(21) EP22838035.8
(47) 21.05.2025
(87) KR2022009908
12.01.2023
(22) 08.07.2022
(54) NEGATIVE ELECTRODE FOR LITHIUM SECONDARY BATTERY, METHOD FOR PREPARING NEGATIVE ELECTRODE FOR LITHIUM SECONDARY BATTERY, AND LITHIUM SECONDARY BATTERY COMPRISING NEGATIVE ELECTRODE
(73) LG Energy Solution, Ltd.
(72) JUN, Chan Soo
KWON, Yohan
KIM, Young Jae
KIM, Taegon
PARK, Su Jin
LEE, Jaewook
JEON, Seoyoung
(31) 20220066756
20210189600
20210090580
(32) 31.05.2022
28.12.2021
09.07.2021
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) H01M 4/38
H01M 4/62
H01M 4/02
H01M 4/04
H01M 4/1395
H01M 4/66
(11) EP3547416
(21) EP18837358.3
(47) 21.05.2025
(87) KR2018007577
31.01.2019
(22) 04.07.2018
(54) METHOD FOR MANUFACTURING LITHIUM ELECTRODE
(73) LG Energy Solution, Ltd.
(72) YOUN, Suk Il
SON, Byoungkuk
CHOI, Junghun
JANG, Minchul
(31) 20170094471
(32) 26.07.2017
(33) Korea (Republic)

(51) H01M 4/525
H01M 4/04
H01M 4/1391
C01G 53/50
H01M 10/0525
H01M 4/36
H01M 4/62
C01G 53/42
(11) EP3680968
(21) EP18880300.1
(47) 21.05.2025
(87) KR2018014367
31.05.2019
(22) 21.11.2018
(54) POSITIVE ELECTRODE ACTIVE MATERIAL FOR LITHIUM SECONDARY BATTERY AND MANUFACTURING METHOD THEREFOR
(73) LG Energy Solution, Ltd.
(72) YOO, Tae Gu
PARK, Younguk
HWANG, Jintae
JUNG, Wang Mo
PARK, Sungbin
(31) 20180143840
20170156745
(32) 20.11.2018
22.11.2017
(33) Korea (Republic)
Korea (Republic)

(51) H01M 4/86
H01M 4/90
H01M 8/10
B01J 23/42
H01M 4/92
H01M 8/1004
(11) EP4074418
(21) EP20886178.1
(47) 21.05.2025
(87) JP2020040475
17.06.2021
(22) 28.10.2020
(54) ELECTRODE CATALYST FOR FUEL CELL, ELECTRODE CATALYST LAYER FOR FUEL CELL, MEMBRANE/ELECTRODE ASSEMBLY, AND FUEL CELL
(73) Panasonic Intellectual Property Management Co., Ltd.
(72) MIYATA, Nobuhiro
SHINTANI, Haruhiko
WADA, Tomokatsu
(31) 2020169841
2019224819
(32) 07.10.2020
12.12.2019
(33) Japan
Japan

(51) H01M 4/88
H01M 4/90
H01M 8/0236
H01M 8/1213
H01M 8/1253
(11) EP3933986
(21) EP21183423.9
(47) 21.05.2025
(22) 02.07.2021
(54) ELECTROCHEMICAL CELL AND ELECTROCHEMICAL CELL STACK
(73) Toshiba Energy Systems & Solutions Corporation
(72) Osada, Norikazu
Kameda, Tsuneji
(31) 2020114580
(32) 02.07.2020
(33) Japan

(51) H01M 4/90
H01M 4/96
H01M 4/86
H01M 8/10
H01M 8/1018
H01M 12/08
(11) EP3760310
(21) EP18908102.9
(47) 21.05.2025
(87) JP2018047829
06.09.2019
(22) 26.12.2018
(54) CATALYST, LIQUID COMPOSITION, ELECTRODE, CATALYST ELECTRODE FOR ELECTROCHEMICAL REACTION, FUEL CELL, AND AIR BATTERY
(73) Azul Energy Inc.
(72) YABU, Hiroshi
MATSUE, Tomokazu
KUMATANI, Akichika
ABE, Hiroya
HIRAI, Yutaro
NOZAKI, Kohei
(31) 2018037521
(32) 02.03.2018
(33) Japan

(51) H01M 8/026
H01M 8/2483
H01M 8/1018
H01M 8/0254
(11) EP3496195
(21) EP17839796.4
(47) 21.05.2025
(87) KR2017008606
15.02.2018
(22) 09.08.2017
(54) SEPARATOR PLATE AND FUEL CELL STACK COMPRISING SAME
(73) LG Chem, Ltd.

(72) JUNG, Hye Mi
YANG, Jae Choon
(31) 20160102844
(32) 12.08.2016
(33) Korea (Republic)

(51) H01M 8/04225
H01M 8/04302
H01M 8/04014
H01M 8/04007
H01M 8/04223
H01M 8/0432
H01M 8/04119
H01M 8/04082
H01M 8/1011
(11) EP3624242
(21) EP18887054.7
(47) 21.05.2025
(87) CN2018118058
13.06.2019
(22) 29.11.2018
(54) DIRECT LIQUID FUEL CELL POWER GENERATION DEVICE
(73) Dalian Institute of Chemical Physics, Chinese Academy of Sciences
(72) SUN, Hai
MA, Shengnan
QIN, Bing
SUN, Gongquan
(31) 201711372610
201711262551
(32) 19.12.2017
04.12.2017
(33) China
China

(51) H01M 8/1004
H01M 4/86
H01M 4/88
(11) EP4018500
(21) EP20764730.6
(47) 21.05.2025
(87) GB2020052011
25.02.2021
(22) 21.08.2020
(54) CATALYSED MEMBRANE
(73) Johnson Matthey Hydrogen Technologies Limited
(72) FONGALLAND, Dash
SHARMAN, Jonathan
(31) 201912062
(32) 22.08.2019
(33) United Kingdom

(51) H01M 10/02
(11) EP3243232
(21) EP16702629.3
(47) 21.05.2025
(87) US2016013736
14.07.2016
(22) 15.01.2016
(54) SEPARATE WELDING PLANES FOR A BATTERY MODULE
(73) CPS Technology Holdings LLC
(72) DEKEUSTER, Richard M.
MACK, Robert J.
SOLESKI, Edward J.
CZARNECKI, Jennifer L.
(31) 201514675661
201562100001 P
(32) 31.03.2015
05.01.2015
(33) United States of America
United States of America

(51) H01M 10/04
H01M 10/0583
H01M 10/052
(11) EP3923393
(21) EP19940410.4
(47) 21.05.2025
(87) CN2019099463
11.02.2021
(22) 06.08.2019
(54) METHOD FOR MANUFACTURING FOLDING ELECTRIC CORE OF ELECTRODE COMPOSITE UNIT
(73) Dongguan Chaohong Automation Equipment Co., Ltd
(72) DUAN, Lei
XU, Jinlong
TAN, Huaming

(51) H01M 10/04
H01M 10/0585
G01B 21/08
H01M 10/052
H01M 10/48
(11) EP4044307
(21) EP21877889.2
(47) 21.05.2025
(87) KR2021012953
14.04.2022
(22) 23.09.2021
(54) ELECTRODE ASSEMBLY STACKING FAULT DETECTION METHOD, ELECTRODE ASSEMBLY INCLUDING INSULATING MEMBER, AND BATTERY CELL INCLUDING SAME
(73) LG Energy Solution, Ltd.
(72) LEE, Suk Woo
YUN, Su Hyun
YOON, Dong Sik
(31) 20200129936
(32) 08.10.2020
(33) Korea (Republic)

(51) H01M 10/04
H01M 50/107
H01M 50/474
H01M 50/477
H01M 50/486
H01M 50/559
(11) EP4336610
(21) EP23151073.6
(47) 21.05.2025
(22) 11.01.2023
(54) CYLINDRICAL BATTERY
(73) CALB Co., Ltd.
(72) QI, Binwei
SUN, Qianqian
ZHANG, Lulu
(31) 202211097635
(32) 08.09.2022
(33) China

(51) H01M 10/04
H01M 50/46
(11) EP3951972
(21) EP20899643.9
(47) 21.05.2025
(87) KR2020016609
17.06.2021
(22) 23.11.2020
(54) METHOD AND APPARATUS FOR MANUFACTURING A UNIT CELL
(73) LG Energy Solution, Ltd.
(72) BAE, Sang Ho
JUNG, Su Taek
KWON, Soon Kwan
CHOI, Seong Won
LEE, Yong Jun
LEE, Sang Woo
HWANG, Won Pill
KIM, Tae Jong
(31) 20200151975
20190164069
(32) 13.11.2020
10.12.2019
(33) Korea (Republic)
Korea (Republic)

(51) H01M 10/04
H05B 3/00
H01M 10/0585
H05B 1/02
(11) EP4199164
(21) EP22833527.9
(47) 21.05.2025
(87) KR2022009092
05.01.2023
(22) 27.06.2022
(54) SECONDARY BATTERY LAMINATION DEVICE USING INFRARED LAMPS
(73) LG Energy Solution, Ltd.
(72) SO, Heeyoung
LEE, Jin Soo
LEE, Youngsoo
HWANG, Hong Ju
HWANG, Taemin
KEUM, Dongyeon
(31) 20220077548
20210085047
(32) 24.06.2022
29.06.2021
(33) Korea (Republic)
Korea (Republic)

(51) H01M 10/0525
(11) EP3955357
(21) EP20846846.2
(47) 21.05.2025
(87) CN2020101668
04.02.2021
(22) 13.07.2020
(54) FUNCTIONALIZED ISOLATION FILM, PREPARATION METHOD THEREFOR, LITHIUM METAL BATTERY, AND DEVICE COMPRISING SAME
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) LIU, Chengyong
GUO, Yongsheng
FAN, Quan
ZHANG, Tao
LIANG, Chengdu
YANG, Jun
(31) 201910682442
(32) 26.07.2019
(33) China

(51) H01M 10/054
H01M 4/13
H01M 4/136

H01M 4/36
H01M 4/485
H01M 4/58
H01M 4/587
H01M 4/62
(11) EP3373376
(21) EP16883671.6
(47) 21.05.2025
(87) JP2016080845
13.07.2017
(22) 18.10.2016
(54) NONAQUEOUS SECONDARY BATTERY, AND POSITIVE ELECTRODE ACTIVE MATERIAL FOR NONAQUEOUS SECONDARY BATTERIES AND METHOD FOR PRODUCING SAME
(73) Murata Manufacturing Co., Ltd.
(72) SUGENO, Naoyuki
(31) 2016001234
(32) 06.01.2016
(33) Japan

(51) H01M 10/0587
H01M 10/0583
H01M 4/13
H01M 4/505
H01M 4/525
H01M 50/103
H01M 50/209
H01M 50/491
(11) EP4075563
(21) EP20949928.4
(47) 21.05.2025
(87) CN2020110628
24.02.2022
(22) 21.08.2020
(54) ELECTRODE ASSEMBLY, BATTERY CELL, BATTERY, AND METHOD AND APPARATUS FOR MANUFACTURING ELECTRODE ASSEMBLY
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) YU, Honggang
SHI, Songjun
JIN, Haizu
SONG, Shutao
CHEN, Bing
DU, Xinxin

(51) H01M 10/14
H01M 10/04
H01M 4/16
B65G 59/02
(11) EP3849010
(21) EP21151403.9
(47) 21.05.2025
(22) 13.01.2021
(54) ENVELOPING MACHINE FOR ENVELOPING PLATES FOR ELECTRIC STORAGE BATTERIES AND METHOD FOR MANIPULATING PLATES FOR ELECTRIC STORAGE BATTERIES IN SAID ENVELOPING MACHINE
(73) SOVEMA GROUP S.P.A.
(72) FERRARESE, Luciano
(31) 202000000415
(32) 13.01.2020
(33) Italy

(51) H01M 10/42
H01M 10/48
H01M 50/209
H01M 50/287
H01M 50/298
H01M 50/30
H01M 50/516
(11) EP3796458
(21) EP19803122.1
(47) 21.05.2025
(87) KR2019004413
21.11.2019
(22) 12.04.2019
(54) BATTERY PACK
(73) Samsung SDI Co., Ltd.
(72) MOON, Soo Deok
KWON, Young Hwan
YUN, Chul Jung
CHO, Kyung Ho
(31) 20180055655
(32) 15.05.2018
(33) Korea (Republic)

(51) H01M 10/42
H01M 50/20
A62C 3/16
A62C 31/00
H01M 10/613
H01M 50/204
H01M 50/209
A62C 37/14
(11) EP4207429
(21) EP21877887.6
(47) 21.05.2025
(87) KR2021012847
14.04.2022
(22) 17.09.2021
(54) BATTERY RACK, ENERGY STORAGE SYSTEM, AND POWER GENERATION SYSTEM
(73) LG Energy Solution, Ltd.
(72) KIM, Hee-Chan
LEE, Seung-Jun
JUNG, Goan-Su
LEE, Kyung-Min
SON, Kown
LEE, Jong-Soo
JEON, Seung-Joon
(31) 20200128285
(32) 05.10.2020
(33) Korea (Republic)

(51) H01M 10/6552
H01M 10/647
H01M 50/103
(11) EP4089798
(21) EP21767252.6
(47) 21.05.2025
(87) KR2021002846
16.09.2021
(22) 08.03.2021
(54) CAN FOR SECONDARY BATTERY, AND SECONDARY BATTERY
(73) LG Energy Solution, Ltd.
(72) PARK, Yoon Woo
MYUNG, Eui Hoon
PARK, Sang Ho
(31) 20200030912
(32) 12.03.2020
(33) Korea (Republic)

(51) H01M 10/6561
H01M 10/6566
H01M 10/627
H01M 10/613
A62C 2/06
A62C 3/16
A62C 3/07
H01M 10/647
H01M 50/209
H01M 50/231
H01M 50/233
H01M 50/211
(11) EP3840082
(21) EP20778711.0
(47) 21.05.2025
(87) KR2020002832
01.10.2020
(22) 27.02.2020
(54) BATTERY MODULE, BATTERY RACK COMPRISING SAME AND POWER STORAGE DEVICE
(73) LG Energy Solution, Ltd.
(72) MIN, Kyoung-Choon
(31) 20190033749
(32) 25.03.2019
(33) Korea (Republic)

(51) H01M 50/103
H01M 50/105
H01M 50/129
H01M 50/211
H01M 50/547
H01M 50/557
(11) EP4154348
(21) EP21725547.0
(47) 21.05.2025
(87) EP2021063112
25.11.2021
(22) 18.05.2021
(54) ELECTROCHEMICAL CELL AND CORRESPONDING BATTERY
(73) SAFT
(72) BLONZ, Valentin
BEUGNON, Alexandre
(31) 2005031
(32) 19.05.2020
(33) France

(51) H01M 50/15
H01M 50/176
H01M 50/30
H01M 50/553
H01M 50/593
(11) EP4415128
(21) EP23212544.3
(47) 21.05.2025
(22) 28.11.2023
(54) ENERGY STORAGE DEVICE AND POWER CONSUMING APPARATUS
(73) Hithium Tech HK Limited
(72) ZHOU, Wenyang
XIONG, Yongfeng
WANG, Feng
(31) 202310091066
(32) 09.02.2023
(33) China

(51) H01M 50/20
(11) EP4142029
(21) EP21854315.5
(47) 21.05.2025
(87) KR2021010086

10.02.2022
(22) 02.08.2021
(54) BATTERY MODULE HAVING STRUCTURE CAPABLE OF ABSORBING CELL SWELLING, AND BATTERY PACK AND VEHICLE COMPRISING SAME
(73) LG Energy Solution, Ltd.
(72) PARK, Jun-Hee
RO, Yong-Hwan
(31) 20200098099
(32) 05.08.2020
(33) Korea (Republic)

(51) H01M 50/204
H01M 10/48
H01M 10/42
(11) EP4102629
(21) EP21202014.3
(47) 21.05.2025
(22) 11.10.2021
(54) CABINET WITH ANTI-CONDENSATION MECHANISM AND ANTI-CONDENSATION CONTROL METHOD
(73) Delta Electronics Inc.
(72) LIN, Mu-Min
LI, Bo-Sheng
KUO, Chia-Hao
(31) 110120637
(32) 07.06.2021
(33) Taiwan, Chinese Taipei

(51) H01M 50/204
H01M 50/284
H01M 50/258
H01M 50/249
H01M 50/233
H01M 50/213
B62M 6/90
B62J 43/13
(11) EP4109648
(21) EP21382553.2
(47) 21.05.2025
(22) 23.06.2021
(54) COMPACT BATTERY FOR ELECTRIC BICYCLES
(73) ORBEA, S. COOP.
(72) AUZMENDI ARKARAZO, Beñat
OCHOA ALBERDI, Kepa
NARBAIZA GÓMEZ, Xabier

(51) H01M 50/204
H01M 50/531
H01M 50/578
(11) EP4199211
(21) EP21215179.9
(47) 21.05.2025
(22) 16.12.2021
(54) BATTERY CELL AND BATTERY SYSTEM
(73) Samsung SDI Co., Ltd.
(72) Golubkov, Andrej

(51) H01M 50/24
H01M 50/375
H01M 50/342
H01M 50/30
H01M 10/6567
H01M 10/613
H01M 10/6551
H01M 10/647
H01M 50/211
H01M 50/204
H01M 10/625
(11) EP4199215
(21) EP22775980.0
(47) 21.05.2025
(87) KR2022003717
29.09.2022
(22) 17.03.2022
(54) BATTERY MODULE WITH THERMAL PROPAGATION PREVENTION STRUCTURE OF BATTERY CELL USING COOLANT AND BATTERY PACK COMPRISING THE SAME
(73) LG Energy Solution, Ltd.
(72) KIM, Seung-Joon
SHIN, Eun-Gyu
YOO, Jae-Min
CHO, Young-Bum
(31) 20210037564
(32) 23.03.2021
(33) Korea (Republic)

(51) H01M 50/30
H01M 50/35
H01M 50/20
H01M 50/103
H01M 10/052
H01M 50/14
H01M 50/141
(11) EP4148888
(21) EP21886771.1
(47) 21.05.2025
(87) KR2021015137
05.05.2022
(22) 26.10.2021
(54) PACK HOUSING INCLUDING INTEGRATED FILTER MESH APPLIED TO VENTING HOLE, AND BATTERY PACK INCLUDING THE SAME
(73) LG Energy Solution, Ltd.
(72) LIM, Jae-Bum
LEE, Bum-Hyun
(31) 20200140699
(32) 27.10.2020
(33) Korea (Republic)

(51) H01M 50/342
H01M 50/213
H01M 50/249
H01M 50/107
H01M 50/375
(11) EP4096009
(21) EP21916654.3
(47) 21.05.2025
(87) CN2021076293
18.08.2022
(22) 09.02.2021
(54) BATTERY, ELECTRIC DEVICE, AND METHOD AND DEVICE FOR MANUFACTURING BATTERY
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) JIN, Haizu
XU, Hu
ZENG, Yuqun
LIANG, Chengdu

(51) H01M 50/50
B60L 58/26
H01M 10/04
H01M 10/613
H01M 10/643
H01M 10/654
H01M 10/6557
(11) EP3994762
(21) EP20737141.0
(47) 21.05.2025
(87) EP2020068866
07.01.2021
(22) 03.07.2020
(54) CELL CONNECTOR FOR CELLS, CELL MODULES, AND BATTERY MODULES COMPRISING CELLS
(73) fischer Power Solutions GmbH
(72) FISCHER, Julian
(31) 102019118162
(32) 04.07.2019
(33) Germany

(51) H01M 50/50
H01M 50/503
H01M 50/517
H01M 50/211
(11) EP3671902
(21) EP18884722.2
(47) 21.05.2025
(87) KR2018011967
06.06.2019
(22) 11.10.2018
(54) BATTERY MODULE HAVING BUS BAR ASSEMBLY
(73) LG Energy Solution, Ltd.
(72) JIN, Hee-Jun
SEO, Sung-Won
LEE, Yoon-Koo
JU, Eun-Ah
MUN, Jeong-O
(31) 20170162867
(32) 30.11.2017
(33) Korea (Republic)

(51) H01M 50/503
H01M 50/522
(11) EP3295521
(21) EP15891649.4
(47) 21.05.2025
(87) CN2015091268
17.11.2016
(22) 30.09.2015
(54) BATTERY CELL CONNECTOR
(73) BYD Company Limited
(72) ZHANG, Zhonglin
XIE, Xiumei
ZHOU, Yanfei
(31) 201510234575
201510233602
(32) 08.05.2015
08.05.2015
(33) China
China

(51) H01M 50/507
H01M 50/514
H01M 50/519
H01M 50/54
(11) EP4002575
(21) EP21163838.2
(47) 21.05.2025
(22) 19.03.2021
(54) DEVICE FOR SOFT-PACKAGED ELECTRIC CORE CONNECTION AND SIGNAL ACQUISITION

(73) Dongguan Guixiang Insulation Material Co., Ltd
(72) MO, Shiying
(31) 202022517857 U
(32) 04.11.2020
(33) China

(51) H01M 50/581
H01M 50/507
(11) EP4068497
(21) EP21782031.5
(47) 21.05.2025
(87) KR2021002658
07.10.2021
(22) 04.03.2021
(54) HV BUSBAR MADE OF DISSIMILAR METALS AND METHOD OF MANUFACTURING THE SAME
(73) LG Energy Solution, Ltd.
(72) SHIN, Ju Hwan
LEE, Hyoung Suk
KIM, Dong Hyun
(31) 20200039086
(32) 31.03.2020
(33) Korea (Republic)

(51) H01P 1/397
H01P 5/22
(11) EP4342024
(21) EP21733941.5
(47) 21.05.2025
(87) EP2021066005
22.12.2022
(22) 15.06.2021
(54) FOUR-PORT CIRCULATOR
(73) Huawei Technologies Co., Ltd.
(72) REGEV, Dror
SHILO, Shimon
EZRI, Doron

(51) H01Q 1/02
H01Q 1/22
H01Q 5/357
H01Q 25/00
H01Q 9/26
H01Q 13/08
H01Q 19/28
(11) EP4216367
(21) EP21884598.0
(47) 21.05.2025
(87) CN2021113630
05.05.2022
(22) 19.08.2021
(54) ANTENNA, ANTENNA MODULE, AND ELECTRONIC DEVICE
(73) Huawei Technologies Co. Ltd.
(72) SHAO, Jinjin
SHI, Cao
WU, Dongwei
(31) 202011193934
(32) 30.10.2020
(33) China

(51) H01Q 1/02
H01Q 1/32
(11) EP4136702
(21) EP21721374.3
(47) 21.05.2025
(87) US2021026756
21.10.2021
(22) 11.04.2021
(54) ANTENNA ASSEMBLY FOR A VEHICLE
(73) AIRGAIN, INC.
(72) GREENSTEIN, Larry
ROMACK, Joe, L.
(31) 202016847981
(32) 14.04.2020
(33) United States of America

(51) H01Q 1/24
H01Q 1/52
H05K 1/14
H01Q 5/42
H01Q 21/06
H01Q 21/08
H05K 1/02
H01R 4/02
H01R 12/62
H04M 1/02
(11) EP3827645
(21) EP19876629.7
(47) 21.05.2025
(87) KR2019013891
30.04.2020
(22) 22.10.2019
(54) ELECTRONIC DEVICE INCLUDING CONDUCTIVE STRUCTURE CONNECTING ELECTRICALLY GROUND LAYER OF FLEXIBLE PRINTED CIRCUIT BOARD AND GROUND LAYER OF PRINTED CIRCUIT BOARD
(73) Samsung Electronics Co., Ltd.
(72) SEO, Seunghan
LEE, Jongpil
(31) 20180126469
(32) 23.10.2018
(33) Korea (Republic)

(51) H01Q 1/24
H01Q 5/328
H01Q 9/42
H01Q 21/28
H04M 1/02
(11) EP4020705
(21) EP20854537.6
(47) 21.05.2025
(87) CN2020108603
25.02.2021
(22) 12.08.2020
(54) ANTENNA ASSEMBLY AND ELECTRONIC DEVICE HAVING ROLLABLE SCREEN
(73) Huawei Technologies Co., Ltd.
(72) MA, Guozhong
LI, Jinlei
CHEN, Hao
ZHONG, Ding
(31) 201910780584
(32) 22.08.2019
(33) China

(51) H01Q 1/27
H01Q 21/29
H01Q 13/10
H04R 1/10
(11) EP4057445
(21) EP20893159.2
(47) 21.05.2025
(87) CN2020131590
03.06.2021
(22) 25.11.2020
(54) WIRELESS EARPHONE
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Junhong
XU, Huiliang
LONG, Zhongying
(31) 201911209306
(32) 30.11.2019
(33) China

(51) H01Q 1/28
H01Q 13/08
H01Q 21/06
H01Q 21/20
(11) EP3830897
(21) EP18762159.4
(47) 21.05.2025
(87) IL2018050855
06.02.2020
(22) 01.08.2018
(54) CONFORMAL ANTENNA
(73) ISRAEL AEROSPACE INDUSTRIES LTD.
(72) ROJANSKI, Vladimir

(51) H01Q 1/50
H01Q 5/378
H01Q 5/335
H01Q 5/328
H01Q 1/24
(11) EP4060811
(21) EP20913264.6
(47) 21.05.2025
(87) CN2020135927
22.07.2021
(22) 11.12.2020
(54) ANTENNA STRUCTURE AND ELECTRONIC DEVICE HAVING THE ANTENNA STRUCTURE
(73) Honor Device Co., Ltd.
(72) CAI, Xiaotao
ZHOU, Dawei
LI, Yuanpeng
LIANG, Tiezhu
(31) 202010054712
(32) 17.01.2020
(33) China

(51) H01Q 3/14
H01Q 1/12
H01Q 15/08
H01Q 15/14
H01Q 21/26
(11) EP4333205
(21) EP22794284.4
(47) 21.05.2025
(87) CN2022076807
03.11.2022
(22) 18.02.2022
(54) LUNEBURG LENS ANTENNA CAPABLE OF ELECTRICALLY ADJUSTING POSITIONS OF FEEDS AND LUNEBURG LENS ANTENNA GROUP
(73) Foshan Eahison Communication Co., Ltd.
(72) DENG, Chongxuan
ZHU, Qiang
SHANG, Chunhui
GAO, Liming
KANG, Youjun
YANG, Haibo
LIANG, Zhibin

(31) 202120893757 U
(32) 28.04.2021
(33) China

(51) H01Q 5/328
H01Q 5/378
H01Q 1/24
H01Q 5/35
H01Q 5/357
H01Q 9/04
(11) EP3940884
(21) EP20773290.0
(47) 21.05.2025
(87) CN2020078321
24.09.2020
(22) 07.03.2020
(54) FOLDABLE TERMINAL DEVICE
(73) Huawei Technologies Co., Ltd.
(72) CHU, Jiahui
YU, Dong
HOU, Meng
(31) 201910199761
(32) 15.03.2019
(33) China

(51) H01Q 5/49
H01Q 9/28
H01Q 21/30
(11) EP4068515
(21) EP22020138.8
(47) 21.05.2025
(22) 29.03.2022
(54) WIDE BAND DIRECTIONAL ANTENNA
(73) Sirio Antenne S.R.L.
(72) Mezzadrelli, Lorenzo
D'Aleo, Mercurio
Loi, Vittorio
Corra', Luigi
(31) 202100008060
(32) 31.03.2021
(33) Italy

(51) H01Q 9/26
H01Q 5/335
H01Q 5/385
H01Q 1/24
H01Q 21/28
H01Q 7/00
(11) EP3916907
(21) EP20763850.3
(47) 21.05.2025
(87) CN2020074578
03.09.2020
(22) 10.02.2020
(54) ANTENNA APPARATUS AND ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) WANG, Yan
LEE, Chien-Ming
WANG, Jikang
YOU, Jiaqing
WANG, Hanyang
(31) 201910614002
201910146577
(32) 08.07.2019
27.02.2019
(33) China
China

(51) H01Q 15/14
H01Q 15/16
(11) EP3918669
(21) EP20722709.1
(47) 21.05.2025
(87) US2020025428
08.10.2020
(22) 27.03.2020
(54) REFLECTOR ANTENNA SYSTEM AND METHOD FOR MANUFACTURE
(73) Viasat, Inc.
(72) ZIMMERMAN, Kurt A.
NEWKIRK, Jack C.
(31) 201962826531 P
(32) 29.03.2019
(33) United States of America

(51) H01Q 17/00
H01Q 1/32
H01Q 1/42
G01S 7/02
G01S 13/931
(11) EP4271157
(21) EP21911084.8
(47) 21.05.2025
(87) JP2021048345
30.06.2022
(22) 24.12.2021
(54) RADIO WAVE SCATTERING BODY, AND MEMBER FOR ATTENUATING RADIO WAVES COMPRISING RADIO WAVE SCATTERING BODY
(73) NITTO DENKO CORPORATION
(72) FUKE Kazuhiro
UI Takehiro
MATSUZAKI Yuya
AKIYAMA Kyohei
(31) 2021209526
2020217603
(32) 23.12.2021
25.12.2020
(33) Japan
Japan

(51) H01Q 21/00
H01Q 21/08
H01Q 9/30
H01Q 9/04
(11) EP4199262
(21) EP21306782.0
(47) 21.05.2025
(22) 15.12.2021
(54) WIRELESS COMMUNICATION BACKPLANE
(73) Schneider Electric Industries SAS
(72) BIEHLER, Aymeric

(51) H01Q 21/24
H01Q 21/26
H01Q 25/00
H01Q 1/24
H01Q 9/28
(11) EP4064453
(21) EP20903178.0
(47) 21.05.2025
(87) CN2020110587
24.06.2021
(22) 21.08.2020
(54) 5G ANTENNA AND RADIATION UNIT THEREOF
(73) Comba Telecom Technology (Guangzhou) Limited
(72) LI, Mingchao
LIN, Xiaoyang
WANG, Yu
CHEN, Litao
(31) 201911323563
(32) 20.12.2019
(33) China

(51) H01R 9/05
H01R 12/53
H01R 13/6594
H05K 1/11
H05K 3/34
(11) EP4398685
(21) EP24171954.1
(47) 21.05.2025
(22) 25.03.2022
(54) CONNECTOR CABLE
(73) Japan Aviation Electronics Industry, Limited
(72) KIUCHI, Hideki
KUROKI, Yoshihide
TANAKA, Yukitaka
NEMOTO, Takashi
(31) 2021081890
(32) 13.05.2021
(33) Japan

(51) H01R 9/05
H01R 13/52
H01R 13/6596
H01R 13/6599
H01R 13/74
(11) EP3931917
(21) EP19916551.5
(47) 21.05.2025
(87) US2019042437
03.09.2020
(22) 18.07.2019
(54) A METHOD FOR ELECTROMAGNETIC NITERFERENCE (EMI) PROTECTION FOR A CONNECTOR ASSEMBLY USING A CONDUCTIVE SEAL
(73) J.S.T. Corporation
(72) DEMARATOS, David
(31) 201916447731
201962811873 P
(32) 20.06.2019
28.02.2019
(33) United States of America
United States of America

(51) H01R 13/52
H01R 13/512
H01R 13/516
(11) EP3855576
(21) EP21152671.0
(47) 21.05.2025
(22) 21.01.2021
(54) CONNECTOR, IN PARTICULAR A PUSH-PULL CONNECTOR, AND USE OF A CONNECTOR
(73) Yamaichi Electronics Deutschland GmbH
(72) Quiter, Michael
Loh, Bernhard
(31) 102020000358
(32) 21.01.2020
(33) Germany

(51) H01R 13/52
H01R 13/516
H01R 13/506
B60L 53/16
(11) EP4120484

(21) EP22184894.8
(47) 21.05.2025
(22) 14.07.2022
(54) CHARGING SOCKET PROVIDED WITH A DUAL-FUNCTIONAL FEATURE FOR DRAINAGE AND FIXING FUNCTIONS
(73) TE Connectivity Italia Distribution S.r.l.
(72) Amerio, Fulvio
Spincich, Demis
Spolverato, Arianna
(31) 202100018752
(32) 15.07.2021
(33) Italy

(51) H01R 13/52
H01R 13/6581
(11) EP4318816
(21) EP22188563.5
(47) 21.05.2025
(22) 03.08.2022
(54) SHIELDED AND SEALED CONNECTOR
(73) Aptiv Technologies AG
(72) EVEZARD, Maxime
TROUSSIER, Julien
MENEZ, Frédéric
MORIN, Laurent
FABRE, Jean

(51) H01R 13/627
H01R 43/18
B29C 45/33
B29L 31/34
(11) EP4167393
(21) EP21202474.9
(47) 21.05.2025
(22) 13.10.2021
(54) CONNECTOR HOUSING, INJECTION MOULDING METHOD AND INJECTION MOULDING APPARATUS FOR MANUFACTURING A CONNECTOR HOUSING
(73) Rosenberger Hochfrequenztechnik GmbH & Co. KG
(72) Schmidt, Christian
Krejber, Alex
Thaler, Michael
Fischer, Andreas

(51) H01R 43/042
H01R 43/048
B25B 27/10
B21D 39/04
B25B 27/14
B25F 5/02
(11) EP3443623
(21) EP17783128.6
(47) 21.05.2025
(87) US2017027403
19.10.2017
(22) 13.04.2017
(54) PORTABLE DIELESS HAND HELD POWER TOOLS
(73) Hubbell Incorporated
(72) LEFAVOUR, John David
FAUCHER, Thomas Romeo
BROWN, Lawrence
(31) 201662322485 P
(32) 14.04.2016
(33) United States of America

(51) H01S 3/23
B23K 26/06
H01S 3/00
G02B 6/35
(11) EP3504764
(21) EP17764711.2
(47) 21.05.2025
(87) US2017048500
01.03.2018
(22) 24.08.2017
(54) FIBER COMBINER WITH INPUT PORT DUMP
(73) NLIGHT, Inc.
(72) RIVERA, Chris, A.
KLINER, Dahv, A.V.
EMERY, Joseph
(31) 201662380235 P
(32) 26.08.2016
(33) United States of America

(51) H01S 5/00
(11) EP4350908
(21) EP23199416.1
(47) 21.05.2025
(22) 25.09.2023
(54) LIGHT-EMITTING DEVICE
(73) Nichia Corporation
(72) KITAJIMA, Tadayuki
MIURA, Soichiro
FUKUNAGA, Munetake
MORI, Yusuke
(31) 2022157196
(32) 29.09.2022
(33) Japan

(51) H01S 5/062
H01S 5/042
H01S 5/024
H04B 10/564
H04B 10/50
H04B 10/272
H04B 10/2507
H01S 5/068
(11) EP3662595
(21) EP18840628.4
(47) 21.05.2025
(87) KR2018008548
07.02.2019
(22) 27.07.2018
(54) OPTICAL TRANSMITTER OPERATING BURST MODE AND CONTROL METHOD OF OPTICAL TRANSMITTER OPERATING BURST MODE
(73) PHOVEL CO., LTD.
PICadvanced
(72) Kim, Jeong-Soo
(31) 20180017283
20170096595
(32) 12.02.2018
29.07.2017
(33) Korea (Republic)
Korea (Republic)

(51) H01S 5/183
H01S 5/42
H01S 5/02326
H01S 5/18
G01S 7/481
G01S 17/89
H01S 5/32
H01S 5/02375
H01S 5/12
H01S 5/042
H01S 5/022
G02B 3/00
H01S 5/00
H01S 5/323
H01S 5/40
H01S 5/02
(11) EP3593423
(21) EP18784395.8
(47) 21.05.2025
(87) US2018027298
18.10.2018
(22) 12.04.2018
(54) BEAM SHAPING FOR ULTRA-SMALL VERTICAL CAVITY SURFACE EMITTING LASER (VCSEL) ARRAYS
(73) Sense Photonics, Inc.
(72) BURROUGHS, Scott
FISHER, Brent
CARTER, James
KANJORSKI, Russell
(31) 201862613985 P
201762484701 P
(32) 05.01.2018
12.04.2017
(33) United States of America
United States of America

(51) H01T 1/14
H01T 15/00
H02H 9/06
H02H 9/04
G06N 20/00
H01T 1/02
H01T 2/02
(11) EP4412008
(21) EP24151395.1
(47) 21.05.2025
(22) 11.01.2024
(54) SURGE ARRESTER FOR A DIRECT CURRENT NETWORK AND METHOD FOR OPERATING SUCH A SURGE ARRESTER
(73) DEHN SE
(72) Bühler, Klaus
Ehrhardt, Arnd
Kellermann, Marco
(31) 102023102619
(32) 02.02.2023
(33) Germany

(51) H01T 4/02
H01T 4/04
H01C 7/12
H01T 4/16
H01H 3/40
(11) EP4173093
(21) EP21783405.0
(47) 21.05.2025
(87) EP2021075094
14.04.2022
(22) 13.09.2021
(54) CONDUCTOR ASSEMBLY
(73) Siemens Energy Global GmbH & Co. KG
(72) CHYLA, Thomas
GRUND, Armin
HATZ, Karsten
RÖSSLER, Ralf
(31) 102020212640
(32) 07.10.2020
(33) Germany

(51) H02B 1/20
H02B 1/36
H01R 13/447
H02B 1/14
H01R 13/52
(11) EP3163694
(21) EP16195884.8
(47) 21.05.2025
(22) 27.10.2016
(54) ELECTRICALLY INSULATING COVER FOR TERMINAL ASSEMBLY
(73) Rockwell Automation Technologies, Inc.
(72) POCHOPIEN, Jacek Tomasz
BELLOWS, Troy Micheal
KOKULA, Pawel
(31) 201514927921
(32) 30.10.2015
(33) United States of America

(51) H02B 1/26
B60R 16/023
H01R 9/24
H05K 5/06
(11) EP3357136
(21) EP16852253.0
(47) 21.05.2025
(87) US2016047710
06.04.2017
(22) 19.08.2016
(54) SEALED MODULAR POWER DISTRIBUTION APPARATUS
(73) Littelfuse, Inc.
(72) SCHWARTZ, Geoffrey
KAUFMAN, Justin
SCRIBNER, Dana
MCWHINNEY, Matt
(31) 201514872325
(32) 01.10.2015
(33) United States of America

(51) H02G 3/22
H01R 4/66
H01B 17/30
F16L 5/02
H01B 17/26
(11) EP3859923
(21) EP21153670.1
(47) 21.05.2025
(22) 27.01.2021
(54) EARTH CONDUCTOR FEEDTHROUGH
(73) Hauff-Technik GmbH & Co. KG
(72) Delikostas, Christos
Eßwein, Thomas
Schmid, Jörg
(31) 202020005158 U
(32) 28.01.2020
(33) Germany

(51) H02G 3/32
F16L 3/10
F16L 3/237
(11) EP3811479
(21) EP19732418.9
(47) 21.05.2025
(87) GB2019051639
26.12.2019
(22) 13.06.2019
(54) CLAMPING MEMBER
(73) Hughes Electronics Limited
(72) RYMAR, Gregory
HUGHES, Glyn
(31) 201810050
(32) 19.06.2018
(33) United Kingdom

(51) H02G 15/068
H02G 15/184
(11) EP4000149
(21) EP20746896.8
(47) 21.05.2025
(87) EP2020069943
01.04.2021
(22) 15.07.2020
(54) ELECTRICAL CONDUCTOR ARRANGEMENT
(73) Innomotics GmbH
(72) FESTA, Marco
GREINACHER, Moritz
(31) 19200091
(32) 27.09.2019
(33) European Patent Office (EPO)

(51) H02J 1/08
H02J 1/12
H02J 1/00
(11) EP3837750
(21) EP19786475.4
(47) 21.05.2025
(87) EP2019076161
02.04.2020
(22) 27.09.2019
(54) ENERGY SUPPLY SYSTEM FOR A WATER-BOUND DEVICE HAVING A FIRST AND SECOND WINDING SYSTEM OF A GENERATOR SYSTEM FOR SUPPLYING DIFFERENT DC VOLTAGE BUSES
(73) Siemens Energy Global GmbH & Co. KG
Siemens Energy AS
(72) SCHULZ, Veiko
VOSS, Wolfgang
(31) 102018216785
(32) 28.09.2018
(33) Germany

(51) H02J 3/36
H02M 1/32
H02M 7/483
(11) EP4184742
(21) EP21866072.8
(47) 21.05.2025
(87) CN2021117724
17.03.2022
(22) 10.09.2021
(54) FLEXIBLE DIRECT-CURRENT TRANSMISSION LINE DISCHARGING METHOD AND APPARATUS, AND STORAGE MEDIUM
(73) NR ELECTRIC CO., LTD.
NR Engineering Co., Ltd.
(72) ZHAN, Changjiang
HU, Zhaoqing
SHAO, Zhenxia
LI, Gang
DONG, Yunlong
LU, Yu
(31) 202010949386
(32) 10.09.2020
(33) China

(51) H02J 3/38
H02J 3/32
H02J 7/35
(11) EP4199295
(21) EP22831993.5
(47) 21.05.2025
(87) CN2022101667
05.01.2023
(22) 27.06.2022
(54) ENERGY STORAGE APPARATUS, CONTROL METHOD FOR ENERGY STORAGE APPARATUS, AND PHOTOVOLTAIC SYSTEM
(73) Huawei Digital Power Technologies Co., Ltd.
(72) YU, Shijiang
WU, Zhipeng
ZHOU, He
SHI, Lei
HU, Yang
(31) 202110732769
(32) 30.06.2021
(33) China

(51) H02J 3/38
H02J 3/50
(11) EP3926783
(21) EP21179564.6
(47) 21.05.2025
(22) 15.06.2021
(54) SYSTEM AND METHOD FOR DYNAMICALLY ESTIMATING INVERTER-BASED RESOURCE REACTIVE POWER CAPABILITY
(73) General Electric Renovables España, S.L.
(72) Howard, Dustin
Achilles, Alfredo Sebastian
(31) 202016905992
(32) 19.06.2020
(33) United States of America

(51) H02J 3/38
H02M 1/00
H02M 1/12
H02M 1/32
H02M 7/493
(11) EP4250513
(21) EP20965369.0
(47) 21.05.2025
(87) CN2020136339
23.06.2022
(22) 15.12.2020
(54) PHOTOVOLTAIC SYSTEM, PROTECTION METHOD, AND INVERTER SYSTEM
(73) Huawei Digital Power Technologies Co., Ltd.
(72) YU, Xinyu
XIN, Kai
ZHANG, Yanzhong
GAO, Yongbing

(51) H02J 7/00
(11) EP3591795
(21) EP19182986.0
(47) 21.05.2025
(22) 27.06.2019
(54) CHARGING METHOD AND ELECTRONIC DEVICE
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) FAN, Jie
(31) 201810716578
(32) 03.07.2018

(33) China

(51) H02J 7/00
B60L 53/30
(11) EP4009479
(21) EP21211528.1
(47) 21.05.2025
(22) 30.11.2021
(54) ELECTRIC CHARGING CABINET FOR CHARGING BATTERIES
(73) Lista GmbH
(72) Dyllong, Andreas
(31) 102020131791
(32) 01.12.2020
(33) Germany

(51) H02J 7/00
H01M 10/44
H02J 50/80
H04B 15/02
(11) EP3751695
(21) EP18912709.5
(47) 21.05.2025
(87) CN2018080554
03.10.2019
(22) 26.03.2018
(54) CHARGING METHOD AND DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) LI, Chuangwei
AI, Ke
LI, Tongjie
ZOU, Jianzhong

(51) H02J 7/00
H02J 7/35
(11) EP3940919
(21) EP20924967.1
(47) 21.05.2025
(87) CN2020091855
25.11.2021
(22) 22.05.2020
(54) CHARGING CONTROL METHOD, ENERGY STORAGE MODULE AND ELECTRIC EQUIPMENT
(73) Huawei Digital Power Technologies Co., Ltd.
(72) TUO, Hong
YU, Hua
LAI, Jiaolong

(51) H02J 7/00
H02J 50/12
H02J 50/60
H02J 50/70
H02J 7/02
(11) EP4092862
(21) EP20918236.9
(47) 21.05.2025
(87) CN2020125829
19.08.2021
(22) 02.11.2020
(54) WIRELESS CHARGING CIRCUIT, WIRELESS CHARGING METHOD, DEVICE, AND SYSTEM
(73) Huawei Digital Power Technologies Co., Ltd.
(72) LI, Yuechao
(31) 202010089150
(32) 12.02.2020
(33) China

(51) H02J 7/34
(11) EP4376257
(21) EP23211479.3
(47) 21.05.2025
(22) 22.11.2023
(54) ULTRACAPACITOR MODULE WITH DEAD BAND VOLTAGE CONTROL SYSTEM
(73) Aptiv Technologies AG
(72) DEUTSCH, Robert
(31) 202318515740
202363462332 P
202263427179 P
(32) 21.11.2023
27.04.2023
22.11.2022
(33) United States of America
United States of America
United States of America

(51) H02J 9/06
G01R 31/3842
H02J 7/00
H02J 9/00
G01R 31/388
(11) EP3955413
(21) EP20808885.6
(47) 21.05.2025
(87) CN2020091688
26.11.2020
(22) 22.05.2020
(54) UNINTERRUPTIBLE POWER SUPPLY (UPS), POWER SUPPLY SYSTEM AND BATTERY CAPACITY TEST METHOD
(73) Huawei Digital Power Technologies Co., Ltd.
(72) SHU, Zhou
(31) 201910435165
(32) 23.05.2019
(33) China

(51) H02J 13/00
H04M 11/00
H04Q 9/00
G06Q 50/10
(11) EP3979460
(21) EP20812917.1
(47) 21.05.2025
(87) JP2020020840
03.12.2020
(22) 27.05.2020
(54) MANAGEMENT SYSTEM AND MANAGEMENT METHOD
(73) Kyocera Corporation
(72) UTAMARU, Tsudoi
(31) 2019101680
(32) 30.05.2019
(33) Japan

(51) H02J 50/10
H02J 50/12
H02J 50/40
H02J 50/80
H02J 50/00
H01F 27/28
H01F 38/14
(11) EP4199306
(21) EP21915750.0
(47) 21.05.2025
(87) KR2021020022
07.07.2022
(22) 28.12.2021
(54) ELECTRONIC APPARATUS HAVING IMPROVED WIRELESS CHARGING EFFICIENCY
(73) Samsung Electronics Co., Ltd.
(72) KIM, Yusu
KIM, Dohyeon
PARK, Seho
PARK, Byunghwa
(31) 20200185157
(32) 28.12.2020
(33) Korea (Republic)

(51) H02J 50/23
H02J 50/40
H02J 50/90
H02J 50/60
G01S 3/48
(11) EP3817190
(21) EP20204882.3
(47) 21.05.2025
(22) 30.10.2020
(54) WIRELESS ENERGY EMISSION DEVICE AND ELECTRONIC EQUIPMENT
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) LIN, Xianqi
PAN, Yajun
WEI, Shujun
BAI, Jian
YUAN, Tuyou
(31) 201911067883
(32) 04.11.2019
(33) China

(51) H02K 1/18
H02K 3/26
H02K 21/24
(11) EP4007123
(21) EP22151089.4
(47) 21.05.2025
(22) 10.01.2018
(54) SYSTEM AND APPARATUS FOR MODULAR AXIAL FIELD ROTARY ENERGY DEVICE
(73) Infinitum Electric Inc.
(72) SCHULER, Bernhard, L.
LEE, Rich
RASMUSSEN, Jorgen
(31) 201815864663
201762609900 P
201762457696 P
201762445289 P
201762445211 P
201762445091 P
(32) 08.01.2018
22.12.2017
10.02.2017
12.01.2017
11.01.2017
11.01.2017
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) H02K 1/32
D06F 37/30
H02K 5/173
H02K 9/06

H02K 21/22
H02K 1/30
(11) EP4239862
(21) EP23152637.7
(47) 21.05.2025
(22) 20.01.2023
(54) MOTOR FOR LAUNDRY APPARATUS
(73) LG Electronics Inc.
(72) KIM, Sunho
KIM, Kyeong-Hwan
OH, Seung-Suk
(31) 20220027456
(32) 03.03.2022
(33) Korea (Republic)

(51) H02K 1/32
H02K 7/04
(11) EP4360195
(21) EP21736573.3
(47) 21.05.2025
(87) EP2021067012
29.12.2022
(22) 22.06.2021
(54) ROTOR FOR AN ELECTRIC MACHINE
(73) Pierburg GmbH
(72) VON PFINGSTEN, Georg
DEWENTER, Stefan
BIGALKE, Stephan

(51) H02K 3/28
H02K 3/12
(11) EP3829036
(21) EP20208821.7
(47) 21.05.2025
(22) 20.11.2020
(54) STATOR WITH PINS FOR AN ELECTRIC MACHINE
(73) Valeo eAutomotive Germany GmbH
(72) DOTZ, Boris
(31) 102019131973
(32) 26.11.2019
(33) Germany

(51) H02K 3/52
(11) EP4402779
(21) EP22802005.3
(47) 21.05.2025
(87) EP2022074916
23.03.2023
(22) 07.09.2022
(54) WINDING GUIDE FOR A ROTOR OF AN ELECTRIC MOTOR
(73) Ampere SAS
Nissan Motor Co., Ltd.
(72) MOTTE, Emmanuel
VIVAS-MARQUEZ, Daniella
(31) 2109605
(32) 14.09.2021
(33) France

(51) H02K 5/18
H02K 15/14
H05K 7/20
(11) EP3800768
(21) EP19213264.5
(47) 21.05.2025
(22) 03.12.2019
(54) ACTUATION MOTOR COMPRISING COOLING FINS
(73) Hamilton Sundstrand Corporation
(72) MASTROCOLA, Naison E.
PAL, Debabrata
(31) 201916593301
(32) 04.10.2019
(33) United States of America

(51) H02K 7/02
H02K 11/00
H02K 16/04
H02K 39/00
H03K 3/57
H02K 3/28
(11) EP4088369
(21) EP20848748.8
(47) 21.05.2025
(87) US2020067242
15.07.2021
(22) 29.12.2020
(54) ENERGY STORAGE MODULE WITH XRAM CURRENT MULTIPLIER
(73) Raytheon Company
(72) KUZNETSOV, Stephen
(31) 202016738184
(32) 09.01.2020
(33) United States of America

(51) H02K 7/10
F16D 63/00
(11) EP4075645
(21) EP21741789.8
(47) 21.05.2025
(87) JP2021001431
22.07.2021
(22) 18.01.2021
(54) ROTATING BODY FOR ROTATION RESTRICTING MECHANISM, AND ACTUATOR
(73) Yamaha Hatsudoki Kabushiki Kaisha
(72) SHINOHARA, Koji
HIRANO, Takumi
(31) PCT/JP2020/001529
(32) 17.01.2020
(33) World Intellectual Property Office (WIPO)

(51) H02K 9/19
H02K 9/193
H02K 5/20
(11) EP3739731
(21) EP20162075.4
(47) 21.05.2025
(22) 10.03.2020
(54) GUIDING DEVICE FOR A WINDING HEAD OF AN ELECTRIC MACHINE COMPRISING COOLING FLUID AND ELECTRIC MACHINE
(73) Valeo eAutomotive Germany GmbH
(72) KRAIS, Nils
SÖNTGERATH, Philipp
(31) 102019113091
(32) 17.05.2019
(33) Germany

(51) H02K 11/30
H02K 5/15
H02K 5/16
H02K 5/04
H02K 7/14
H02K 5/18
H02K 5/06
H02K 5/08
D06F 37/20
D06F 37/30
(11) EP4007128
(21) EP20950480.2
(47) 21.05.2025
(87) CN2020137628
24.03.2022
(22) 18.12.2020
(54) MOTOR AND WASHING MACHINE
(73) Foshan Welling Washer Motor Manufacturing Co., Ltd.
Huai'An Welling Motor Manufacturing Co., Ltd.
(72) GUO, Bingchun
ZHU, Xiaogang
YU, Minghu
(31) 202010968683
(32) 15.09.2020
(33) China

(51) H02K 11/33
H02K 5/22
H02K 7/14
H02K 9/22
H02K 11/00
H05K 7/14
(11) EP3240159
(21) EP17168111.7
(47) 21.05.2025
(22) 26.04.2017
(54) ELECTRICAL CONNECTION BAR FOR EXCHANGING ELECTRIC ENERGY BETWEEN AN ELECTRICAL APPARATUS AND AN ELECTRICITY NETWORK
(73) Valeo Electrification
(72) DUCHON, Rudy
(31) 1653782
(32) 28.04.2016
(33) France

(51) H02K 15/04
B21D 43/00
B21D 51/26
B21F 23/00
B65G 47/84
B07C 5/342
B07B 13/05
B21F 1/02
(11) EP4304063
(21) EP23183154.6
(47) 21.05.2025
(22) 03.07.2023
(54) SORTING MACHINE AND PRODUCTION SYSTEM AND SORTING METHOD FOR ROD CONDUCTORS
(73) FELSOMAT GmbH & Co. KG
(72) PESCHINA, Jürgen
ZACHMANN, Raphael
(31) 102022206997
(32) 08.07.2022
(33) Germany

(51) H02M 1/00
H02M 1/08
H02M 7/48
G01K 7/01
G01R 19/00
H02M 7/00
H02M 7/5387
H03K 17/14
H10D 30/66
H10D 84/00
(11) EP4160888
(21) EP21812305.7

(47) 21.05.2025
(87) JP2021004247
02.12.2021
(22) 05.02.2021
(54) POWER CONVERSION DEVICE
(73) Hitachi Astemo, Ltd.
(72) WADA, Shinichirou
YANO, Tomohiko
KOBAYASHI, Yoichiro
(31) 2020090370
(32) 25.05.2020
(33) Japan

(51) H02M 1/00
H02M 3/155
(11) EP4016828
(21) EP20851876.1
(47) 21.05.2025
(87) CN2020101898
18.02.2021
(22) 14.07.2020
(54) DC-DC CONVERTER CIRCUIT
(73) Huawei Digital Power Technologies Co., Ltd.
(72) WANG, Jun
XU, Houjian
LIN, Tiansan
ZHANG, Fangpo
(31) 201910754932
(32) 15.08.2019
(33) China

(51) H02M 3/156
H02M 1/42
H02M 1/00
(11) EP4050782
(21) EP21215125.2
(47) 21.05.2025
(22) 16.12.2021
(54) POWER CONVERTER CONTROL USING CURRENT RECONSTRUCTION OF POWER FACTOR CORRECTION INDUCTOR CURRENT
(73) NXP B.V.
(72) HALBERSTADT, Hans
GRAKIST, Alfred
(31) 202117185890
(32) 25.02.2021
(33) United States of America

(51) H02M 3/335
H02M 1/00
G06N 3/02
G06N 3/04
G06N 3/08
(11) EP3955450
(21) EP21185023.5
(47) 21.05.2025
(22) 12.07.2021
(54) DC-DC CONVERTER WITH INTELLIGENT CONTROLLER
(73) SKAIChips Co., Ltd.
Research & Business Foundation Sungkyunkwan University
(72) Lee, Kang Yoon
Jo, Jong Wan
Kim, Min Young
Park, Dong Soo
Choi, Kyung Duk
Pu, Young Gun
(31) 20200101414
(32) 12.08.2020
(33) Korea (Republic)

(51) H02M 7/06
H02J 7/00
(11) EP3907873
(21) EP20749269.5
(47) 21.05.2025
(87) CN2020072972
06.08.2020
(22) 19.01.2020
(54) POWER SUPPLY RECTIFYING METHOD AND DEVICE
(73) Huawei Technologies Co. Ltd.
(72) XIONG, Liqun
FANG, Liangren
(31) 201910092038
(32) 30.01.2019
(33) China

(51) H02M 7/162
B23K 11/24
B23K 11/25
(11) EP2639954
(21) EP12007441.4
(47) 21.05.2025
(22) 31.10.2012
(54) METHOD AND CONTROL DEVICE FOR CHARGING AN INTERMEDIATE CIRCUIT CAPACITOR FOR A WELDING DEVICE
(73) Robert Bosch GmbH
(72) SCHOLZ, Reinhard
(31) 102012005959
102011122409
(32) 23.03.2012
24.12.2011
(33) Germany
Germany

(51) H02P 1/52
H02P 27/06
H02P 1/46
H02P 7/293
H02P 23/00
(11) EP3644498
(21) EP17914666.7
(47) 21.05.2025
(87) JP2017022845
27.12.2018
(22) 21.06.2017
(54) THYRISTOR STARTER
(73) TMEIC Corporation
(72) KAWAGUCHI, Hironori
ANDO, Akinobu
OGINO, Hiroshi
MATSUMOTO, Yasuaki

(51) H02P 5/48
H02P 5/50
B60L 15/20
(11) EP3920404
(21) EP19913897.5
(47) 21.05.2025
(87) CN2019103641
06.08.2020
(22) 30.08.2019
(54) MOTOR CONTROL METHOD AND DEVICE
(73) Beijing Jingwei Hirain Technologies Co., Inc.
(72) FAN, Jingyuan
LIU, Shuang
(31) 201910079629
(32) 28.01.2019
(33) China

(51) H02P 6/00
(11) EP4300806
(21) EP23175008.4
(47) 21.05.2025
(22) 24.05.2023
(54) CONTROLLING OF AN AIRCRAFT POWER AND PROPULSION SYSTEM
(73) Rolls-Royce plc
(72) Trainer, David R
Chong, Ellis F H
Sweet, Mark
Incerpi, Gian
(31) 202209356
(32) 27.06.2022
(33) United Kingdom

(51) H02P 6/10
H02P 21/05
H02P 29/032
B60L 15/20
(11) EP4434796
(21) EP21964802.9
(47) 21.05.2025
(87) JP2021042656
25.05.2023
(22) 19.11.2021
(54) ELECTRIC MOTOR CONTROL METHOD AND ELECTRIC MOTOR CONTROL DEVICE
(73) NISSAN MOTOR CO., LTD.
(72) SHOUJI, Mitsuhiro
KOJIMA, Tetsuro

(51) H02P 6/24
B60L 3/04
H02P 3/22
(11) EP4042557
(21) EP20793070.2
(47) 21.05.2025
(87) GB2020052489
15.04.2021
(22) 08.10.2020
(54) METHOD AND APPARATUS FOR CONTROLLING ELECTRIC MOTORS
(73) BorgWarner Gateshead Limited
(72) THOMPSON, Ken
ZHOU, Jolene
DUNN, Jack
(31) 201914528
(32) 08.10.2019
(33) United Kingdom

(51) H02P 23/14
H04M 1/725
H04M 19/04
H02P 25/032
H04W 52/02
(11) EP4024699
(21) EP20866623.0
(47) 21.05.2025
(87) CN2020112884
25.03.2021
(22) 01.09.2020
(54) MOTOR VIBRATION CONTROL METHOD AND ELECTRONIC DEVICE
(73) Huawei Technologies Co., Ltd.
(72) ZHA, Tingmin

CHEN, Bowen
ZHAO, Chunjiang
(31) 201910883245
(32) 18.09.2019
(33) China

(51) H02P 27/08
G01R 31/34
(11) EP4152019
(21) EP22195931.5
(47) 21.05.2025
(22) 15.09.2022
(54) CURRENT-SAMPLING METHOD, CHIP, AND SAMPLING APPARATUS FOR PHASE CURRENT OF MOTOR
(73) Autochips Wuhan Co., Ltd.
(72) PENG, Zhihao
(31) 202111080891
(32) 15.09.2021
(33) China

(51) H02P 27/08
H02P 21/00
(11) EP4369594
(21) EP21949177.6
(47) 21.05.2025
(87) IB2021000455
12.01.2023
(22) 06.07.2021
(54) MOTOR CONTROL METHOD AND MOTOR CONTROL DEVICE
(73) NISSAN MOTOR CO., LTD.
Renault s.a.s
(72) OKUYAMA, Yuka
BOUARFA, Abdelkader

(51) H02P 29/00
H02P 6/15
H02P 29/024
H02P 23/26
(11) EP3322087
(21) EP15898223.1
(47) 21.05.2025
(87) JP2015069948
19.01.2017
(22) 10.07.2015
(54) MOTOR CONTROL DEVICE, COMPRESSOR, AND AIR CONDITIONER
(73) Mitsubishi Electric Corporation
(72) TSUMURA, Akihiro
KUSUBE, Shinsaku
IWATA, Akihiko
YUASA, Kenta

(51) H02P 29/024
G01R 31/34
(11) EP4280454
(21) EP21848121.6
(47) 21.05.2025
(87) JP2021001098
21.07.2022
(22) 14.01.2021
(54) DIAGNOSIS METHOD AND DIAGNOSIS DEVICE FOR THREE-PHASE ALTERNATING CURRENT MOTOR
(73) Nissan Motor Co., Ltd.
(72) KANEKO, Yuta

(51) H02P 29/032
(11) EP4000175
(21) EP20750077.8
(47) 21.05.2025
(87) US2020041637
21.01.2021
(22) 10.07.2020
(54) METHOD AND APPARATUS FOR THE SAFE LIMITATION OF MOTOR TORQUE IN A THREE-PHASE DRIVE
(73) Kollmorgen Corporation
(72) PEARCE, Robert
(31) 201962875320 P
(32) 17.07.2019
(33) United States of America

(51) H02S 10/00
H02M 1/12
H02M 1/36
H02M 7/12
H02M 7/44
H02M 1/32
(11) EP4369584
(21) EP23210808.4
(47) 21.05.2025
(22) 28.01.2019
(54) DEVICE, METHOD, AND SYSTEM FOR RESOLVING COMMON-MODE VOLTAGE INTERFERENCE
(73) Huawei Digital Power Technologies Co., Ltd.
(72) GAO, Yongbing
WANG, Chen
LIU, Zhaopeng

(51) H02S 20/10
F24S 25/50
F24S 20/67
F24S 25/10
F24S 25/60
(11) EP4331112
(21) EP22726665.7
(47) 21.05.2025
(87) EP2022061581
03.11.2022
(22) 29.04.2022
(54) SUPPORT STRUCTURE FOR PV MODULES
(73) SBP Sonne GmbH
(72) BALZ, Markus
BOHN, Matthis
FRANK, Martin
DILLMANN, Uli
(31) 102021111106
(32) 29.04.2021
(33) Germany

(51) H02S 20/10
F24S 25/617
(11) EP4200973
(21) EP21769848.9
(47) 21.05.2025
(87) US2021046650
24.02.2022
(22) 19.08.2021
(54) PHOTOVOLTAIC MODULE MOUNTING STRUCTURE
(73) Parasol Structures Inc.
(72) ATTAL, Francois
CUFF, Brian
IWASAKA, Hikaru
KELLER, Alexander
(31) 202063068017 P
(32) 20.08.2020
(33) United States of America

(51) H02S 20/10
H02S 30/10
F16M 11/06
H02S 20/32
F24S 25/12
F24S 25/617
F24S 25/65
F24S 30/425
(11) EP4211792
(21) EP21867824.1
(47) 21.05.2025
(87) US2021050290
17.03.2022
(22) 14.09.2021
(54) PIER FOR A SOLAR TRACKER
(73) Nextracker Inc.
(72) KUMAR, Phani
SABLE, Abhimanyu
MORANKAR, Jitendra
AU, Alexander W.
KRESSE, David E.
(31) 202163235272 P
202063078228 P
(32) 20.08.2021
14.09.2020
(33) United States of America
United States of America

(51) H02S 20/20
H02S 40/30
(11) EP3361628
(21) EP18155743.0
(47) 21.05.2025
(22) 08.02.2018
(54) DEVICE AND METHOD FOR ATTACHING ELECTRONIC AUXILIARY COMPONENTS TO A SUPPORT STRUCTURE FOR SOLAR PANELS
(73) Esdec B.V.
(72) DE VOGEL, Vincent
DE VOGEL, Jeroen
VAN REGTEREN, Frank
TE BOEKHORST, Laurens
(31) 2018343
(32) 08.02.2017
(33) Netherlands

(51) H02S 20/30
H02S 40/22
(11) EP3742603
(21) EP18901363.4
(47) 21.05.2025
(87) KR2018009895
25.07.2019
(22) 28.08.2018
(54) SOLAR MODULE INSTALLATION METHOD FOR EFFICIENT USE OF SUNLIGHT
(73) Sung Chang Co., Ltd
(72) LEE, Jai Jin
(31) 20180005599
(32) 16.01.2018
(33) Korea (Republic)

(51) H02S 50/10
(11) EP4380042
(21) EP23212508.8
(47) 21.05.2025
(22) 28.11.2023

(54) ADJUSTMENT AND MEASUREMENT METHOD AND SYSTEM FOR PHOTOVOLTAIC POWER PLANT
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
(72) AMHAL, Mohamed
BUTTIN, Hervé
(31) 2212518
(32) 29.11.2022
(33) France

(51) H03F 1/32
H04B 1/04
H04L 27/26
H03F 1/02
H03F 3/19
H03F 3/24
H03F 3/193
H04L 27/233
H04L 27/38
H02M 3/158
(11) EP3335314
(21) EP16754111.9
(47) 21.05.2025
(87) US2016046715
23.02.2017
(22) 12.08.2016
(54) DIGITAL DYNAMIC BIAS CIRCUIT
(73) Viasat, Inc.
(72) PETROVIC, Branislav
BREWER, Kenneth
BUER, Kenneth
KENT, Steve
JALALEDDINE, Sateh
(31) 201562205286 P
(32) 14.08.2015
(33) United States of America

(51) H03F 3/58
H03F 3/189
H03F 1/02
(11) EP4380048
(21) EP22306781.0
(47) 21.05.2025
(22) 02.12.2022
(54) SYSTEM AND METHOD FOR MANAGING THE OPERATION OF A TRAVELING WAVE TUBE AMPLIFIER
(73) THALES
(72) PEQUET, Eric
LISMONDE, Xavier
FAYT, Philippe

(51) H03G 1/00
H03G 3/30
H03F 3/72
H03F 1/22
H03F 1/26
H03F 3/193
H03G 5/28
H04B 1/18
H04B 1/26
H04B 1/525
(11) EP3804131
(21) EP19810207.1
(47) 21.05.2025
(87) US2019033401
05.12.2019
(22) 21.05.2019
(54) WIDEBAND LOW NOISE AMPLIFIER (LNA) WITH A RECONFIGURABLE BANDWIDTH FOR MILLIMETER-WAVE 5G COMMUNICATION
(73) Swiftlink Technologies Inc.
(72) HUANG, Min-Yu
WANG, Hua
CHEN, Thomas
CHI, Taiyun
(31) 201815993580
(32) 30.05.2018
(33) United States of America

(51) H03K 5/15
G06F 1/10
(11) EP3843270
(21) EP20197694.1
(47) 21.05.2025
(22) 23.09.2020
(54) APPARATUS FOR GENERATING A PLURALITY OF PHASE-SHIFTED CLOCK SIGNALS, ELECTRONIC SYSTEM, BASE STATION AND MOBILE DEVICE
(73) INTEL Corporation
(72) SHIN, Hundo
AZADET, Kameran
CLARA, Martin
GRUBER, Daniel
(31) 201916724564
(32) 23.12.2019
(33) United States of America

(51) H03L 7/081
H03L 7/087
H03L 7/191
H03L 7/197
(11) EP3985876
(21) EP21202813.8
(47) 21.05.2025
(22) 15.10.2021
(54) FRACTIONAL-N PHASE-LOCKED LOOP AND SLICED CHARGE PUMP CONTROL METHOD THEREOF
(73) MEDIATEK Inc.
(72) HUANG, Po-Chun
HSUEH, Yu-Li
(31) 202117462014
202063093325 P
(32) 31.08.2021
19.10.2020
(33) United States of America
United States of America

(51) H03M 1/06
H03M 1/08
H03M 1/76
H03M 3/00
(11) EP3846347
(21) EP20216863.9
(47) 21.05.2025
(22) 23.12.2020
(54) SYSTEM AND METHOD FOR IMPROVING MATCHING IN A SIGNAL CONVERTER
(73) NXP B.V.
(72) KAMRAN, Muhammad
NEUTEBOOM, Harry
(31) 202016735031
(32) 06.01.2020
(33) United States of America

(51) H03M 1/10
H03M 3/00
H03M 1/66
(11) EP4072022
(21) EP22174946.8
(47) 21.05.2025
(22) 30.09.2016
(54) DELTA SIGMA PATTERNS FOR CALIBRATING A DIGITAL-TO-ANALOG CONVERTER
(73) Analog Devices, Inc.
(72) CLARA, Martin
ENGEL, Gill
(31) 201615144163
(32) 02.05.2016
(33) United States of America

(51) H03M 13/13
H03M 13/11
H03M 13/00
(11) EP4208947
(21) EP20951946.1
(47) 21.05.2025
(87) CN2020113243
10.03.2022
(22) 03.09.2020
(54) METHOD AND APPARATUS FOR IMPROVED BELIEF PROPAGATION BASED DECODING
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) ZHANG, Yushi
XIE, Ailing

(51) H03M 13/13
H03M 13/39
(11) EP3987665
(21) EP19735320.4
(47) 21.05.2025
(87) EP2019067865
07.01.2021
(22) 03.07.2019
(54) SLIDING WINDOW AND SUBBLOCK-WISE ENCODING AND DECODING OF POLAR CODES
(73) Huawei Technologies Co., Ltd.
(72) CONDO, Carlo
BIOGLIO, Valerio

(51) H04B 1/10
H04B 1/16
H03G 3/00
H03G 3/30
(11) EP4250562
(21) EP23161943.8
(47) 21.05.2025
(22) 15.03.2023
(54) JOINT STEPPED OVERLAPPING HYSTERESIS GAIN CONTROL
(73) L3Harris Technologies, Inc.
(72) Gunn, Joshua D.
Hinton, Ryan W.
Thorson, David W.
(31) 202217702390
(32) 23.03.2022
(33) United States of America

(51) H04B 1/30
H04B 1/10
(11) EP4391395
(21) EP22306990.7
(47) 21.05.2025
(22) 22.12.2022
(54) METHOD FOR DEMODULATING A RF SIGNAL

(73) STMicroelectronics (Grand Ouest) SAS
(72) SITTLER, François
GUYARD, Patrick

(51) H04B 1/40
H04B 1/04
(11) EP4054082
(21) EP19953785.3
(47) 21.05.2025
(87) CN2019122186
03.06.2021
(22) 29.11.2019
(54) RADIO FREQUENCY TRANSMITTER
(73) Huawei Technologies Co., Ltd.
(72) QIAN, Huizhen
LUO, Xun

(51) H04B 1/40
H04B 1/04
H01L 23/48
(11) EP4106208
(21) EP22170452.1
(47) 21.05.2025
(22) 28.04.2022
(54) DIE TO DIE HIGH-SPEED COMMUNICATION WITHOUT DISCRETE AMPLIFIERS BETWEEN A MIXER AND TRANSMISSION LINE
(73) INTEL Corporation
(72) Kamgaing, Telesphor
(31) 202117349777
(32) 16.06.2021
(33) United States of America

(51) H04B 3/54
H04B 3/32
(11) EP4005100
(21) EP20848003.8
(47) 21.05.2025
(87) US2020044115
04.02.2021
(22) 29.07.2020
(54) PROTOCOL FOR MULTI-MASTER COMMUNICATION COORDINATION ON SHARED MEDIA CHANNEL
(73) Enphase Energy, Inc.
(72) BRONSTEIN, Vladimir Isaac
CHAUDHARI, Gaurao Onkar
LAUDEL, Kennan Herbert
(31) 201962879620 P
(32) 29.07.2019
(33) United States of America

(51) H04B 3/56
H04L 9/08
(11) EP3410608
(21) EP18173946.7
(47) 21.05.2025
(22) 24.05.2018
(54) ELECTRONIC APPARATUS HAVING TWO MEMORIES AND ASSOCIATED PAIRING METHOD
(73) Freebox
(72) POUILLON, Nicolas
(31) 1754725
(32) 30.05.2017
(33) France

(51) H04B 5/00
A47J 43/07
(11) EP4243293
(21) EP22160537.1
(47) 21.05.2025
(22) 07.03.2022
(54) ACCESSORY FOR A KITCHEN APPLIANCE
(73) Vorwerk & Co. Interholding GmbH
(72) Beckmann, Nils

(51) H04B 5/48
H04B 5/77
G06K 19/07
G06K 7/10
(11) EP3790201
(21) EP19196097.0
(47) 21.05.2025
(22) 09.09.2019
(54) NFC DEVICE AND METHOD OF OPERATING THE SAME
(73) NXP B.V.
(72) NUNZIATA, Fred George
BUCHSBAUM, Martin
MERLIN, Erich
KRENN, Adrian Rafael

(51) H04B 7/024
H04B 7/06
H04B 7/0452
H04B 7/0413
H04W 84/12
H04W 92/12
(11) EP4052377
(21) EP20796609.4
(47) 21.05.2025
(87) EP2020080400
06.05.2021
(22) 29.10.2020
(54) COMMUNICATION DEVICES AND METHODS
(73) Sony Group Corporation
(72) HANDTE, Thomas
CIOCHINA, Dana
(31) 19206564
(32) 31.10.2019
(33) European Patent Office (EPO)

(51) H04B 7/024
H04B 7/06
H04W 24/10
H04W 84/12
(11) EP4029151
(21) EP20885220.2
(47) 21.05.2025
(87) CN2020127532
14.05.2021
(22) 09.11.2020
(54) METHOD AND APPARATUS FOR CHANNEL STATE INFORMATION FEEDBACK FOR JOINT TRANSMISSION
(73) Huawei Technologies Co., Ltd.
(72) SUH, Jung Hoon
XIN, Yan
ABOUL-MAGD, Osama
(31) 202017089112
201962932845 P
(32) 04.11.2020
08.11.2019
(33) United States of America
United States of America

(51) H04B 7/0452
H04B 7/0413
H04B 7/0456
H04B 7/06
H04L 27/26
H04L 1/06
H04L 1/00
H04L 27/00
(11) EP4072034
(21) EP22156474.3
(47) 21.05.2025
(22) 20.06.2017
(54) TRANSMITTING DEVICE AND TRANSMITTING METHOD
(73) Panasonic Intellectual Property Corporation of America
(72) MURAKAMI, Yutaka
KIMURA, Tomohiro
OUCHI, Mikihiro
(31) 2017107012
2017040865
2017000512
2016140331
(32) 30.05.2017
03.03.2017
05.01.2017
15.07.2016
(33) Japan
Japan
Japan
Japan

(51) H04B 7/0456
H04B 7/06
H04L 5/00
H04L 25/00
(11) EP4311122
(21) EP23198759.5
(47) 21.05.2025
(22) 06.01.2020
(54) PARAMETER CONFIGURATION METHOD AND COMMUNICATIONS APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) WANG, Xiaohan
JIN, Huangping
BI, Xiaoyan
(31) 201910021166
(32) 09.01.2019
(33) China

(51) H04B 7/06
H04W 76/18
(11) EP3711185
(21) EP18816234.1
(47) 21.05.2025
(87) IB2018059021
23.05.2019
(22) 16.11.2018
(54) METHOD FOR PERFORMING RADIO LINK MONITORING
(73) Telefonaktiebolaget LM Ericsson (Publ)
(72) SIOMINA, Iana
KAZMI, Muhammad
CALLENDER, Christopher
MÄÄTTANEN, Helka-Liina
DA SILVA, Icaro L. J.
(31) 201762587218 P
(32) 16.11.2017
(33) United States of America

(51) H04B 7/185
(11) EP4344093
(21) EP24155869.1

(47) 21.05.2025
(22) 24.02.2021
(54) LENSING USING LOWER EARTH ORBIT REPEATERS
(73) ViaSat, Inc.
(72) HANCHARIK, David J.
(31) 202062981000 P
(32) 24.02.2020
(33) United States of America

(51) H04B 10/075
H04B 10/516
H04B 10/50
(11) EP4173169
(21) EP20945350.5
(47) 21.05.2025
(87) CN2020102183
20.01.2022
(22) 15.07.2020
(54) SELF-CALIBRATING DEVICE AND METHOD FOR IN-PHASE AND QUADRATURE TIME SKEW AND CONJUGATION IN A COHERENT TRANSMITTER
(73) Huawei Technologies Co., Ltd.
(72) TANG, Xuefeng
JIN, Qiang
NG, Wing Chau
OUYANG, Si
ZHANG, Zhuhong

(51) H04B 10/112
(11) EP4042596
(21) EP20789703.4
(47) 21.05.2025
(87) NL2020050623
15.04.2021
(22) 09.10.2020
(54) OPTIMIZING ALIGNMENT IN OPTICAL COMMUNICATION
(73) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk Onderzoek TNO
(72) KLOP, Willem Arjan
DEN BREEJE, Remco
SAATHOF, Rudolf
DOELMAN, Nicolaas Jan
(31) 19202674
(32) 11.10.2019
(33) European Patent Office (EPO)

(51) H04B 10/25
H04B 10/2581
H04B 10/50
H04B 10/572
H01S 5/0687
H01S 5/40
H01S 3/13
H01S 3/139
H01S 5/00
H01S 5/0625
H01S 5/14
H04J 14/02
(11) EP3855646
(21) EP19870386.0
(47) 21.05.2025
(87) CN2019105301
16.04.2020
(22) 11.09.2019
(54) MULTI-WAVELENGTH LASER
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) ZHAO, Jialin
GUI, Chengcheng
FU, Shengmeng
(31) 201811190205
(32) 12.10.2018
(33) China

(51) H04B 10/25
H04L 9/40
H04Q 11/00
H03M 13/05
(11) EP4262093
(21) EP21917270.7
(47) 21.05.2025
(87) CN2021139424
14.07.2022
(22) 18.12.2021
(54) STATE NOTIFICATION METHOD, OPTICAL MODULE, NETWORK DEVICE, AND NETWORK SYSTEM
(73) Huawei Technologies Co. Ltd.
(72) DING, Li
WANG, Jianbing
SUN, Desheng
BI, Hongjun
(31) 202110363540
202110021317
(32) 02.04.2021
08.01.2021
(33) China
China

(51) H04B 10/294
G02B 26/08
G02B 6/35
H04B 10/564
(11) EP3978988
(21) EP20876178.3
(47) 21.05.2025
(87) CN2020110897
22.04.2021
(22) 24.08.2020
(54) POWER EQUALIZER AND ADJUSTMENT METHOD THEREFOR
(73) Huawei Technologies Co., Ltd.
(72) LI, Shimao
YAN, Yunfei
ZOU, Bing
(31) 201910974368
(32) 14.10.2019
(33) China

(51) H04B 10/40
H04B 10/548
H04B 10/61
H04J 14/02
H04J 14/08
H04B 10/60
(11) EP3935753
(21) EP20716136.5
(47) 21.05.2025
(87) US2020021024
10.09.2020
(22) 04.03.2020
(54) TIME DIVISION MULTIPLE ACCESS OPTICAL SUBCARRIERS
(73) Infinera Corporation
Jafari, Amir
Wu, Kuang-Tsan
Welch, David F.
Hand, Steven Joseph
Osman, Mohamed
(72) JAFARI, Amir
WU, Kuang-Tsan
WELCH, David F.
HAND, Steven Joseph
OSMAN, Mohamed
(31) 201962813151 P
(32) 04.03.2019
(33) United States of America

(51) H04B 10/50
(11) EP4406153
(21) EP22786006.1
(47) 21.05.2025
(87) EP2022075732
30.03.2023
(22) 16.09.2022
(54) AN OPTICAL WIRELESS COMMUNICATION SYSTEM
(73) Signify Holding B.V.
(72) TAO, Haimin
ARULANDU, Karnekumar
KHALID, Amir, Masood
(31) 21197980
(32) 21.09.2021
(33) European Patent Office (EPO)

(51) H04B 10/50
H01S 3/00
(11) EP4231550
(21) EP22157267.0
(47) 21.05.2025
(22) 17.02.2022
(54) APPARATUS AND METHOD FOR SYNTHESIZING A BROADBAND ELECTROMAGNETIC SIGNAL
(73) Karlsruher Institut für Technologie
(72) Koos, Christian
Henauer, Thomas
Sherifaj, Alban
Zwick, Thomas

(51) H04B 10/70
H04L 9/08
H04J 14/02
(11) EP3738227
(21) EP18707648.4
(47) 21.05.2025
(87) EP2018053685
22.08.2019
(22) 14.02.2018
(54) TRANSMITTER AND RECEIVER FOR QUANTUM KEY DISTRIBUTION
(73) Huawei Technologies Duesseldorf GmbH
(72) HILLERKUSS, David
COMANDAR, Lucian
FUNG, Fred, Chi, Hang
CANO VALADEZ, Ivan Nicolas

(51) H04B 17/318
H04L 5/00
H04W 40/22
(11) EP4211829
(21) EP21791089.2
(47) 21.05.2025
(87) US2021049464
17.03.2022
(22) 08.09.2021
(54) METHOD AND APPARATUS FOR PRIORITIZATION OF POSITIONING-RELATED REPORTS IN UPLINK
(73) QUALCOMM INCORPORATED
(72) MANOLAKOS, Alexandros

DUAN, Weimin
HOSSEINI, Seyedkianoush
HE, Linhai
SUNDARARAJAN, Jay Kumar
CHEN, Wanshi
MUKKAVILLI, Krishna Kiran
BHUSHAN, Naga
(31) 202117467969
202063076752 P
(32) 07.09.2021
10.09.2020
(33) United States of America
United States of America

(51) H04J 14/02
(11) EP2561636
(21) EP11772663.8
(47) 21.05.2025
(87) US2011033311
27.10.2011
(22) 20.04.2011
(54) ARCHITECTURE FOR SERVICE AGGREGATION IN AN INTERCONNECTION NODE
(73) Cisco Technology, Inc.
(72) GHIONI, Lorenzo
JOHNSON, Ronald
GAZZOLA, Maurizio
(31) 764641
(32) 21.04.2010
(33) United States of America

(51) H04J 14/02
G02B 6/293
(11) EP4080797
(21) EP20912214.2
(47) 21.05.2025
(87) CN2020141355
15.07.2021
(22) 30.12.2020
(54) ADD/DROP FILTER, OPTICAL ADD/DROP MULTIPLEXER AND WAVELENGTH CONTROL METHOD
(73) Huawei Technologies Co., Ltd.
Politecnico di Milano
(72) MELLONI, Andrea
MORICHETTI, Francesco
MAZIYAR, Milanizadeh
JI, Ruiqiang
MI, Guangcan
ZHANG, Zecen
(31) 202010018395
(32) 08.01.2020
(33) China

(51) H04K 3/00
(11) EP4167505
(21) EP22201296.5
(47) 21.05.2025
(22) 13.10.2022
(54) SYSTEMS AND METHOD FOR DECENTRALIZED LINK PERFORMANCE
(73) L3Harris Technologies, Inc.
(72) Zarubica, Radijove
Bench, Jeffrey B.
Kenney, Brent A.
Hirz, Philip M.
Giallorenzi, Thomas R.
Thorp, Brian J.
Hawker, James E.
Carter, Lee F.
Hamblin, Marley D.
Twitchell, Edwin R.
McCarthy, Rhett B.
(31) 202117500569
(32) 13.10.2021
(33) United States of America

(51) H04L 1/00
(11) EP3993294
(21) EP20863129.1
(47) 21.05.2025
(87) CN2020114600
18.03.2021
(22) 10.09.2020
(54) PACKET PROCESSING METHOD, DEVICE, AND COMPUTER STORAGE MEDIUM
(73) Huawei Technologies Co., Ltd.
(72) SHI, Jiyuan
CHEN, Qing
ZHANG, Mingli
(31) 201911207236
201910854179
(32) 29.11.2019
10.09.2019
(33) China
China

(51) H04L 1/00
H03M 13/27
H04B 7/02
(11) EP3868045
(21) EP19783182.9
(47) 21.05.2025
(87) US2019051919
23.04.2020
(22) 19.09.2019
(54) SYSTEMATIC BIT PRIORITY MAPPING INTERLEAVING FOR LAYERS WITH DIFFERENT MODULATION ORDERS
(73) QUALCOMM INCORPORATED
(72) KHOSHNEVISAN, Mostafa
SUN, Jing
ZHANG, Xiaoxia
(31) 201916575033
201862748088 P
(32) 18.09.2019
19.10.2018
(33) United States of America
United States of America

(51) H04L 1/00
H04B 7/06
H04L 25/02
(11) EP4068660
(21) EP19958112.5
(47) 21.05.2025
(87) CN2019130991
08.07.2021
(22) 31.12.2019
(54) CHANNEL INFORMATION FEEDBACK METHOD AND COMMUNICATION APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) REN, Xiang
JIN, Huangping
WANG, Xiaohan
GE, Shibin
YUAN, Yiling

(51) H04L 1/00
H04L 1/04
H04J 11/00
H04B 1/71
H04B 1/74
H04W 72/542
H04W 84/18
H04W 72/23
H04W 72/0453
(11) EP4333352
(21) EP24152893.4
(47) 21.05.2025
(22) 23.02.2023
(54) CONTROL CHANNEL DIVERSITY SELECTION
(73) L3Harris Technologies, Inc.
(72) KENNEY, Brent A.
BENCH, Jeffrey B.
Thorp, Brian J.
(31) 202217686761
(32) 04.03.2022
(33) United States of America

(51) H04L 1/00
H04L 1/1867
G10L 19/008
G10L 19/16
H04W 4/80
H04W 56/00
(11) EP3895163
(21) EP20758959.9
(47) 21.05.2025
(87) KR2020002323
27.08.2020
(22) 18.02.2020
(54) METHOD FOR PROCESSING AUDIO DATA AND ELECTRONIC DEVICE THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) MOON, Hangil
KIM, Hyunwook
LEE, Sanghoon
HAN, Euibum
(31) 20190019112
(32) 19.02.2019
(33) Korea (Republic)

(51) H04L 1/00
H04L 5/00
(11) EP3826347
(21) EP19846014.9
(47) 21.05.2025
(87) CN2019099588
13.02.2020
(22) 07.08.2019
(54) DCI DETECTION METHOD, PDCCH CONFIGURATION METHOD, AND COMMUNICATIONS APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) HANG, Haicun
GE, Shibin
WANG, Xiaohan
BI, Xiaoyan
(31) 201810910875
(32) 10.08.2018
(33) China

(51) H04L 1/00
H04L 5/00
H04W 4/40
H04W 76/14
H04W 24/08

H04W 24/10
H04W 92/18
(11) EP3883159
(21) EP19892435.9
(47) 21.05.2025
(87) CN2019123101
11.06.2020
(22) 04.12.2019
(54) METHOD FOR MEASURING QUALITY OF SIDELINK AND COMMUNICATION APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) LI, Tianze
XIANG, Zhengzheng
ZHANG, Jinfang
SU, Hongjia
LU, Lei
(31) 201811481307
(32) 05.12.2018
(33) China

(51) H04L 1/08
(11) EP4173189
(21) EP21748994.7
(47) 21.05.2025
(87) US2021039113
30.12.2021
(22) 25.06.2021
(54) DYNAMIC SLOT AGGREGATION CONFIGURATION
(73) QUALCOMM INCORPORATED
(72) YANG, Ming
RAY CHAUDHURI, Kausik
MONTOJO, Juan
(31) 202117357310
202063044769 P
(32) 24.06.2021
26.06.2020
(33) United States of America
United States of America

(51) H04L 1/08
H04L 1/18
H04L 5/00
(11) EP4135233
(21) EP22199260.5
(47) 21.05.2025
(22) 20.03.2018
(54) DESIGN OF EARLY TERMINATION SIGNAL AND HARQ-ACK FEEDBACK FOR PUSCH
(73) Apple Inc.
(72) CHATTERJEE, Debdeep
YE, Qiaoyang
XIONG, Gang
SHRESTHA, Bharat
TALARICO, Salvatore
(31) 201762586746 P
201762568185 P
201762562027 P
201762543031 P
201762502367 P
201762476085 P
(32) 15.11.2017
04.10.2017
22.09.2017
09.08.2017
05.05.2017
24.03.2017
(33) United States of America
United States of America
United States of America
United States of America
United States of America
United States of America

(51) H04L 1/08
H04L 5/00
H04W 74/0833
(11) EP3914020
(21) EP19914942.8
(47) 21.05.2025
(87) CN2019075276
20.08.2020
(22) 15.02.2019
(54) MONITORING METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) MI, Xiang
TIE, Xiaolei
SHAN, Baokun
LUO, Zhihu
JIN, Zhe

(51) H04L 1/16
H04L 1/18
H04L 1/00
(11) EP4245001
(21) EP21801786.1
(47) 21.05.2025
(87) US2021054224
19.05.2022
(22) 08.10.2021
(54) MULTIPLE BIT FEEDBACK CHANNEL
(73) QUALCOMM INCORPORATED
(72) SUN, Jing
ZHANG, Xiaoxia
LUO, Tao
AKKARAKARAN, Sony
XUE, Yisheng
MONTOJO, Juan
OZTURK, Ozcan
(31) 202117450242
202063112372 P
(32) 07.10.2021
11.11.2020
(33) United States of America
United States of America

(51) H04L 1/1607
H04L 1/1867
H04W 72/04
H04W 72/12
H04W 72/23
(11) EP3823192
(21) EP20215316.9
(47) 21.05.2025
(22) 07.07.2017
(54) DATA INDICATING METHOD AND RELATED PRODUCTS
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) LIN, Yanan

(51) H04L 1/18
(11) EP3893420
(21) EP21166596.3
(47) 21.05.2025
(22) 01.04.2021
(54) COMMUNICATION SYSTEM, DATA TRANSMISSION METHOD AND BASE STATION THEREOF
(73) Arcadyan Technology Corporation
(72) CHEN, Hsueh-Chien
TENG, Wei-Yang
(31) 109111531
(32) 06.04.2020
(33) Taiwan, Chinese Taipei

(51) H04L 1/18
(11) EP4193524
(21) EP21755992.1
(47) 21.05.2025
(87) EP2021072195
10.02.2022
(22) 09.08.2021
(54) METHODS FOR OPERATING HYBRID AUTOMATIC REPEAT REQUEST WITH DISABLING PER HYBRID AUTOMATIC REPEAT REQUEST PROCESS
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) KARAKI, Reem
LIN, Xingqin
FALAHATI, Sorour
KOORAPATY, Havish
(31) 202063062930 P
(32) 07.08.2020
(33) United States of America

(51) H04L 1/18
H04L 5/00
(11) EP4040698
(21) EP22166381.8
(47) 21.05.2025
(22) 29.12.2018
(54) METHOD FOR PERFORMING HYBRID AUTOMATIC REPEAT REQUEST FEEDBACK, AND TERMINAL
(73) Datang Mobile Communications Equipment Co., Ltd.
(72) GAO, Xuejuan
SI, Qianqian
TONY, Ekpenyong
(31) 201810129186
(32) 08.02.2018
(33) China

(51) H04L 1/1812
H04L 1/1829
H04L 47/24
H04W 28/02
H04W 72/23
(11) EP3644668
(21) EP17914992.7
(47) 21.05.2025
(87) CN2017089855
27.12.2018
(22) 23.06.2017
(54) TIME-FREQUENCY RESOURCE PREEMPTION DETERMINING METHOD, DEVICE, AND COMPUTER READABLE STORAGE MEDIUM
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) ZHOU, Juejia

(51) H04L 1/1829
H04L 1/1867
H04L 1/18
H04L 5/00
H04W 56/00
H04B 7/04
H04W 72/04
H04W 8/22
H04W 72/23

(11) EP4107887
(21) EP21717592.6
(47) 21.05.2025
(87) US2021018717
26.08.2021
(22) 19.02.2021
(54) UE PROCESSING TIME FOR PDSCH REPETITION IN THE SAME SLOT
(73) QUALCOMM INCORPORATED
(72) KHOSHNEVISAN, Mostafa
KIM, Tae Min
ZHANG, Xiaoxia
YU, Yuanning
(31) 202117178999
202062979988 P
(32) 18.02.2021
21.02.2020
(33) United States of America
United States of America

(51) H04L 5/00
(11) EP3566364
(21) EP17825533.7
(47) 21.05.2025
(87) EP2017084231
12.07.2018
(22) 21.12.2017
(54) CONTROL USING NR TDD
(73) Telefonaktiebolaget LM Ericsson (PUBL)
(72) WIKSTRÖM, Gustav
SACHS, Joachim
ASHRAF, Shehzad Ali
AKTAS, Ismet
(31) 201762444060 P
(32) 09.01.2017
(33) United States of America

(51) H04L 5/00
(11) EP3682579
(21) EP18739511.6
(47) 21.05.2025
(87) EP2018068468
14.03.2019
(22) 09.07.2018
(54) UPLINK TIMING ADJUSTMENT WITH MULTIPLE NUMEROLOGIES
(73) Nokia Technologies Oy
(72) TURTINEN, Samuli Heikki
HOOLI, Kari Juhani
TIIROLA, Esa Tapani
(31) 201762556885 P
(32) 11.09.2017
(33) United States of America

(51) H04L 5/00
(11) EP3860261
(21) EP19865539.1
(47) 21.05.2025
(87) CN2019106664
02.04.2020
(22) 19.09.2019
(54) METHOD FOR DETERMINING CARRIER WAVE SEARCH SPACE, TERMINAL AND NETWORK DEVICE
(73) Datang Mobile Communications Equipment Co., Ltd.
(72) WANG, Lei
GAO, Xuejuan
(31) 201811146099
(32) 29.09.2018
(33) China

(51) H04L 5/00
(11) EP4193549
(21) EP21762264.6
(47) 21.05.2025
(87) US2021044657
10.02.2022
(22) 05.08.2021
(54) DEMODULATION REFERENCE SIGNALS TRANSMISSION IN WIRELESS SYSTEMS
(73) InterDigital Patent Holdings, Inc.
(72) HASEGAWA, Fumihiro
MARINIER, Paul
COMSA, Virgil
LEE, Moon-il
ALFARHAN, Faris
(31) 202163185760 P
202163167893 P
202163136313 P
202063091454 P
202063061397 P
(32) 07.05.2021
30.03.2021
12.01.2021
14.10.2020
05.08.2020
(33) United States of America
United States of America
United States of America
United States of America
United States of America

(51) H04L 5/00
(11) EP4030675
(21) EP22160177.6
(47) 21.05.2025
(22) 14.06.2018
(54) METHOD OF FREQUENCY RESOURCE ALLOCATION
(73) NTT DOCOMO, INC.
(72) Kakishima, Yuichi
Na, Chongning
Nagata, Satoshi
(31) 201762519708 P
(32) 14.06.2017
(33) United States of America

(51) H04L 5/00
(11) EP4181449
(21) EP22206673.0
(47) 21.05.2025
(22) 10.11.2022
(54) RADIO FREQUENCY (RF) COMMUNICATION SYSTEM PROVIDING CHANNEL SELECTION BASED UPON HISTORICAL RF SPECTRAL DATA AND RELATED METHODS
(73) L3Harris Technologies, Inc.
(72) Jeraj, Janez
(31) 202117454496
(32) 11.11.2021
(33) United States of America

(51) H04L 5/00
(11) EP3345326
(21) EP15771564.0
(47) 21.05.2025
(87) EP2015071956
30.03.2017
(22) 24.09.2015
(54) METHOD AND DEVICE IN A WIRELESS COMMUNICATION SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) WANG, Fan
BERGGREN, Fredrik
DU, Yinggang

(51) H04L 5/00
(11) EP3665842
(21) EP18762208.9
(47) 21.05.2025
(87) US2018045836
14.02.2019
(22) 08.08.2018
(54) MULTIPLE SLOT LONG PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) DESIGN FOR 5TH GENERATION (5G) NEW RADIO (NR)
(73) SHARP Kabushiki Kaisha
FG INNOVATION COMPANY LIMITED
(72) YIN, Zhanping
NOGAMI, Toshizo
(31) 201762543795 P
(32) 10.08.2017
(33) United States of America

(51) H04L 5/00
(11) EP4078874
(21) EP20812163.2
(47) 21.05.2025
(87) US2020057751
24.06.2021
(22) 28.10.2020
(54) TECHNIQUES FOR SIGNALING UPLINK TRANSMISSION CONFIGURATION INDICATOR STATES
(73) QUALCOMM Incorporated
(72) VENUGOPAL, Kiran
ZHOU, Yan
LUO, Tao
BAI, Tianyang
LI, Junyi
KHOSHNEVISAN, Mostafa
(31) 202017081602
201962949959 P
(32) 27.10.2020
18.12.2019
(33) United States of America
United States of America

(51) H04L 5/00
(11) EP3996319
(21) EP21215760.6
(47) 21.05.2025
(22) 10.01.2019
(54) ACTIVATION AND DEACTIVATION OF SEMI-PERSISTENT CSI REPORTING
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) GAO, Shiwei
FAXÉR, Sebastian
MURUGANATHAN, Siva
(31) 201862616823 P
(32) 12.01.2018
(33) United States of America

(51) H04L 5/00
(11) EP4300868
(21) EP23195146.8
(47) 21.05.2025
(22) 04.05.2018
(54) BANDWIDTH PART CONFIGURATION AND OPERATION FOR NEW RADIO

(NR) WIDEBAND USER EQUIPMENT (UE)
(73) Apple Inc.
(72) JEON, Jeongho
CHO, Joonyoung
KWON, Hwan-Joon
(31) 201762521108 P
201762502512 P
(32) 16.06.2017
05.05.2017
(33) United States of America
United States of America

(51) H04L 5/00
H04B 7/0404
H04W 72/04
H04B 7/08
H04B 7/06
(11) EP4184847
(21) EP22204317.6
(47) 21.05.2025
(22) 13.07.2020
(54) SPATIAL RELATION IN NEW RADIO
(73) Ofinno, LLC
(72) CIRIK, Ali
DINAN, Esmael
YI, Yunjung
ZHOU, Hua
BABAEI, Alireza
KWAK, Youngwoo
PARK, Kyungmin
(31) 201962875144 P
(32) 17.07.2019
(33) United States of America

(51) H04L 5/00
H04B 7/06
H04B 7/08
H04L 27/26
H04W 56/00
H04W 74/0833
H04L 27/00
H04W 8/00
(11) EP3753171
(21) EP19704065.2
(47) 21.05.2025
(87) US2019012378
22.08.2019
(22) 04.01.2019
(54) DISCOVERY PREAMBLE CONTENT FOR A DEVICE DISCOVERY PROCEDURE
(73) QUALCOMM Incorporated
(72) ABEDINI, Navid
WU, Zhibin
LI, Junyi
BAGHEL, Sudhir, Kumar
GULATI, Kapil
JIANG, Libin
(31) 201916239408
201862630019 P
(32) 03.01.2019
13.02.2018
(33) United States of America
United States of America

(51) H04L 5/00
H04B 7/26
H04L 1/1867
H04L 1/1607
H04W 72/0446
H04L 1/1825
H04L 5/14
(11) EP3764583
(21) EP20194106.9
(47) 21.05.2025
(22) 29.09.2017
(54) SCHEDULED UCI TRANSMISSION SCHEME
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) BALDEMAIR, Robert
PARKVALL, Stefan
(31) 201662402405 P
(32) 30.09.2016
(33) United States of America

(51) H04L 5/00
H04J 11/00
H04J 13/00
(11) EP4192165
(21) EP21855326.1
(47) 21.05.2025
(87) CN2021107073
17.02.2022
(22) 19.07.2021
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) QU, Weilin
SU, Liyan
ZHANG, Jingjing
(31) 202010814990
(32) 13.08.2020
(33) China

(51) H04L 5/00
H04L 1/00
H04B 7/06
H04W 92/18
(11) EP4529711
(21) EP23745698.3
(47) 21.05.2025
(87) US2023026716
04.01.2024
(22) 30.06.2023
(54) CHANNEL STATE INFORMATION REPORT
(73) Ofinno, LLC
(72) PARK, Kyungmin
HONG, Jongwoo
DINAN, Esmael Hejazi
CHUN, SungDuck
JEON, Hyoungsuk
KIM, Taehun
XU, Jian
(31) 202263357374 P
(32) 30.06.2022
(33) United States of America

(51) H04L 5/00
H04L 1/1829
H04L 5/14
(11) EP3883164
(21) EP19899013.7
(47) 21.05.2025
(87) CN2019121514
25.06.2020
(22) 28.11.2019
(54) COMMUNICATION METHOD FOR CARRIER AGGREGATION SYSTEM, TERMINAL, AND NETWORK APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) YAN, Chaoyi
LUO, Zezhou
(31) 201811544898
(32) 17.12.2018
(33) China

(51) H04L 5/00
H04L 27/26
(11) EP4199617
(21) EP20950958.7
(47) 21.05.2025
(87) CN2020112742
03.03.2022
(22) 31.08.2020
(54) SYNCHRONIZATION SIGNAL TRANSMISSION METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) LIU, Fengwei
CHEN, Lei

(51) H04L 5/00
H04W 8/04
H04W 24/04
H04W 48/16
H04L 41/0893
(11) EP4344138
(21) EP21945069.9
(47) 21.05.2025
(87) JP2021021812
15.12.2022
(22) 08.06.2021
(54) COMMUNICATION CONTROL SYSTEM, CONTROL DEVICE, COMMUNICATION CONTROL METHOD, AND COMMUNICATION CONTROL PROGRAM
(73) MITSUBISHI ELECTRIC CORPORATION
(72) YASUTOMO, Yohei
ISHIHARA, Koshiro
YAMAUCHI, Takahisa

(51) H04L 5/00
H04W 24/00
H04L 27/26
(11) EP3562081
(21) EP17890767.1
(47) 21.05.2025
(87) CN2017119357
12.07.2018
(22) 28.12.2017
(54) METHOD AND APPARATUS FOR CONFIGURING REFERENCE SIGNAL
(73) Huawei Technologies Co., Ltd.
(72) LIU, Yong
WU, Lu
BI, Xiaoyan
(31) 201710313518
201710011868
(32) 05.05.2017
06.01.2017
(33) China
China

(51) H04L 5/00
H04W 28/20
H04W 72/04
H04W 72/54
(11) EP3627888
(21) EP18871581.7

(47) 21.05.2025
(87) CN2018111434
02.05.2019
(22) 23.10.2018
(54) METHOD, TERMINAL DEVICE, AND NETWORK DEVICE FOR DETECTING DOWNLINK CONTROL INFORMATION
(73) Huawei Technologies Co., Ltd.
(72) ZHUANG, Hongcheng
HAN, Yunbo
(31) 201711427739
201710996490
(32) 25.12.2017
24.10.2017
(33) China
China

(51) H04L 5/00
H04W 72/02
H04W 4/08
H04L 1/1829
H04L 1/00
(11) EP4027563
(21) EP20873682.7
(47) 21.05.2025
(87) CN2020113611
15.04.2021
(22) 04.09.2020
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) LIU, Yun
WANG, Jian
(31) 201910970091
(32) 12.10.2019
(33) China

(51) H04L 5/00
H04W 72/04
H04B 1/713
H04B 7/06
H04L 1/08
H04L 25/02
(11) EP3687094
(21) EP18866956.8
(47) 21.05.2025
(87) KR2018011890
18.04.2019
(22) 10.10.2018
(54) METHOD FOR TRANSMITTING AND RECEIVING SRS AND COMMUNICATION DEVICE THEREFOR
(73) LG Electronics Inc.
(72) CHOI, Kukheon
KANG, Jiwon
PARK, Jonghyun
KIM, Kyuseok
LEE, Kilbom
(31) 201762571167 P
(32) 11.10.2017
(33) United States of America

(51) H04L 5/00
H04W 72/20
H04L 27/26
(11) EP4047850
(21) EP20876828.3
(47) 21.05.2025
(87) CN2020120657
22.04.2021
(22) 13.10.2020
(54) TRANSMISSION METHOD, APPARATUS, FIRST COMMUNICATION NODE, SECOND COMMUNICATION NODE, AND MEDIUM
(73) ZTE Corporation
(72) WANG, Yuxin
LI, Yu Ngok
LU, Zhaohua
JIANG, Chuangxin
WU, Hao
ZHANG, Shujuan
(31) 201910980440
(32) 15.10.2019
(33) China

(51) H04L 5/00
H04W 72/23
H04W 72/0453
(11) EP4026269
(21) EP20861804.1
(47) 21.05.2025
(87) CN2020113462
11.03.2021
(22) 04.09.2020
(54) UPLINK CROSS-CARRIER SCHEDULING FOR TIME DIVISION MULTIPLEXING CARRIER AGGREGATION
(73) QUALCOMM Incorporated
(72) CAO, Yiqing
XU, Huilin
HAO, Chenxi
(31) PCT/CN2019/104675
(32) 06.09.2019
(33) World Intellectual Property Office (WIPO)

(51) H04L 5/00
H04W 72/40
H04W 76/28
(11) EP4199640
(21) EP21860537.6
(47) 21.05.2025
(87) CN2021115124
03.03.2022
(22) 27.08.2021
(54) DISCONTINUOUS RECEPTION (DRX) METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) CAI, Yu
XU, Haibo
XUE, Lixia
(31) 202110358455
202011112258
202010890908
(32) 01.04.2021
16.10.2020
29.08.2020
(33) China
China
China

(51) H04L 5/00
H04W 74/06
H04W 28/20
H04W 84/12
(11) EP4231773
(21) EP21891019.8
(47) 21.05.2025
(87) CN2021128374
19.05.2022
(22) 03.11.2021
(54) METHOD FOR DETERMINING SPATIAL REUSE PARAMETER FIELD IN PPDU AND RELATED APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) YU, Jian
GUO, Yuchen
PAN, Jinzhe
GAN, Ming
(31) 202011263310
(32) 12.11.2020
(33) China

(51) H04L 5/00
H04W 76/15
H04W 76/38
H04W 72/23
(11) EP3713357
(21) EP18878644.6
(47) 21.05.2025
(87) JP2018041984
23.05.2019
(22) 13.11.2018
(54) MOBILE STATION DEVICE IN MOBILE COMMUNICATION SYSTEM
(73) Sharp Kabushiki Kaisha
(72) SATO, Seiji
GOTO, Jungo
NAKAMURA, Osamu
YAMADA, Shohei
(31) 2017219907
(32) 15.11.2017
(33) Japan

(51) H04L 5/00
H04W 80/02
(11) EP4101108
(21) EP21709183.4
(47) 21.05.2025
(87) US2021016241
12.08.2021
(22) 02.02.2021
(54) USING MEDIUM ACCESS CONTROL CONTROL ELEMENTS TO SCHEDULE SEMI-PERSISTENT SOUNDING REFERENCE SIGNALS FOR POSITIONING
(73) QUALCOMM INCORPORATED
(72) MANOLAKOS, Alexandros
AKKARAKARAN, Sony
FISCHER, Sven
(31) 202117164316
202062970093 P
(32) 01.02.2021
04.02.2020
(33) United States of America
United States of America

(51) H04L 5/14
H04L 5/00
H04L 27/26
H04W 72/04
H04W 28/06
H04B 7/26
(11) EP3471472
(21) EP17813351.8
(47) 21.05.2025
(87) JP2017021972
21.12.2017
(22) 14.06.2017
(54) USER TERMINAL AND WIRELESS COMMUNICATION METHOD

(73) NTT DOCOMO, INC.
(72) TAKEDA, Kazuki
NAGATA, Satoshi
(31) 2016120932
(32) 17.06.2016
(33) Japan

(51) H04L 5/16
H04L 5/00
H04L 5/14
(11) EP2677827
(21) EP12746661.3
(47) 21.05.2025
(87) JP2012053818
23.08.2012
(22) 17.02.2012
(54) MOBILE TERMINAL DEVICE, BASE STATION DEVICE, AND COMMUNICATION CONTROL METHOD
(73) NTT DOCOMO, INC.
(72) KISHIYAMA, Yoshihisa
(31) 2011033388
(32) 18.02.2011
(33) Japan

(51) H04L 7/00
H03L 7/095
(11) EP4360245
(21) EP21759312.8
(47) 21.05.2025
(87) EP2021072708
23.02.2023
(22) 16.08.2021
(54) TIMING RECOVERY LOCK DETECTOR, SIGNAL RECEIVER APPARATUS, AND METHOD OF DETECTING TIMING RECOVERY LOCK
(73) Huawei Technologies Co., Ltd.
(72) STOJANOVIC, Nebojsa

(51) H04L 9/08
H04L 9/14
H04L 9/40
(11) EP3817276
(21) EP20204926.8
(47) 21.05.2025
(22) 30.10.2020
(54) APPARATUS AND METHOD FOR DATA SECURITY
(73) Samsung SDS Co., Ltd.
(72) LEE, Chang Hoon
AHN, Jang Hyuk
SEON, Dong Ghu
KIM, Ki Young
LEE, Young Hwa
YOON, Ji Sang
(31) 20190137086
(32) 31.10.2019
(33) Korea (Republic)

(51) H04L 9/08
H04L 9/40
H04W 12/04
H04W 12/041
H04W 12/0431
H04W 12/0433
H04W 88/08
(11) EP3852413
(21) EP20204543.1
(47) 21.05.2025
(22) 01.11.2013
(54) KEY PROCESSING METHOD IN DUAL CONNECTIVITY MODE AND DEVICE
(73) Huawei Technologies Co., Ltd.
(72) CHANG, Junren
LIN, Bo

(51) H04L 9/40
G06F 21/55
H04L 51/212
G06Q 10/107
(11) EP3496343
(21) EP18209258.5
(47) 21.05.2025
(22) 29.11.2018
(54) ELECTRONIC MAIL SECURITY SYSTEM
(73) Chicago Mercantile Exchange, Inc.
(72) KEMP, Thomas Anthony
DEPAOLIS, Metin Carlo
GEMZA JR., William Robert
WHALEN, Ryan Jerome
(31) 201715833396
(32) 06.12.2017
(33) United States of America

(51) H04L 9/40
G06N 20/00
G06F 21/55
G06F 21/56
G06N 3/045
G06N 3/088
G06N 3/09
(11) EP4293956
(21) EP22179244.3
(47) 21.05.2025
(22) 15.06.2022
(54) METHOD FOR PREDICTING MALICIOUS DOMAINS
(73) Heimdal Security A/S
(72) Rusu, Valentin
Cernei, Eugeniu

(51) H04L 9/40
H04L 9/08
H04L 9/06
H04L 9/32
(11) EP4346166
(21) EP23185950.5
(47) 21.05.2025
(22) 17.07.2023
(54) METHODS AND SYSTEMS FOR STARTING SECURE COMMUNICATION IN SYSTEMS WITH HIGH AVAILABILITY
(73) General Electric Company
BAE Systems Controls Inc.
(72) GILTON, Jeffrey
PFENNINGER, Matthew
NICHOLS, Douglas
SEIDEL, Russell
(31) 202217956939
(32) 30.09.2022
(33) United States of America

(51) H04L 9/40
H04L 9/32
H04L 9/00
G06F 21/64
G06F 21/44
(11) EP3832970
(21) EP20209911.5
(47) 21.05.2025
(22) 25.11.2020
(54) APPARATUS AND METHODS FOR VERIFYING A FILE ORIGIN
(73) Sage Global Services Limited
(72) GOODWIN, Michael Stuart
TEYJAS, Jaya
VOGELBERG, Klaus-Michael
LATIMER, Christopher Ian
(31) 201917568
(32) 02.12.2019
(33) United Kingdom

(51) H04L 9/40
H04L 67/02
H04L 61/4511
(11) EP4285551
(21) EP22704130.8
(47) 21.05.2025
(87) US2022013519
04.08.2022
(22) 24.01.2022
(54) ZERO TRUST END POINT NETWORK SECURITY DEVICE
(73) Raytheon Company
(72) JONES, Frederick K.
(31) 202117158345
(32) 26.01.2021
(33) United States of America

(51) H04L 9/40
H04L 67/12
H04L 67/565
(11) EP3939227
(21) EP20711884.5
(47) 21.05.2025
(87) EP2020056958
17.09.2020
(22) 13.03.2020
(54) METHOD AND COMMUNICATION CONTROL SYSTEM FOR INFLUENCING COMMUNICATION IN A COMMUNICATION NETWORK
(73) Anapur AG
(72) KRUSCHITZ, Erwin
(31) 102019106543
(32) 14.03.2019
(33) Germany

(51) H04L 9/40
H04W 4/50
H04W 12/02
H04L 41/0895
H04L 41/5051
H04L 41/50
(11) EP4173228
(21) EP20942982.8
(47) 21.05.2025
(87) CN2020098420
06.01.2022
(22) 28.06.2020
(54) NETWORK SLICING ENHANCEMENT
(73) Qualcomm Incorporated
(72) LI, Zhiguo
ZHANG, Nan

(51) H04L 12/10
(11) EP4398521
(21) EP23160905.8
(47) 21.05.2025
(22) 09.03.2023
(54) NETWORK DEVICE FOR RESTORING POE OPERATION
(73) Moxa Inc.

(72) Liu, Hsin-Hung
(31) 112100370
(32) 05.01.2023
(33) Taiwan, Chinese Taipei

(51) H04L 12/12
H04L 12/66
H04W 88/08
H04L 12/28
H04W 76/14
G06F 13/38
H04L 41/0806
H04L 41/08
H04W 84/18
(11) EP4064615
(21) EP19953342.3
(47) 21.05.2025
(87) KR2019015869
27.05.2021
(22) 19.11.2019
(54) ELECTRONIC DEVICE
(73) LG Electronics Inc.
(72) LEE, Kiwoong

(51) H04L 12/28
H04L 51/02
H04M 1/7243
H04L 51/04
G08B 21/24
G06F 9/451
(11) EP4202618
(21) EP21865823.5
(47) 21.05.2025
(87) CN2021113399
17.03.2022
(22) 19.08.2021
(54) METHOD FOR CONTROLLING DEVICE, ELECTRONIC DEVICE, AND SYSTEM
(73) Huawei Technologies Co. Ltd.
(72) WANG, Zongwei
WANG, Long
DU, Zhong
(31) 202010939859
(32) 09.09.2020
(33) China

(51) H04L 12/40
(11) EP4243352
(21) EP22161031.4
(47) 21.05.2025
(22) 09.03.2022
(54) COLLECTIVE SWITCHING FROM A DIFFERENTIAL SIGNALLING COMMUNICATION MODE TO A SINGLE-ENDED COMMUNICATION MODE UPON THE DETECTION OF A FAULT
(73) NXP B.V.
(72) van Dijk, Lucas Pieter Lodewijk
Wagner, Martin
Kwakernaat, Gerald

(51) H04L 12/40
(11) EP4152700
(21) EP22190438.6
(47) 21.05.2025
(22) 15.08.2022
(54) CONTROLLER AREA NETWORK TRANSCEIVER
(73) NXP B.V.
(72) de Haas, Clemens Gerhardus Johannes
(31) 202117447749
(32) 15.09.2021
(33) United States of America

(51) H04L 12/403
H04J 3/06
H04L 12/46
H04L 47/2416
H04L 47/2491
H04L 47/28
H04L 12/40
G05B 19/418
(11) EP4062595
(21) EP20811318.3
(47) 21.05.2025
(87) EP2020082943
27.05.2021
(22) 20.11.2020
(54) METHOD, SYSTEM, AND GATEWAY FOR LINKING TIME-SENSITIVE FIELDBUSES
(73) Wago Verwaltungsgesellschaft mbH
(72) SCHWAMBORN, Fabian
(31) 102019217909
(32) 20.11.2019
(33) Germany

(51) H04L 12/46
(11) EP4027592
(21) EP20862429.6
(47) 21.05.2025
(87) CN2020105244
18.03.2021
(22) 28.07.2020
(54) PACKET PROCESSING METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Yongkang
ZHENG, Kuili
CHU, Bosen
(31) 201910853670
(32) 10.09.2019
(33) China

(51) H04L 12/46
(11) EP4099644
(21) EP22176976.3
(47) 21.05.2025
(22) 02.06.2022
(54) PACKET PROCESSING METHOD AND RELATED APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) LI, Weihua
TIAN, Taixu
LIN, Libing
(31) 202110938562
202110621479
(32) 16.08.2021
03.06.2021
(33) China
China

(51) H04L 12/46
H04L 12/403
H04J 3/06
H04L 12/40
G05B 19/418
(11) EP4062597
(21) EP20811994.1
(47) 21.05.2025
(87) EP2020082958
27.05.2021
(22) 20.11.2020
(54) METHOD, SYSTEM, AND GATEWAY FOR LINKING TIME-SENSITIVE FIELDBUSES
(73) Wago Verwaltungsgesellschaft mbH
(72) SCHWAMBORN, Fabian
(31) 102019217906
(32) 20.11.2019
(33) Germany

(51) H04L 12/46
H04W 76/10
(11) EP4054130
(21) EP20893893.6
(47) 21.05.2025
(87) CN2020132414
03.06.2021
(22) 27.11.2020
(54) COMMUNICATION METHOD, APPARATUS AND SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) YAO, Qi
(31) 201911206495
(32) 29.11.2019
(33) China

(51) H04L 25/02
H01H 36/00
H01H 51/00
H04B 5/00
H04B 5/24
H04B 5/26
H04B 5/75
H04B 5/79
H04B 5/72
(11) EP4246822
(21) EP23190834.4
(47) 21.05.2025
(22) 05.12.2017
(54) COMMUNICATIONS USING AN INDUCTIVE COUPLING
(73) Power Integrations, Inc.
(72) Garcia, Olivier
Thalheim, Jan
Balli, Didier Raphael
Peter, Matthias

(51) H04L 25/49
H04B 14/02
H04L 1/00
(11) EP3790245
(21) EP20185612.7
(47) 21.05.2025
(22) 11.02.2015
(54) DATA PROCESSING METHOD AND DATA PROCESSING APPARATUS
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) YANG, Wenbin
WANG, Xinyuan
WANG, Tongtong
(31) PCT/CN2015/070314
(32) 08.01.2015
(33) World Intellectual Property Office (WIPO)

(51) H04L 27/18
H04B 10/556
H04L 27/22
H04L 27/00
(11) EP4187860
(21) EP22207365.2
(47) 21.05.2025
(22) 15.11.2022

(54) RADIO FREQUENCY (RF) RECEIVER THAT DETERMINES AN INTERFERING PHASE SHIFT KEYING (PSK) SIGNAL AN ASSOCIATED METHODS
(73) L3Harris Technologies, Inc.
(72) GIBSON, L. Andrew
KIMANI, Alexander
LINDSAY, Lance R.
SCHLEGEL, Christian
BROWN, Christopher L.
(31) 202117456897
(32) 30.11.2021
(33) United States of America

(51) H04L 27/34
H04N 21/63
H04L 5/00
H04B 7/0413
H04B 7/06
H04L 1/1867
H04L 65/80
H04L 67/06
H04L 69/14
H04N 21/4363
(11) EP3930277
(21) EP20773737.0
(47) 21.05.2025
(87) CN2020079542
24.09.2020
(22) 16.03.2020
(54) METHOD AND APPARATUS FOR DATA TRANSMISSION
(73) Huawei Technologies Co., Ltd.
(72) WU, Tao
CHEN, Teyan
YU, Jian
JIA, Jia
LIU, Yingzhuang
PENG, Yuanyuan
(31) 201910207982
(32) 19.03.2019
(33) China

(51) H04L 41/042
H04L 41/344
(11) EP3764594
(21) EP19777499.5
(47) 21.05.2025
(87) CN2019078537
03.10.2019
(22) 18.03.2019
(54) NETWORK DEVICE MANAGEMENT METHOD, APPARATUS AND SYSTEM
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) ZHANG, Yongkang
(31) 201810277234
(32) 30.03.2018
(33) China

(51) H04L 41/0631
H04L 41/0893
H04L 43/0811
H04L 41/16
(11) EP4024819
(21) EP21218064.0
(47) 21.05.2025
(22) 29.12.2021
(54) DETECTION METHOD, ASSOCIATED COMPUTER PROGRAM PRODUCT AND DETECTION SYSTEM
(73) THALES
(72) RANNOU, Léo
GRAH, Simon
SAUSSET, François
(31) 2014242
(32) 30.12.2020
(33) France

(51) H04L 41/0654
H04L 41/0668
G06F 11/16
G06F 11/20
(11) EP4044509
(21) EP20875118.0
(47) 21.05.2025
(87) CN2020120111
15.04.2021
(22) 10.10.2020
(54) PBFT ALGORITHM-BASED IMPROVED METHOD FOR ACTIVE RECOVERY OF SINGLE NODE FROM ANOMALY
(73) Hangzhou Hyperchain Technology Co., Ltd.
(72) QIU, Weiwei
LI, Wei
DUAN, Hao
HUANG, Fanglei
ZHANG, Shuai
KUANG, Lizhong
(31) 201910956576
(32) 10.10.2019
(33) China

(51) H04L 41/08
G06F 8/34
G06F 8/30
(11) EP3864800
(21) EP19871589.8
(47) 21.05.2025
(87) US2019055109
16.04.2020
(22) 08.10.2019
(54) SYSTEM, APPARATUS AND METHOD FOR PROVIDING END TO END SOLUTION FOR NETWORKS
(73) Ciambella Ltd.
Chandaria, Trisala
(72) CHANDARIA, Trisala
(31) 201862742898 P
201862742798 P
(32) 08.10.2018
08.10.2018
(33) United States of America
United States of America

(51) H04L 41/0816
H04L 41/0823
H04L 41/5025
H04L 43/0817
H04W 4/50
H04L 47/70
H04L 47/80
H04L 65/1063
H04L 65/80
H04W 72/54
H04W 76/20
H04W 84/04
H04L 47/74
H04L 47/83
H04L 65/1033
H04N 21/238
H04N 21/442
H04N 21/658
H04N 21/61
(11) EP4042637
(21) EP20775508.3
(47) 21.05.2025
(87) US2020049391
15.04.2021
(22) 04.09.2020
(54) APPLICATION CLIENT PERFORMANCE INDICATOR MANAGEMENT
(73) QUALCOMM INCORPORATED
(72) SOLOWAY, Alan
HALL, Edward Robert
(31) 202017011578
201962913121 P
(32) 03.09.2020
09.10.2019
(33) United States of America
United States of America

(51) H04L 41/0895
H04L 41/14
H04L 41/40
H04L 41/5054
H04L 43/08
H04L 43/20
H04W 24/08
H04W 24/04
H04W 88/18
H04L 41/0806
(11) EP4122170
(21) EP20925209.7
(47) 21.05.2025
(87) SE2020050271
23.09.2021
(22) 16.03.2020
(54) METHOD, SYSTEM AND NETWORK NODE FOR GENERATING A NETWORK SERVICE MONITORING MODEL
(73) Telefonaktiebolaget LM ERICSSON (PUBL)
(72) LACHOS, Danny
SARAIVA DE SOUSA, Nathan
GOMES DA SILVA, Pedro
ESTEVE ROTHENBERG, Christian

(51) H04L 41/0896
H04L 43/0876
H04L 43/045
H04L 47/11
H04L 47/24
H04L 47/10
H04L 47/30
H04L 47/32
H04L 41/0806
H04L 41/0823
H04L 41/08
H04L 43/0829
H04L 43/0894
H04L 43/16
(11) EP4161018
(21) EP22195003.3
(47) 21.05.2025
(22) 12.09.2022
(54) METHOD FOR ALLOCATING RESOURCE FOR STORING VISUALIZATION INFORMATION, APPARATUS, AND SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) HUANG, Chao

LI, Nan
(31) 202111160775
(32) 30.09.2021
(33) China

(51) H04L 41/142
H04L 41/16
(11) EP4369679
(21) EP22206704.3
(47) 21.05.2025
(22) 10.11.2022
(54) DATA ANALYTICS ON MEASUREMENT DATA
(73) Nokia Solutions and Networks Oy
(72) BAJZIK, Lajos

(51) H04L 41/5051
H04L 67/51
(11) EP3834367
(21) EP18755437.3
(47) 21.05.2025
(87) EP2018071836
13.02.2020
(22) 10.08.2018
(54) A METHOD, APPARATUS, AND COMPUTER PROGRAM
(73) Nokia Solutions and Networks Oy
(72) LAIR, Yannick
CHANDRAMOULI, Devaki
GKELLAS, Georgios
LANDAIS, Bruno

(51) H04L 41/5061
H04L 43/08
H04L 41/046
H04L 41/16
(11) EP4014435
(21) EP20753368.8
(47) 21.05.2025
(87) EP2020072522
18.02.2021
(22) 11.08.2020
(54) AN AUTOMATED SUPPORT SYSTEM FOR CONNECTED DEVICES
(73) SWEEPR TECHNOLOGIES LIMITED
(72) O'FLAHERTY, Jerome
HANNON, James
MAGUIRE, John
COLEMAN, Alan
(31) 19191280
(32) 12.08.2019
(33) European Patent Office (EPO)

(51) H04L 43/026
H04L 41/147
H04L 43/062
H04L 67/02
H04L 9/40
(11) EP4221132
(21) EP23176104.0
(47) 21.05.2025
(22) 19.06.2020
(54) SYSTEM AND METHOD FOR IDENTIFYING OTT APPLICATIONS AND SERVICES
(73) Netscout Systems, Inc.
(72) SINGHAL, Anil K.
BYRAPURAM, Narendra
NADKARNI, Rajeev
SRINIVASAGOWDA, Mahesh
TAYADE, Nilesh
JOCH, Anthony P.
(31) 202016905628
201962863692 P
(32) 18.06.2020
19.06.2019
(33) United States of America
United States of America

(51) H04L 45/00
H04L 45/02
H04L 45/50
H04L 45/52
(11) EP4016965
(21) EP21860445.2
(47) 21.05.2025
(87) CN2021114566
03.03.2022
(22) 25.08.2021
(54) INFORMATION PROCESSING METHOD, NETWORK CONTROLLER, NODE AND COMPUTER-READABLE STORAGE MEDIUM
(73) ZTE Corporation
(72) LI, Qingning
PENG, Shaofu
(31) 202010862297
(32) 25.08.2020
(33) China

(51) H04L 45/02
H04L 45/0377
H04L 45/302
H04L 45/745
(11) EP4102784
(21) EP20923270.1
(47) 21.05.2025
(87) CN2020141750
10.09.2021
(22) 30.12.2020
(54) DATA STREAM PROCESSING METHOD AND DEVICE
(73) Huawei Technologies Co., Ltd.
(72) WANG, Fang
ZHANG, Xudong
ZHANG, Peng
(31) 202010148537
(32) 05.03.2020
(33) China

(51) H04L 45/02
H04W 4/80
H04W 4/12
H04W 40/28
H04L 45/00
H04W 4/06
(11) EP4029208
(21) EP20776031.5
(47) 21.05.2025
(87) US2020050055
18.03.2021
(22) 10.09.2020
(54) BLUETOOTH MESH ROUTING WITH SUBNETS
(73) Honeywell International Inc.
(72) KUENZI, Adam
LANG, Michael
DOW, Randall
(31) 201962898685 P
(32) 11.09.2019
(33) United States of America

(51) H04L 45/16
H04L 45/28
(11) EP3926900
(21) EP21178946.6
(47) 21.05.2025
(22) 11.06.2021
(54) SUPPORTING CANDIDATE PATH SELECTION
(73) Nokia Solutions and Networks Oy
(72) BIDGOLI, Hooman
(31) 202016902970
(32) 16.06.2020
(33) United States of America

(51) H04L 45/50
H04J 3/06
H04L 45/02
(11) EP3761533
(21) EP20186451.9
(47) 21.05.2025
(22) 26.10.2015
(54) TRANSMITTING RESIDENCE TIME INFORMATION IN A NETWORK
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) RUFFINI, Stefano
MIRSKY, Gregory
KINI, Sriganesh
GRAY, Eric
(31) 201462075614 P
PCT/EP2014/075332
(32) 05.11.2014
21.11.2014
(33) United States of America
World Intellectual Property Office (WIPO)

(51) H04L 45/50
H04L 45/302
H04L 41/00
H04L 43/10
H04L 101/659
H04L 45/02
H04L 45/745
(11) EP4199447
(21) EP21863533.2
(47) 21.05.2025
(87) CN2021113974
10.03.2022
(22) 23.08.2021
(54) OPERATION ADMINISTRATION AND MAINTENANCE (OAM) PACKET PROCESSING METHOD AND DEVICE
(73) Huawei Technologies Co. Ltd.
(72) YU, Tao
ZHAO, Qi
CHEN, Zhiguo
(31) 202010917057
(32) 03.09.2020
(33) China

(51) H04L 45/50
H04L 45/64
H04L 47/72
H04L 45/00
(11) EP3711263
(21) EP18887965.4
(47) 21.05.2025
(87) CN2018119847
20.06.2019
(22) 07.12.2018
(54) COMMUNICATION METHODS, APPARATUSES AND SYSTEM FOR SHARING NETWORK RESOURCES
(73) HUAWEI TECHNOLOGIES CO., LTD.

(72) KARUNANITHI, Satish
DHODY, Dhruv
DEVADIGA, Shankara
(31) 201731044887
(32) 13.12.2017
(33) India

(51) H04L 45/50
H04L 45/74
H04L 45/745
(11) EP4160950
(21) EP21831666.9
(47) 21.05.2025
(87) CN2021102184
06.01.2022
(22) 24.06.2021
(54) METHOD AND APPARATUS FOR SENDING A MESSAGE, AND NETWORK DEVICE, SYSTEM AND STORAGE MEDIUM
(73) Huawei Technologies Co., Ltd.
(72) WEN, Huizhi
XIAO, Yaqun
ZHAO, Keqiang
(31) 202011098780
202010598722
(32) 14.10.2020
28.06.2020
(33) China
China

(51) H04L 45/64
H04L 45/655
(11) EP4060961
(21) EP22154847.2
(47) 21.05.2025
(22) 31.07.2017
(54) INFORMATION SYNCHRONIZATION METHOD, APPARATUS, AND SYSTEM
(73) Huawei Technologies Co. Ltd.
(72) YAN, Changjiang
ZHUANG, Shunwan
WU, Nan
CHEN, Guoyi
LI, Zhenbin
SONG, Baohua
(31) 201610698182
(32) 19.08.2016
(33) China

(51) H04L 47/32
(11) EP3959847
(21) EP19739894.4
(47) 21.05.2025
(87) EP2019066825
30.12.2020
(22) 25.06.2019
(54) COMPUTER-IMPLEMENTED METHOD FOR ADAPTING AT LEAST ONE PREDEFINED FRAME DELAY
(73) Siemens Aktiengesellschaft
(72) OBRADOVIC, Dragan
STEINDL, Günter

(51) H04L 47/70
H04L 47/80
H04W 28/16
H04W 28/18
H04W 48/06
H04W 28/02
H04W 88/04
H04W 76/14
H04W 76/50
H04W 40/22
(11) EP4156643
(21) EP22193184.3
(47) 21.05.2025
(22) 31.08.2022
(54) ACCESS LOAD CONTROL IN PEER-TO-PEER NETWORKS
(73) Apple Inc.
(72) BADIC, Biljana
QAISRANI, Babar
(31) 202217879023
202163249403 P
(32) 02.08.2022
28.09.2021
(33) United States of America
United States of America

(51) H04L 47/80
H04L 41/5025
H04L 47/2425
H04L 47/2475
H04W 28/10
H04L 47/2441
H04W 4/00
(11) EP3440812
(21) EP16718072.8
(47) 21.05.2025
(87) US2016025921
12.10.2017
(22) 04.04.2016
(54) CONTEXT AWARE AND ADAPTIVE QOS/QOE TARGET DEFINITION IN 5G
(73) Nokia Technologies Oy
(72) SZILAGYI, Peter
VULKAN, Csaba

(51) H04L 61/2503
(11) EP4195621
(21) EP22831901.8
(47) 21.05.2025
(87) CN2022101268
05.01.2023
(22) 24.06.2022
(54) MESSAGE FORWARDING METHOD, APPARATUS AND SYSTEM
(73) Huawei Technologies Co. Ltd.
(72) CHEN, Xia
LIU, Bing
XU, Ling
MAO, Jianwei
(31) 202110722092
(32) 28.06.2021
(33) China

(51) H04L 67/10
H04L 67/00
H04L 45/302
H04L 9/40
(11) EP3499814
(21) EP17855890.4
(47) 21.05.2025
(87) JP2017033913
05.04.2018
(22) 20.09.2017
(54) COMMUNICATION CONTROL METHOD, COMMUNICATION CONTROL DEVICE, AND COMPUTER PROGRAM
(73) NTT Communications Corporation
(72) TAMURA, Mahoko
KURIHARA, Yoshinao
OODO, Kazuki
IKEDA, Kento
SAKODA, Hiroshi
MIZUGUCHI, Takanori
HATAYA, Yasuhiro
SATO, Kazuki
NISHIZUKA, Kaname
KIMURA, Tomohiro
SAKURADA, Masashi
ONOJIMA, Kyoko
(31) 2016192223
(32) 29.09.2016
(33) Japan

(51) H04L 67/10
H04L 67/51
H04L 67/52
(11) EP3759892
(21) EP19711494.5
(47) 21.05.2025
(87) CH2019000006
06.09.2019
(22) 28.02.2019
(54) DEVICE FOR THE COMBINED DISPLAY OF CARTOGRAPHIC MATERIAL AND OUTDOOR ADVERTISEMENT
(73) Clear Channel International Limited
(72) ALBRECHT, Clemens
(31) 3402018
2422018
(32) 16.03.2018
28.02.2018
(33) Switzerland
Switzerland

(51) H04L 67/1087
H04L 67/1001
H04L 67/60
G06F 9/50
G06F 9/48
(11) EP4167539
(21) EP21826298.8
(47) 21.05.2025
(87) CN2021100121
23.12.2021
(22) 15.06.2021
(54) RESOURCE MANAGEMENT
(73) ZTE Corporation
(72) PU, Jiange
XU, Daigang
HU, Rui
ZHANG, Jin
(31) 202010549774
(32) 16.06.2020
(33) China

(51) H04L 67/12
H04L 43/50
(11) EP4412183
(21) EP24155905.3
(47) 21.05.2025
(22) 06.02.2024
(54) METHOD AND SYSTEM FOR TRANSFORMING RECORDED COMMUNICATION DATA
(73) dSPACE GmbH
(72) Hötger, Martin
Kalte, Heiko
Seiler, Remigiusz

(31) 102023102806
(32) 06.02.2023
(33) Germany

(51) H04L 67/12
H04L 67/567
H04W 74/04
H04W 84/18
(11) EP3718373
(21) EP18880325.8
(47) 21.05.2025
(87) SG2018050579
31.05.2019
(22) 27.11.2018
(54) GATEWAY DEVICE FOR IOT SENSORS OR ACTUATORS
(73) Willowmore Pte. Ltd.
(72) CHONG, Chieh Tseng
HOGG, Alan
TEY, Choon Koon, Joseph
(31) 10201709812R
(32) 27.11.2017
(33) Singapore

(51) H04L 67/12
H04L 69/24
(11) EP4186216
(21) EP20768783.1
(47) 21.05.2025
(87) US2020048140
03.03.2022
(22) 27.08.2020
(54) CENTRALIZED MANAGEMENT OF DATA FLOW MAPS FOR DISTRIBUTED EDGE NODE DEPLOYMENT
(73) Siemens Aktiengesellschaft
(72) PETIT, Emmanuel
BASIT, Abdul
BAHIG, Ghada
MOUSTAFA, Ahmed

(51) H04L 67/125
G05B 19/05
H04L 67/025
H04L 67/52
(11) EP4097952
(21) EP21703532.8
(47) 21.05.2025
(87) GB2021050200
05.08.2021
(22) 28.01.2021
(54) MONITORING AND CONFIGURING A FIELD MACHINE VIA A GSM TELECOMMUNICATIONS NETWORK
(73) Control Station Ltd.
(72) RYECROFT, Gary
ALLINSON, Damian
(31) 202001189
(32) 28.01.2020
(33) United Kingdom

(51) H04L 67/141
H04L 51/10
H04L 65/1059
H04L 65/1069
H04M 1/724
H04N 7/14
H04N 7/15
H04L 12/18
H04L 51/222
H04L 67/02
H04W 4/02
H04W 4/90
(11) EP4371291
(21) EP22750672.2
(47) 21.05.2025
(87) EP2022069128
19.01.2023
(22) 08.07.2022
(54) METHOD FOR ESTABLISHING REINFORCED COMMUNICATION BETWEEN TWO DEVICES
(73) Daumont, Romain
(72) Daumont, Romain
(31) 2107617
(32) 13.07.2021
(33) France

(51) H04L 67/55
H04L 67/60
H04L 65/1073
C02F 1/00
H04W 4/70
H04L 67/125
(11) EP4033722
(21) EP20866007.6
(47) 21.05.2025
(87) CN2020115074
25.03.2021
(22) 14.09.2020
(54) RULE-BASED CONTINUOUS EVENT NOTIFICATION
(73) BOE Technology Group Co., Ltd.
Beijing BOE Technology Development Co., Ltd.
(72) ZHAO, Junjie
SU, Jing
WANG, Xinan
CHEN, Shaobei
ZHANG, Qian
ZHAO, Yanqiu
(31) 201910872383
(32) 16.09.2019
(33) China

(51) H04L 67/56
H04L 69/14
H04L 69/08
(11) EP4246937
(21) EP22162020.6
(47) 21.05.2025
(22) 15.03.2022
(54) MP-DCCP PROXY TO ENABLE MULTIPATH TRANSMISSION OF DCCP DATA PACKETS BETWEEN A SENDER AND A RECEIVER
(73) Deutsche Telekom AG
(72) AMEND, Markus

(51) H04L 67/62
H04L 67/52
G06Q 30/02
(11) EP3832974
(21) EP20217964.4
(47) 21.05.2025
(22) 13.03.2013
(54) ACCESSING MEDIA CONTENT VIA A HANDHELD DEVICE
(73) Adeia Media Solutions Inc.
(72) BARTON, James
WONG, Kirk D.
(31) 201261610384 P
(32) 13.03.2012
(33) United States of America

(51) H04L 69/163
H04L 69/166
H04L 69/28
H04L 65/61
H04L 65/65
H04L 67/02
(11) EP3891949
(21) EP19806299.4
(47) 21.05.2025
(87) EP2019082775
11.06.2020
(22) 27.11.2019
(54) NETWORK EQUIPMENT AND METHOD FOR DELIVERING DATA PACKETS
(73) InterDigital CE Patent Holdings, SAS
(72) LEGALLAIS, Yvon
TAIBI GUGUEN, Charline
HOUDAILLE, Remi
(31) 18306627
(32) 06.12.2018
(33) European Patent Office (EPO)

(51) H04L 69/22
H04L 69/16
H04L 69/325
H04L 69/167
H04L 45/02
H04L 45/74
H04L 45/745
(11) EP4020908
(21) EP20862508.7
(47) 21.05.2025
(87) CN2020104878
18.03.2021
(22) 27.07.2020
(54) IPV6 PACKET PROCESSING METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) XIE, Jingrong
XIA, Yang
YAN, Gang
HU, Zhibo
(31) 201911074212
201910848563
(32) 31.10.2019
09.09.2019
(33) China
China

(51) H04L 69/40
H04L 65/1104
H04L 65/1069
H04W 4/16
(11) EP4287757
(21) EP22762447.5
(47) 21.05.2025
(87) CN2022077934
09.09.2022
(22) 25.02.2022
(54) CALL ESTABLISHMENT METHOD AND APPARATUS, AND ELECTRONIC DEVICE AND READABLE STORAGE MEDIUM
(73) Vivo Mobile Communication Co., Ltd.
(72) MA, Wenfei
(31) 202110236780
(32) 03.03.2021
(33) China

(51) H04M 1/02

G06F 1/16
(11) EP3925200
(21) EP20756529.2
(47) 21.05.2025
(87) KR2020001411
20.08.2020
(22) 30.01.2020
(54) MOBILE TERMINAL
(73) LG Electronics Inc.
(72) SONG, Insu
LEE, Jaewook
(31) 20190045543
201962805920 P
(32) 18.04.2019
14.02.2019
(33) Korea (Republic)
United States of America

(51) H04M 1/02
G06F 1/16
(11) EP4246941
(21) EP21914215.5
(47) 21.05.2025
(87) CN2021141406
07.07.2022
(22) 25.12.2021
(54) FOLDING MECHANISM
(73) Huawei Technologies Co. Ltd.
(72) YU, Weidong
ZHAN, Qiang
MAO, Weihua
HUANG, Bo
ZHA, Peng
(31) 202011602760
(32) 29.12.2020
(33) China

(51) H04M 1/02
H04M 1/03
G06F 1/16
C09J 9/00
H04M 1/18
(11) EP4307648
(21) EP23705197.4
(47) 21.05.2025
(87) KR2023002299
07.12.2023
(22) 16.02.2023
(54) ELECTRONIC APPARATUS INCLUDING STRUCTURE FOR CONNECTING ADHESIVE MEMBERS
(73) Samsung Electronics Co., Ltd.
(72) ROH, Hyunyoung
(31) 20220092717
20220067817
(32) 26.07.2022
02.06.2022
(33) Korea (Republic)
Korea (Republic)

(51) H04M 1/02
H05K 5/03
H05K 5/00
H04R 1/28
H04R 1/02
H01M 50/209
H01M 10/42
(11) EP3808059
(21) EP19859456.6
(47) 21.05.2025
(87) KR2019008388
19.03.2020
(22) 09.07.2019
(54) ELECTRONIC DEVICE WITH SEALING STRUCTURE
(73) Samsung Electronics Co., Ltd.
(72) JEONG, Wontae
PARK, Eungkyu
LEE, Dongyeop
KIM, Yonghwa
LEE, Gihoon
LEE, Jaehwan
CHOI, Seungbum
CHOI, Hyounggil
HEO, Changryong
(31) 20180108821
(32) 12.09.2018
(33) Korea (Republic)

(51) H04M 1/72412
G06F 3/0481
G06F 3/14
G09G 5/14
H04N 21/462
H04N 21/41
G06F 3/04883
(11) EP3982246
(21) EP20844858.9
(47) 21.05.2025
(87) CN2020103361
28.01.2021
(22) 21.07.2020
(54) DISPLAY METHOD AND RELATED APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) YI, Jie
GU, Hejin
(31) 201910665620
(32) 23.07.2019
(33) China

(51) H04N 1/00
(11) EP4239993
(21) EP22199961.8
(47) 21.05.2025
(22) 06.10.2022
(54) INFORMATION PROCESSING APPARATUS, PROGRAM, AND INFORMATION PROCESSING METHOD
(73) Fujifilm Business Innovation Corp.
(72) MATSUSHITA, Itsusei
MATSUOKA, Daiki
(31) 2022033454
(32) 04.03.2022
(33) Japan

(51) H04N 1/04
H04N 1/00
(11) EP4348997
(21) EP21943254.9
(47) 21.05.2025
(87) US2021034321
01.12.2022
(22) 26.05.2021
(54) MEDIA POSITION DETERMINATION BASED ON IMAGES OF PATTERNS CAPTURED BY IMAGING SENSORS
(73) Hewlett-Packard Development Company, L.P.
(72) SOO, Sai Horng
JACOB, Ginu
LAM, Siew Hong
KOH, Chin Hung Andy
PHOA, Biyun
TANG, Ganlin
LEONG, Shyh Chije

(51) H04N 1/401
H04N 1/60
(11) EP4364399
(21) EP22743760.5
(47) 21.05.2025
(87) EP2022067899
05.01.2023
(22) 29.06.2022
(54) METHOD FOR COLOUR CORRECTION OF DIGITAL PRINTER
(73) Akzenta Paneele + Profile GmbH
(72) KLEMM, Markus
LINNENBRÜGGER, Timo
HANNIG, Hans-Jürgen
(31) 21182847
(32) 30.06.2021
(33) European Patent Office (EPO)

(51) H04N 1/60
H04N 23/88
G06T 5/00
G06T 7/90
(11) EP4261771
(21) EP22843605.1
(47) 21.05.2025
(87) CN2022115486
06.07.2023
(22) 29.08.2022
(54) IMAGE PROCESSING METHOD AND RELATED ELECTRONIC DEVICE
(73) Honor Device Co., Ltd.
(72) QIAN, Yanlin
(31) 202210022487
202111680029
(32) 10.01.2022
31.12.2021
(33) China
China

(51) H04N 7/18
B66C 13/00
B66C 13/22
G01B 11/24
(11) EP3657782
(21) EP18835738.8
(47) 21.05.2025
(87) JP2018027189
24.01.2019
(22) 19.07.2018
(54) GUIDE INFORMATION DISPLAY DEVICE, CRANE EQUIPPED WITH SAME, AND GUIDE INFORMATION DISPLAY METHOD
(73) Tadano Ltd.
The School Corporation Kansai University
(72) KOSAKA, Takayuki
ISHIKAWA, Iwao
KUBOTA, Satoshi
TANAKA, Shigenori
NAKAMURA, Kenji
YAMAMOTO, Yuhei
NAKAHARA, Masaya
(31) 2017142206
(32) 21.07.2017

(33) Japan

(51) H04N 9/73
H04N 23/60
(11) EP4203468
(21) EP22862314.6
(47) 21.05.2025
(87) CN2022115889
30.03.2023
(22) 30.08.2022
(54) ALGORITHM CALLING METHOD AND ALGORITHM CALLING APPARATUS
(73) Honor Device Co., Ltd.
(72) LIN, Mengran
SHAO, Tao
XU, Jirun
(31) 202111138674
(32) 27.09.2021
(33) China

(51) H04N 13/10
H04N 13/388
H04N 13/111
H04N 13/366
G06T 15/06
G06F 3/01
G06F 3/0354
G06F 3/038
G06F 3/04815
G06F 3/04842
G06N 20/00
G06T 19/00
(11) EP4026318
(21) EP20861231.7
(47) 21.05.2025
(87) US2020048964
11.03.2021
(22) 01.09.2020
(54) INTELLIGENT STYLUS BEAM AND ASSISTED PROBABILISTIC INPUT TO ELEMENT MAPPING IN 2D AND 3D GRAPHICAL USER INTERFACES
(73) zSpace, Inc.
(72) HOSENPUD, Jonathan J.
CHAMPION, Clifford S.
CHAVEZ, David A.
YAMADA, Kevin S.
LELIEVRE, Alexandre R.
(31) 201916562944
(32) 06.09.2019
(33) United States of America

(51) H04N 13/239
H04N 13/133
H04N 23/45
G01C 3/08
G01C 3/14
H04N 13/00
H04N 13/25
(11) EP4027106
(21) EP20860144.3
(47) 21.05.2025
(87) JP2020027755
11.03.2021
(22) 17.07.2020
(54) IMAGE PROCESSING DEVICE
(73) Hitachi Astemo, Ltd.
(72) YAMAZAKI, Kazuyoshi
(31) 2019161080
(32) 04.09.2019
(33) Japan

(51) H04N 17/00
H04N 13/246
H04N 23/60
G01B 11/00
G01B 11/26
G06T 7/80
H01M 6/00
H01M 10/04
G01B 11/02
G01B 21/04
(11) EP4418211
(21) EP23785966.5
(47) 21.05.2025
(87) CN2023089292
11.07.2024
(22) 19.04.2023
(54) CAMERA PIXEL CALIBRATION APPARATUS AND WINDING DEVICE
(73) Contemporary Amperex Technology (Hong Kong) Limited
(72) XUE, Yucong
CHEN, Zhipeng
CHEN, Chao
(31) 202320001530 U
(32) 03.01.2023
(33) China

(51) H04N 19/105
H04N 19/176
H04N 19/423
H04N 19/593
H04N 19/57
(11) EP3785434
(21) EP19861977.7
(47) 21.05.2025
(87) US2019050564
26.03.2020
(22) 11.09.2019
(54) METHOD AND APPARATUS FOR VIDEO DECODING
(73) TENCENT AMERICA LLC
(72) XU, Xiaozhong
LI, Xiang
LIU, Shan
(31) 201916419235
201862735002 P
(32) 22.05.2019
21.09.2018
(33) United States of America
United States of America

(51) H04N 19/117
H04N 19/14
H04N 19/176
H04N 19/82
H04N 19/86
(11) EP3804338
(21) EP19825054.0
(47) 21.05.2025
(87) CN2019093397
02.01.2020
(22) 27.06.2019
(54) IN-LOOP DEBLOCKING FILTER APPARATUS AND METHOD FOR VIDEO CODING
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) KOTRA, Anand Meher
WANG, Biao
ZHAO, Zhijie
ESENLIK, Semih
GAO, Han
CHEN, Jianle
(31) 201862692851 P
201862691590 P
(32) 01.07.2018
28.06.2018
(33) United States of America
United States of America

(51) H04N 19/126
H04N 19/186
H04N 19/42
H04N 19/70
(11) EP4032276
(21) EP20768635.3
(47) 21.05.2025
(87) EP2020075841
25.03.2021
(22) 16.09.2020
(54) CHROMA RESIDUAL SCALING FORESEEING A CORRECTIVE VALUE TO BE ADDED TO LUMA MAPPING SLOPE VALUES
(73) InterDigital Madison Patent Holdings, SAS
(72) FRANCOIS, Edouard
GALPIN, Franck
NASER, Karam
DE LAGRANGE, Philippe
(31) 19306325
19306324
19306288
19306170
19306117
(32) 10.10.2019
10.10.2019
04.10.2019
23.09.2019
17.09.2019
(33) European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)
European Patent Office (EPO)

(51) H04N 19/167
H04N 19/176
H04N 19/119
(11) EP4250730
(21) EP23185053.8
(47) 21.05.2025
(22) 28.05.2019
(54) SPATIALLY VARYING TRANSFORM WITH ADAPTIVE TRANSFORM TYPE
(73) Huawei Technologies Co. Ltd.
(72) ZHAO, Yin
YANG, Haitao
CHEN, Jianle
(31) 201862678738 P
(32) 31.05.2018
(33) United States of America

(51) H04N 19/174
H04N 19/129
H04N 19/593
H04N 19/146
(11) EP3094091
(21) EP15752321.8
(47) 21.05.2025
(87) CN2015072089
27.08.2015

(22) 02.02.2015
(54) CODING AND DECODING METHOD AND DEVICE
(73) Huawei Technologies Co., Ltd.
(72) YANG, Haitao
ZHENG, Amin
YUAN, Yuan
AU, Oscar
(31) 201410054130
(32) 18.02.2014
(33) China

(51) H04N 19/176
H04N 19/119
(11) EP3925221
(21) EP21750692.2
(47) 21.05.2025
(87) US2021016343
12.08.2021
(22) 03.02.2021
(54) METHOD AND APPARATUS FOR INTERACTIONS BETWEEN DECODER-SIDE INTRA MODE DERIVATION AND ADAPTIVE INTRA PREDICTION MODES
(73) Tencent America LLC
(72) ZHAO, Liang
ZHAO, Xin
LIU, Shan
(31) 202017094923
202062970505 P
(32) 11.11.2020
05.02.2020
(33) United States of America
United States of America

(51) H04N 19/463
H04N 19/52
H04N 19/70
(11) EP3873093
(21) EP19875756.9
(47) 21.05.2025
(87) KR2019014016
30.04.2020
(22) 23.10.2019
(54) METHOD FOR PROCESSING A VIDEO SIGNAL BY USING SUBBLOCK-BASED MOTION COMPENSATION
(73) Wilus Institute of Standards and Technology Inc.
(72) KO, Geonjung
KIM, Dongcheol
SON, Juhyung
JUNG, Jaehong
KWAK, Jinsam
(31) 20190016537
20190000479
20180137704
20180126782
(32) 13.02.2019
02.01.2019
09.11.2018
23.10.2018
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) H04N 19/55
(11) EP4029248
(21) EP20822584.7
(47) 21.05.2025
(87) RU2020050260
17.12.2020
(22) 30.09.2020
(54) USAGE OF DCT BASED INTERPOLATION FILTER
(73) Huawei Technologies Co., Ltd.
(72) SYCHEV, Maxim Borisovitch
CHEN, Huanbang
KARABUTOV, Alexander Alexandrovich
CHERNYAK, Roman Igorevich
IKONIN, Sergey Yurievich
YANG, Haitao
ALSHINA, Elena Alexandrovna
SOLOVYEV, Timofey Mikhailovich
(31) 202062958291 P
201962927671 P
201962912049 P
201962908594 P
PCT/CN2019/114161
(32) 07.01.2020
29.10.2019
07.10.2019
30.09.2019
29.10.2019
(33) United States of America
United States of America
United States of America
United States of America
World Intellectual Property Office (WIPO)

(51) H04N 19/55
H04N 19/513
H04N 19/70
(11) EP4026333
(21) EP20827036.3
(47) 21.05.2025
(87) RU2020050258
24.12.2020
(22) 30.09.2020
(54) AFFINE MOTION MODEL RESTRICTIONS FOR MEMORY BANDWIDTH REDUCTION
(73) Huawei Technologies Co., Ltd.
(72) SYCHEV, Maxim Borisovitch
CHEN, Huanbang
KARABUTOV, Alexander Alexandrovich
CHERNYAK, Roman Igorevich
IKONIN, Sergey Yurievich
YANG, Haitao
ALSHINA, Elena Alexandrovna
SOLOVYEV, Timofey Mikhailovich
(31) 202062958291 P
PCT/RU2019/000691
(32) 07.01.2020
30.09.2019
(33) United States of America
World Intellectual Property Office (WIPO)

(51) H04N 19/593
H04N 19/11
H04N 19/105
H04N 19/13
H04N 19/91
(11) EP4093028
(21) EP22172762.1
(47) 21.05.2025
(22) 29.12.2017
(54) VIDEO AND IMAGE CODING WITH WIDE-ANGLE INTRA PREDICTION
(73) Nokia Technologies Oy
(72) LAINEMA, Jani
(31) 20175006
(32) 03.01.2017
(33) Finland

(51) H04N 19/593
H04N 19/80
(11) EP3516875
(21) EP16815995.2
(47) 21.05.2025
(87) RU2016000703
19.04.2018
(22) 14.10.2016
(54) DISTANCE WEIGHTED BI-DIRECTIONAL INTRA PREDICTION
(73) Huawei Technologies Co., Ltd.
(72) FILIPPOV, Alexey Konstantinovich
RUFITSKIY, Vasily Alexeevich

(51) H04N 19/597
H04N 21/81
H04N 21/854
(11) EP3782366
(21) EP19918520.8
(47) 21.05.2025
(87) CN2019094476
07.01.2021
(22) 03.07.2019
(54) VIDEO CODING METHOD AND VIDEO DECODING METHOD
(73) Beijing Xiaomi Mobile Software Co., Ltd.
(72) CHAMPEL, Mary-Luc Georges Henry

(51) H04N 19/60
H04N 19/132
H04N 19/176
H04N 19/14
H04N 19/137
(11) EP4418656
(21) EP24186964.3
(47) 21.05.2025
(22) 12.03.2020
(54) TRANSFORM-BASED IMAGE CODING DEVICE
(73) LG Electronics Inc.
(72) KOO, Moonmo
LIM, Jaehyun
CHOI, Jungah
KIM, Seunghwan
SALEHIFAR, Mehdi
(31) 201962823571 P
201962822000 P
201962817490 P
201962817494 P
(32) 25.03.2019
21.03.2019
12.03.2019
12.03.2019
(33) United States of America
United States of America
United States of America
United States of America

(51) H04N 19/60
H04N 19/186
H04N 19/124
H04N 19/137
H04N 9/67
H04N 19/70
H04N 19/61
H04N 19/625

H04N 19/119
H04N 19/18
(11) EP4068782
(21) EP20893625.2
(47) 21.05.2025
(87) KR2020016968
03.06.2021
(22) 26.11.2020
(54) METHOD AND DEVICE FOR PROCESSING VIDEO SIGNAL BY USING ADAPTIVE COLOR SPACE TRANSFORM
(73) Wilus Institute of Standards and Technology Inc.
(72) JUNG, Jaehong
SON, Juhyung
KIM, Dongcheol
KO, Geonjung
KWAK, Jinsam
(31) 20190177150
20190160096
20190153835
(32) 27.12.2019
04.12.2019
26.11.2019
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) H04N 19/70
H04N 19/105
H04N 19/46
H04N 19/61
H04N 19/117
H04N 19/82
H04N 19/436
H04N 19/174
(11) EP4047932
(21) EP22159870.9
(47) 21.05.2025
(22) 28.12.2011
(54) SYSTEM FOR SELECTIVELY BREAKING PREDICTION IN VIDEO DECODING
(73) Dolby International AB
(72) HOROWITZ, Michael
(31) 201113336475
201061427569 P
(32) 23.12.2011
28.12.2010
(33) United States of America
United States of America

(51) H04N 21/218
H04N 21/2343
H04N 21/472
H04N 21/845
(11) EP3761647
(21) EP19020418.0
(47) 21.05.2025
(22) 05.07.2019
(54) METHODS AND DEVICES FOR RENDERING A VIDEO ON A DISPLAY
(73) Tiledmedia B.V.
(72) van Brandenburg, Ray
Corbillon, Xavier Albert Jean-Pierre
Veenhuizen, Arjen Timotheus

(51) H04N 21/234
H04N 21/81
H04N 21/44
G06T 7/277
G06N 3/084
G06Q 30/0241
G06V 10/82
G06V 20/40
G06V 10/764
G06N 3/045
G06N 3/047
(11) EP3745339
(21) EP19750801.3
(47) 21.05.2025
(87) CN2019072103
15.08.2019
(22) 17.01.2019
(54) METHOD FOR IMPLANTING ADVERTISEMENTS IN VIDEO, AND COMPUTER DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) XU, Wei
CONRAN, Clare
PITIÉ, Francois
(31) 201810147228
(32) 12.02.2018
(33) China

(51) H04N 21/422
G05F 1/625
H03K 17/16
(11) EP3982627
(21) EP19935461.4
(47) 21.05.2025
(87) CN2019093868
30.12.2020
(22) 28.06.2019
(54) TRANSCEIVING CIRCUIT, CHIP USING TRANSCEIVING CIRCUIT, AND TERMINAL APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) XIONG, Furong
LI, Kai
SONG, Wei

(51) H04N 21/4223
H04N 21/4363
H04N 21/658
H04N 21/64
H04N 21/643
G06F 13/42
H04N 23/661
(11) EP4106285
(21) EP20919771.4
(47) 21.05.2025
(87) CN2020075778
26.08.2021
(22) 18.02.2020
(54) INFORMATION TRANSMISSION METHOD AND RELATED DEVICE
(73) Huawei Technologies Co., Ltd.
(72) YANG, Jingming
YAO, Yao
CHEN, Jian
TANG, Zhiyu
ZHANG, Zhicheng

(51) H04N 23/45
H04N 1/387
H04N 9/73
H04N 23/743
H04N 1/60
H04N 23/88
H04N 23/10
H04N 23/741
H04N 23/951
G06T 5/50
(11) EP4250723
(21) EP20965456.5
(47) 21.05.2025
(87) CN2020136881
23.06.2022
(22) 16.12.2020
(54) IMAGE GENERATION METHOD AND APPARATUS, AND ELECTRONIC DEVICE
(73) Huawei Technologies Co. Ltd.
(72) DONG, Siwei
YANG, Hui
CHEN, Baoyang
HU, Jia

(51) H04N 23/54
H04N 23/51
H04N 23/55
H04N 23/57
H04N 23/68
G03B 17/02
G03B 17/12
G03B 30/00
G03B 3/10
G03B 5/00
(11) EP4161057
(21) EP21814395.6
(47) 21.05.2025
(87) KR2021095054
02.12.2021
(22) 26.05.2021
(54) CAMERA ACTUATOR AND CAMERA DEVICE COMPRISING SAME
(73) LG Innotek Co., Ltd.
(72) KIM, Tae Gon
KWON, Han Ul
(31) 20200065028
(32) 29.05.2020
(33) Korea (Republic)

(51) H04N 23/61
H04N 23/60
H04N 21/236
H04N 21/434
G09G 5/00
H04N 19/167
H04N 19/70
H04N 19/17
H04N 25/443
G06V 10/25
G06V 10/96
(11) EP3709662
(21) EP18875615.9
(47) 21.05.2025
(87) JP2018031565
16.05.2019
(22) 27.08.2018
(54) TRANSMISSION DEVICE
(73) Sony Semiconductor Solutions Corporation
(72) TAKAHASHI, Tomohiro
SUGIOKA, Tatsuya
YOSHIMOCHI, Naoki
INADA, Yoshiaki
KOBAYASHI, Masatsugu
YODA, Koji
IINUMA, Takahiro

(31) 2017217833
(32) 10.11.2017
(33) Japan

(51) H04N 23/617
H04N 23/65
H04N 23/80
H04N 5/262
G06F 16/901
G09G 5/06
H04N 1/60
G09G 5/04
(11) EP4201054
(21) EP20767699.0
(47) 21.05.2025
(87) US2020070451
03.03.2022
(22) 24.08.2020
(54) LOOKUP TABLE PROCESSING AND PROGRAMMING FOR CAMERA IMAGE SIGNAL PROCESSING
(73) Google LLC
(72) MOHTASHAM, Hossein
ROMANENKO, Yuriy
OIZUMI, Munenori

(51) H04N 23/73
H04N 23/75
H04N 23/76
(11) EP3516862
(21) EP17865891.0
(47) 21.05.2025
(87) CN2017107431
03.05.2018
(22) 24.10.2017
(54) SYSTEMS AND METHODS FOR EXPOSURE CONTROL
(73) Zhejiang Dahua Technology Co., Ltd.
(72) QU, Erping
HUANG, Qianfeng
PAN, Runfa
LI, Liangcheng
(31) 201611229065
201610957318
(32) 27.12.2016
26.10.2016
(33) China
China

(51) H04N 23/90
H04N 23/66
H04N 23/60
(11) EP4228245
(21) EP21897094.5
(47) 21.05.2025
(87) CN2021133218
02.06.2022
(22) 25.11.2021
(54) DATA TRANSMISSION METHOD AND ELECTRONIC DEVICE
(73) Huawei Technologies Co. Ltd.
(72) CHANG, Ming
DU, Siqing
YUE, Peiyu
FAN, Maobin
(31) 202011347808
(32) 26.11.2020
(33) China

(51) H04N 25/133
H04N 25/778
(11) EP4102829
(21) EP22164979.1
(47) 21.05.2025
(22) 29.03.2022
(54) IMAGE DEVICE, IMAGE SENSOR, AND OPERATION METHOD OF IMAGE SENSOR
(73) Samsung Electronics Co., Ltd.
(72) JANG, Chanyoung
YOU, Jongmin
(31) 20210073994
202217675694
(32) 08.06.2021
18.02.2022
(33) Korea (Republic)
United States of America

(51) H04N 25/633
H04N 25/671
H04N 25/535
H04N 25/673
H04N 25/533
H04N 25/63
(11) EP3952292
(21) EP19923111.9
(47) 21.05.2025
(87) JP2019014391
08.10.2020
(22) 29.03.2019
(54) IMAGE CAPTURE ELEMENT AND IMAGE CAPTURE DEVICE
(73) NIKON CORPORATION
(72) TAKAHASHI, Masaya
MORIOKA, Yu

(51) H04N 25/771
H04N 25/78
H04N 25/79
H04N 25/65
(11) EP4142281
(21) EP21793493.4
(47) 21.05.2025
(87) JP2021006785
28.10.2021
(22) 24.02.2021
(54) SOLID-STATE IMAGE CAPTURING ELEMENT
(73) Sony Semiconductor Solutions Corporation
(72) ASAKURA, Luonghung
INADA, Yoshiaki
(31) 2020193108
2020075184
(32) 20.11.2020
21.04.2020
(33) Japan
Japan

(51) H04Q 11/00
(11) EP3820157
(21) EP19830769.6
(47) 21.05.2025
(87) CN2019093726
09.01.2020
(22) 28.06.2019
(54) METHOD FOR MANAGING ONU, OLT, ONU, SYSTEM AND STORAGE MEDIUM
(73) ZTE Corporation
(72) ZHANG, Yangchun
(31) 201810708838
(32) 02.07.2018
(33) China

(51) H04Q 11/00
(11) EP4131987
(21) EP20930485.6
(47) 21.05.2025
(87) CN2020133129
14.10.2021
(22) 01.12.2020
(54) OPTICAL NETWORK UNIT REGISTRATION METHOD, OPTICAL NETWORK UNIT, OPTICAL LINE TERMINAL AND SYSTEM
(73) ZTE Corporation
(72) YUAN, Liquan
ZHANG, Weiliang
(31) 202010266352
(32) 07.04.2020
(33) China

(51) H04R 1/02
H04R 5/02
(11) EP3869816
(21) EP21158385.1
(47) 21.05.2025
(22) 22.02.2021
(54) PASSIVE AUTO-ORIENTING SPEAKER ASSEMBLY
(73) Harman International Industries, Incorporated
(72) WINTON, Riley
SACHS, Adam Michaeil
(31) 202117177320
202062979512 P
(32) 17.02.2021
21.02.2020
(33) United States of America
United States of America

(51) H04R 1/10
(11) EP4040799
(21) EP20890501.8
(47) 21.05.2025
(87) CN2020128011
27.05.2021
(22) 11.11.2020
(54) MICROPHONE AND SPEAKER COMBINED MODULE, EARPHONES, AND TERMINAL DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) LEE, Fang-ching
XU, Changrong
DING, Yue
XU, Haowen
(31) 201911157650
(32) 22.11.2019
(33) China

(51) H04R 1/10
G02C 11/00
H04R 5/033
G02C 5/22
(11) EP3739900
(21) EP18898265.6
(47) 21.05.2025
(87) CN2018102360
11.07.2019
(22) 24.08.2018
(54) BONE CONDUCTION SOUND DEVICE
(73) Shenzhen Shokz Co., Ltd.
(72) LIU, Yinchao
ZHANG, Haofeng

ZHANG, Lei
LI, Yongjian
WANG, Yueqiang
CHEN, Qian
(31) 201810017175
(32) 08.01.2018
(33) China

(51) H04R 1/10
G06F 21/10
A63H 5/00
(11) EP4197197
(21) EP21758112.3
(47) 21.05.2025
(87) EP2021072292
17.02.2022
(22) 10.08.2021
(54) INTERACTIVE HEADPHONE SYSTEM FOR STORING AND RENDERING AUDIO CONTENT
(73) KEKZ GmbH
(72) TAYLOR, Carl Simon
MUMMA, Adin Timothy
(31) 102020121117
(32) 11.08.2020
(33) Germany

(51) H04R 1/10
H04R 3/00
H04R 1/40
(11) EP3989599
(21) EP19933641.3
(47) 21.05.2025
(87) CN2019108290
24.12.2020
(22) 26.09.2019
(54) NOISE REDUCTION METHOD AND DEVICE OF MICROPHONE ARRAY OF EARPHONE, EARPHONE, AND TWS EARPHONE
(73) Weifang Goertek Microelectronics Co., Ltd.
(72) TIE, Guangpeng
(31) 201910536601
(32) 20.06.2019
(33) China

(51) H04R 1/40
H04R 29/00
H04R 3/00
(11) EP3968656
(21) EP21204322.8
(47) 21.05.2025
(22) 26.05.2017
(54) METHOD, APPARATUS, AND COMPUTER-READABLE MEDIA FOR FOCUSSING SOUNDS SIGNALS IN A SHARED 3D SPACE
(73) Nureva Inc.
(72) MCGIBNEY, Grant Howard
(31) 201662343512 P
(32) 31.05.2016
(33) United States of America

(51) H04R 5/02
H04R 1/02
H04N 21/40
H04R 1/26
H04N 21/41
H04N 5/64
H04R 1/28
H04R 3/14
(11) EP4451700
(21) EP24169990.9
(47) 21.05.2025
(22) 12.04.2024
(54) REDUCED HEIGHT SET TOP BOX
(73) Sagemcom Broadband SAS
(72) CHUSSEAU, Hugo
NEDELCU, Radu
DELPLACE, Stéphane
BOURGOIN, Gilles
(31) 2303802
(32) 17.04.2023
(33) France

(51) H04R 5/02
H04R 29/00
H04R 5/027
(11) EP3902287
(21) EP21167337.1
(47) 21.05.2025
(22) 08.04.2021
(54) METHOD AND MANIKIN FOR ELECTROACOUSTIC SIMULATION
(73) GN Audio A/S
(72) HANSEN, Helge Lykke
(31) PA202070238
(32) 16.04.2020
(33) Denmark

(51) H04R 7/04
H04R 7/16
H04R 9/02
H04R 9/04
(11) EP4195699
(21) EP23150517.3
(47) 21.05.2025
(22) 27.11.2019
(54) REINFORCED ACTUATORS FOR DISTRIBUTED MODE LOUDSPEAKERS
(73) Google LLC
(72) GOMES, Rajiv Bernard
STARNES, Mark William
KING, Anthony
(31) 201916599888
201916261435
201862774104 P
(32) 11.10.2019
29.01.2019
30.11.2018
(33) United States of America
United States of America
United States of America

(51) H04R 17/00
H04R 23/02
H04R 3/12
(11) EP3926979
(21) EP20180066.1
(47) 21.05.2025
(22) 15.06.2020
(54) LOUDSPEAKER APPARATUS
(73) VOLVO CAR CORPORATION
(72) ROCHA, Teo

(51) H04R 23/00
G01H 9/00
G01B 11/14
H04R 1/04
G01B 9/02015
G01B 9/02056
(11) EP4021015
(21) EP20858536.4
(47) 21.05.2025
(87) CN2020095940
04.03.2021
(22) 12.06.2020
(54) MICROPHONE CHIP, MICROPHONE, AND TERMINAL DEVICE
(73) Huawei Technologies Co., Ltd.
(72) FANG, Dongming
LI, Ming
(31) 201910817689
(32) 30.08.2019
(33) China

(51) H04R 25/00
A61F 2/18
(11) EP3386214
(21) EP16871094.5
(47) 21.05.2025
(87) KR2016014141
08.06.2017
(22) 02.12.2016
(54) HUMAN BODY IMPLANT DEVICE
(73) Todoc Co., Ltd.
(72) MIN, Kyou Sik
(31) 20150171911
(32) 04.12.2015
(33) Korea (Republic)

(51) H04R 25/00
H04R 1/40
(11) EP3629602
(21) EP19198561.3
(47) 21.05.2025
(22) 20.09.2019
(54) A HEARING DEVICE AND A HEARING SYSTEM COMPRISING A MULTITUDE OF ADAPTIVE TWO CHANNEL BEAMFORMERS
(73) Oticon A/S
(72) KOUTROULI, Eleni
PEDERSEN, Michael Syskind
JENSEN, Jesper
DE HAAN, Jan M.
(31) 18197069
(32) 27.09.2018
(33) European Patent Office (EPO)

(51) H04R 27/00
G06F 1/3209
H04W 84/12
H04L 65/611
G10L 15/22
G06F 3/16
H04L 65/1094
(11) EP4238316
(21) EP21820361.0
(47) 21.05.2025
(87) US2021057082
05.05.2022
(22) 28.10.2021
(54) NETWORKING IN A MEDIA PLAYBACK SYSTEM
(73) Sonos, Inc.
(72) GOSSAIN, Hrishikesh
STEFANI, Lawrence
RAPPOPORT, Benjamin
(31) 202063106715 P
(32) 28.10.2020
(33) United States of America

(51) H04S 3/00
(11) EP4284026

(21) EP23202235.0
(47) 21.05.2025
(22) 16.07.2013
(54) METHOD AND DEVICE FOR RENDERING AN AUDIO SOUNDFIELD REPRESENTATION
(73) Dolby International AB
(72) BOEHM, Johannes
KEILER, Florian
(31) 12305862
(32) 16.07.2012
(33) European Patent Office (EPO)

(51) H04S 5/00
H04S 7/00
(11) EP3720148
(21) EP17933807.4
(47) 21.05.2025
(87) JP2017043369
06.06.2019
(22) 01.12.2017
(54) SIGNAL PROCESSING DEVICE AND SIGNAL PROCESSING METHOD
(73) Socionext Inc.
(72) ABE, Kazutaka
MIYASAKA, Shuji
KOBAYASHI, Katsumi
MIZUNO, Yoshitaka

(51) H04S 7/00
H04S 3/00
(11) EP3780661
(21) EP20192613.6
(47) 21.05.2025
(22) 10.12.2015
(54) METADATA-PRESERVED AUDIO OBJECT CLUSTERING
(73) Dolby Laboratories Licensing Corporation
(72) CHEN, Lianwu
LU, Lie
TSINGOS, Nicolas R.
(31) 201410765578
201562100183 P
(32) 11.12.2014
06.01.2015
(33) China
United States of America

(51) H04W 4/00
H04W 4/50
H04W 12/08
H04W 12/082
H04W 88/02
G06F 21/12
G06F 21/51
G06F 21/60
H04L 9/40
H04L 67/00
H04L 41/082
H04W 12/00
G06F 7/04
G06F 21/00
(11) EP3955597
(21) EP21194472.3
(47) 21.05.2025
(22) 01.12.2011
(54) END USER DEVICE THAT SECURES AN ASSOCIATION OF APPLICATION TO SERVICE POLICY WITH AN APPLICATION CERTIFICATE CHECK
(73) Headwater Research LLC
(72) RALEIGH, Gregory
GREEN, Jeffrey
LAVINE, James
(31) 201161550906 P
42257210 P
42257410 P
41850910 P
41850710 P
(32) 24.10.2011
13.12.2010
13.12.2010
01.12.2010
01.12.2010
(33) United States of America
United States of America
United States of America
United States of America
United States of America

(51) H04W 4/02
H04W 4/021
H04W 48/04
H04W 64/00
(11) EP3556118
(21) EP16825358.1
(47) 21.05.2025
(87) EP2016081480
21.06.2018
(22) 16.12.2016
(54) DYNAMIC ZONE DETERMINATION FOR LOCATION BASED SERVICES
(73) Harman Becker Automotive Systems GmbH
(72) GUENKOVA-LUY, Teodora
CLAUSS, Martin
KLIMKE, Andreas
ABT, Oliver

(51) H04W 4/02
H04W 4/40
(11) EP4284036
(21) EP23196778.7
(47) 21.05.2025
(22) 13.07.2020
(54) PROVIDING A NETWORK LOCATION SERVICE WHEN A USER EQUIPMENT IS NOT SERVED BY A THIRD GENERATION PARTNERSHIP PROJECT (3GPP) RADIO
(73) Cisco Technology, Inc.
(72) SRIVASTAVA, Vimal
GUNDAVELLI, Srinath
(31) 201916516737
(32) 19.07.2019
(33) United States of America

(51) H04W 4/02
H04W 4/40
H04R 5/02
H04S 7/00
H04W 4/44
G01S 5/00
H04W 4/46
H04R 1/02
G10L 19/00
G01S 19/48
G01S 19/51
(11) EP3900406
(21) EP19839763.0
(47) 21.05.2025
(87) US2019068074
25.06.2020
(22) 20.12.2019
(54) RENDERING OF SOUNDS ASSOCIATED WITH SELECTED TARGET OBJECTS EXTERNAL TO A DEVICE
(73) QUALCOMM INCORPORATED
(72) THAGADUR SHIVAPPA, Shankar
FORUTANPOUR, Bijan
NGUYEN, Phi Hung
(31) 201916720639
201862783887 P
(32) 19.12.2019
21.12.2018
(33) United States of America
United States of America

(51) H04W 4/02
H04W 4/44
H04L 1/1829
(11) EP4302490
(21) EP22712111.8
(47) 21.05.2025
(87) US2022016721
09.09.2022
(22) 17.02.2022
(54) VEHICULAR AND CELLULAR WIRELESS DEVICE COLOCATION USING UPLINK COMMUNICATIONS
(73) QUALCOMM INCORPORATED
(72) WU, Shuanshuan
LI, Junyi
CHENG, Hong
(31) 202117192817
(32) 04.03.2021
(33) United States of America

(51) H04W 4/021
H04W 4/40
H04W 52/02
H04L 9/40
H04W 4/80
H04W 84/18
(11) EP4262242
(21) EP22905503.3
(47) 21.05.2025
(87) CN2022138033
31.08.2023
(22) 09.12.2022
(54) BLUETOOTH CONNECTION METHOD AND DEVICE
(73) Honor Device Co., Ltd.
(72) TANG, Nengfu
GONG, Weilin
SHEN, Li
(31) 202210179176
(32) 25.02.2022
(33) China

(51) H04W 4/029
H04L 1/00
H04B 7/06
G06N 3/08
(11) EP4205318
(21) EP20838077.4
(47) 21.05.2025
(87) EP2020087650
30.06.2022
(22) 22.12.2020
(54) DEVICES AND METHODS FOR LOCALIZATION

(73) Huawei Technologies Co. Ltd.
(72) ARVANITAKIS, George
YANG, Ganghua
LI, Yanchun
CHU, Yun Yaw

(51) H04W 4/029
H04W 4/80
H04W 12/06
H04W 64/00
H04W 84/12
(11) EP4029292
(21) EP20862665.5
(47) 21.05.2025
(87) US2020046667
18.03.2021
(22) 17.08.2020
(54) PASSIVE ASSET TRACKING WITH EXISTING INFRASTRUCTURE
(73) Troverlo, Inc.
(72) CATALENA, Cody
(31) 202016812612
201916570195
(32) 09.03.2020
13.09.2019
(33) United States of America
United States of America

(51) H04W 4/06
H04L 1/1822
H04L 1/1829
H04L 12/18
(11) EP4228293
(21) EP21932047.0
(47) 21.05.2025
(87) CN2021082195
29.09.2022
(22) 22.03.2021
(54) METHOD AND APPARATUS FOR IMPROVING RELIABILITY OF MBS, AND TERMINAL DEVICE AND NETWORK DEVICE
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) WANG, Shukun
SHI, Cong

(51) H04W 4/20
H04W 8/00
H04W 76/14
H04W 8/22
H04W 40/22
H04W 88/04
(11) EP4088492
(21) EP20789521.0
(47) 21.05.2025
(87) EP2020077678
15.07.2021
(22) 02.10.2020
(54) PATH SELECTION FOR SIDELINK COMMUNICATIONS IN NR NETWORK
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) FU, Zhang
ZHANG, Congchi
CONDOLUCI, Massimo
ERIKSSON, Anders E.
LARSSON, Conny
(31) 202062958011 P
(32) 07.01.2020
(33) United States of America

(51) H04W 4/40
(11) EP3843431
(21) EP20864265.2
(47) 21.05.2025
(87) CN2020102085
08.04.2021
(22) 15.07.2020
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Cloud Computing Technologies Co., Ltd.
(72) ZHOU, Kai
(31) 201910944057
(32) 30.09.2019
(33) China

(51) H04W 4/44
H04W 4/80
G07B 15/06
H04W 4/06
H04W 84/18
G06Q 20/32
H04W 4/021
G06F 21/32
G06Q 20/14
G06Q 50/40
H04W 12/06
H04W 12/50
(11) EP4210361
(21) EP21874252.6
(47) 21.05.2025
(87) CN2021118562
07.04.2022
(22) 15.09.2021
(54) TARGET SERVICE EXECUTION METHOD AND ELECTRONIC DEVICE
(73) Huawei Technologies Co. Ltd.
(72) LI, Zhuofei
WANG, Liang
(31) 202011063589
(32) 30.09.2020
(33) China

(51) H04W 4/80
H04B 5/77
H04W 4/35
G06F 3/147
H04W 52/02
H04W 88/08
G06Q 10/087
H04W 88/10
H04W 92/10
H04W 88/18
(11) EP3984259
(21) EP19828280.8
(47) 21.05.2025
(87) EP2019086993
17.12.2020
(22) 23.12.2019
(54) ELECTRONIC SHELF LABEL SYSTEM WITH SHELF RAIL SUBSYSTEM
(73) VusionGroup GmbH
(72) RÖSSL, Andreas
(31) PCT/EP2019/072141
PCT/EP2019/065894
PCT/EP2019/065718
PCT/EP2019/065715
(32) 19.08.2019
17.06.2019
14.06.2019
14.06.2019
(33) World Intellectual Property Office (WIPO)
World Intellectual Property Office (WIPO)
World Intellectual Property Office (WIPO)
World Intellectual Property Office (WIPO)

(51) H04W 8/02
H04W 36/00
H04W 24/02
H04W 36/32
(11) EP3993496
(21) EP20832728.8
(47) 21.05.2025
(87) CN2020097655
30.12.2020
(22) 23.06.2020
(54) MOBILITY STATE EVALUATION METHOD AND TERMINAL DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) LIANG, Jing
BAO, Wei
(31) 201910568054
(32) 27.06.2019
(33) China

(51) H04W 8/08
H04L 5/00
(11) EP3900417
(21) EP18930135.1
(47) 21.05.2025
(87) CN2018121905
20.02.2020
(22) 19.12.2018
(54) SYNCHRONIZATION SIGNAL TRANSMISSION
(73) ZTE Corporation
(72) XIAO, Kai
LIU, Xing
HAO, Peng
BI, Feng
GOU, Wei

(51) H04W 8/14
H04W 48/04
H04W 76/32
H04W 60/04
H04W 64/00
(11) EP4287673
(21) EP21943601.1
(47) 21.05.2025
(87) CN2021098501
08.12.2022
(22) 05.06.2021
(54) METHOD FOR INDICATING TRACKING AREA OF TERMINAL DEVICE AND NETWORK DEVICE
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) CHEN, Jingran
LU, Fei
LI, Haitao

(51) H04W 8/18
H04W 68/00
H04W 68/12
H04W 8/20
H04W 60/04
H04W 88/06
(11) EP4044639
(21) EP20883843.3
(47) 21.05.2025
(87) CN2020125918
14.05.2021

(22) 02.11.2020
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) JIN, Hui
CAI, Yu
YAO, Chuting
(31) 201911090556
(32) 08.11.2019
(33) China

(51) H04W 12/06
H04W 48/16
G06F 3/0346
H04W 8/00
H04W 84/12
H04W 48/14
H04W 48/20
(11) EP4247031
(21) EP21900005.6
(47) 21.05.2025
(87) CN2021134522
09.06.2022
(22) 30.11.2021
(54) ACCESS METHOD AND SYSTEM AND ELECTRONIC DEVICE
(73) Huawei Technologies Co. Ltd.
(72) YANG, Ming
YU, Zhongyi
YANG, Jianhua
(31) 202011399025
(32) 04.12.2020
(33) China

(51) H04W 12/084
H04W 24/02
H04W 24/10
H04W 12/08
H04W 8/00
H04W 24/08
(11) EP4277319
(21) EP23163677.0
(47) 21.05.2025
(22) 23.03.2023
(54) TERMINAL DEVICE AUTHORIZATION FOR REQUESTING ANALYTICS
(73) Nokia Technologies Oy
(72) KHARE, Saurabh
AGGARWAL, Chaitanya
(31) 202241027670
(32) 13.05.2022
(33) India

(51) H04W 12/10
H04W 12/08
H04L 9/40
(11) EP3925187
(21) EP20755979.0
(47) 21.05.2025
(87) FI2020050046
20.08.2020
(22) 29.01.2020
(54) MANAGEMENT OF USER EQUIPMENT SECURITY CAPABILITIES IN COMMUNICATION SYSTEM
(73) Nokia Technologies Oy
(72) LIU, Jennifer
(31) 201962806370 P
(32) 15.02.2019
(33) United States of America

(51) H04W 12/37
H04W 12/45
H04W 12/48
H04W 8/18
H04W 60/00
H04W 12/06
H04W 88/02
H04W 48/18
(11) EP3735011
(21) EP20172520.7
(47) 21.05.2025
(22) 30.04.2020
(54) MULTI-SIM SECURE OPERATIONAL MODE CHANGE
(73) Trustonic Limited
(72) LORESKÄR, Chris
MELL, Andrew Paul
(31) 201917051
201906276
(32) 22.11.2019
03.05.2019
(33) United Kingdom
United Kingdom

(51) H04W 12/80
H04L 9/40
H04W 4/44
(11) EP4497256
(21) EP22717759.9
(47) 21.05.2025
(87) EP2022057551
28.09.2023
(22) 22.03.2022
(54) COMMUNICATION NETWORK DEVICES, COMMUNICATION NETWORK SYSTEM AND METHOD FOR MONITORING UNMANNED AERIAL SYSTEMS IN A COMMUNICATION NETWORK
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) CELOZZI, Giuseppe
CIONE, Domenico Raffaele
GAITO, Daniele

(51) H04W 16/10
H04W 74/0808
(11) EP4325919
(21) EP23199992.1
(47) 21.05.2025
(22) 01.09.2014
(54) CHANNEL SELECTING METHOD AND TRANSMIT END
(73) Huawei Technologies Co. Ltd.
(72) LI, Yanchun
LI, Bo
QU, Qiao

(51) H04W 16/14
H04W 24/02
(11) EP3941102
(21) EP20774737.9
(47) 21.05.2025
(87) JP2020002747
24.09.2020
(22) 27.01.2020
(54) INFORMATION PROCESSING DEVICE AND INFORMATION PROCESSING METHOD
(73) Sony Group Corporation
(72) TSUDA, Shinichiro
SAWAI, Ryo
(31) 2019049174
(32) 15.03.2019
(33) Japan

(51) H04W 16/14
H04W 72/23
(11) EP3833076
(21) EP18928945.7
(47) 21.05.2025
(87) CN2018098595
06.02.2020
(22) 03.08.2018
(54) METHODS AND APPARATUSES FOR DATA TRANSMISSION AND RECEPTION
(73) FUJITSU LIMITED
(72) ZHANG, Guoyu
JIANG, Qinyan
ZHANG, Lei
WANG, Xin

(51) H04W 24/02
H04L 5/00
H04W 72/541
H04L 5/14
H04W 72/0453
(11) EP3806525
(21) EP20201159.9
(47) 21.05.2025
(22) 09.10.2020
(54) MITIGATING INTERFERENCE BETWEEN BASE STATIONS AND MICROWAVE BACKHAUL TRANSCEIVERS
(73) T-Mobile USA, Inc.
(72) Lekutai, Gaviphat
Olsen, Brian Allan
MacDonald, Alan Denis
(31) 201916598135
201916598097
(32) 10.10.2019
10.10.2019
(33) United States of America
United States of America

(51) H04W 24/02
H04W 24/10
H04B 7/185
H04W 84/06
(11) EP4013100
(21) EP20853338.0
(47) 21.05.2025
(87) CN2020099438
18.02.2021
(22) 30.06.2020
(54) COMMUNICATION METHOD, APPARATUS AND COMPUTER READABLE STORAGE MEDIUM
(73) Huawei Technologies Co., Ltd.
(72) GENG, Tingting
YANG, Chenchen
(31) PCT/CN2019/100658
(32) 14.08.2019
(33) World Intellectual Property Office (WIPO)

(51) H04W 24/02
H04W 36/00
H04W 24/10
H04W 36/30
H04W 84/04
(11) EP3818774
(21) EP18925608.4
(47) 21.05.2025

(87) CN2018094671
09.01.2020
(22) 05.07.2018
(54) METHOD AND APPARATUS FOR BACKHAUL LINK SWITCHING
(73) Lenovo (Beijing) Limited
(72) WU, Lianhai
WANG, Haiming
HAN, Jing

(51) H04W 24/02
H04W 76/15
H04W 84/12
H04W 88/08
H04W 80/02
(11) EP4199570
(21) EP21855642.1
(47) 21.05.2025
(87) CN2021112618
17.02.2022
(22) 13.08.2021
(54) KEY BSS PARAMETER MANAGEMENT METHOD SUITABLE FOR MULTIPLE LINKS, AND RELATED DEVICE
(73) Huawei Technologies Co. Ltd.
(72) GAN, Ming
YU, Jian
LI, Yunbo
GUO, Yuchen
YANG, Xun
(31) 202010821468
(32) 14.08.2020
(33) China

(51) H04W 24/06
H04L 43/50
(11) EP4289171
(21) EP22703690.2
(47) 21.05.2025
(87) FI2022050028
11.08.2022
(22) 17.01.2022
(54) TESTING A NETWORK CONTROL SYSTEM
(73) Elisa Oyj
(72) LIUKKONEN, Janne
(31) 20215119
(32) 04.02.2021
(33) Finland

(51) H04W 24/08
(11) EP4367924
(21) EP22741549.4
(47) 21.05.2025
(87) GB2022051564
12.01.2023
(22) 20.06.2022
(54) METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT FOR LOCATING SOURCES OF POTENTIAL INTERFERENCE IN A CELLULAR RADIO COMMUNICATION SYSTEM
(73) Vodafone Group Services Limited
(72) ZAKI, Mohamed Mahmoud
ABUGABAL, Muhammad Amin
(31) 202109959
(32) 09.07.2021
(33) United Kingdom

(51) H04W 24/08
H04W 24/10
(11) EP3852425
(21) EP19859972.2
(47) 21.05.2025
(87) KR2019011850
19.03.2020
(22) 11.09.2019
(54) TRAFFIC PROCESSING MONITORING METHOD
(73) SK TELECOM CO., LTD.
(72) LEE, Dong Jin
(31) 20180108833
(32) 12.09.2018
(33) Korea (Republic)

(51) H04W 28/02
(11) EP3589010
(21) EP18772609.6
(47) 21.05.2025
(87) CN2018079891
27.09.2018
(22) 21.03.2018
(54) WIRELESS COMMUNICATION METHOD, TERMINAL, ACCESS NETWORK DEVICE, AND NETWORK SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) LI, Hong
HAN, Feng
JIN, Yinghao
(31) 201710184939
(32) 24.03.2017
(33) China

(51) H04W 28/02
H04L 65/40
H04L 65/1016
H04L 65/1069
H04L 65/80
(11) EP4054234
(21) EP19954135.0
(47) 21.05.2025
(87) CN2019122200
03.06.2021
(22) 29.11.2019
(54) UPLINK PDR GENERATION METHOD, APPARATUS AND SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) SUN, Haiyang
LI, Yan

(51) H04W 28/02
H04W 28/08
H04B 7/204
H04W 28/086
H04W 72/12
H04W 84/06
(11) EP3905764
(21) EP20763305.8
(47) 21.05.2025
(87) CN2020076642
03.09.2020
(22) 25.02.2020
(54) SATELLITE COOPERATIVE COMMUNICATION METHOD, DEVICE AND SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) LIN, Meixin
QIAO, Yunfei
MENG, Xian
QIN, Dali
(31) 201910146990
(32) 27.02.2019
(33) China

(51) H04W 28/02
H04W 72/02
H04W 4/80
H04W 92/18
H04W 72/21
H04W 8/00
H04W 24/10
H04B 7/26
H04L 67/51
(11) EP3369268
(21) EP16812668.8
(47) 21.05.2025
(87) KR2016011724
04.05.2017
(22) 19.10.2016
(54) METHOD FOR TRIGGERING A SIDELINK BUFFER STATUS REPORTING IN A D2D COMMUNICATION SYSTEM AND DEVICE THEREFOR
(73) LG Electronics Inc.
(72) LEE, Sunyoung
YI, Seungjune
(31) 201562250525 P
201562246618 P
(32) 04.11.2015
27.10.2015
(33) United States of America
United States of America

(51) H04W 28/06
H04L 69/00
(11) EP4250811
(21) EP21909422.4
(47) 21.05.2025
(87) CN2021140242
30.06.2022
(22) 21.12.2021
(54) COMMUNICATION METHOD, APPARATUS AND SYSTEM
(73) Huawei Technologies Co. Ltd.
(72) HU, Mengshi
YU, Jian
LI, Yunbo
GAN, Ming
(31) 202011541715
(32) 23.12.2020
(33) China

(51) H04W 28/086
(11) EP3729858
(21) EP17828787.6
(47) 21.05.2025
(87) IL2017051371
27.06.2019
(22) 21.12.2017
(54) DEVICE AND METHOD FOR HOLISTIC STEERING OF STATIONS IN A WIRELESS NETWORK WITH MULTIPLE ACCESS POINTS
(73) AirTies Belgium SPRL
(72) MISHAEL, Eli
ABRAMOVITZ, Assi

(51) H04W 28/16
H04W 28/02
H04W 88/08
H04B 7/024
H04B 7/0452

H04L 1/08
H04L 5/00
H04W 24/02
H04W 74/08
(11) EP4070622
(21) EP19954805.8
(47) 21.05.2025
(87) SE2019051239
10.06.2021
(22) 06.12.2019
(54) METHODS, SYSTEMS AND BASEBAND UNITS FOR IMPROVED USAGE OF SHARED FRONTHAUL CONNECTIONS
(73) TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
(72) LINS DE MEDEIROS, Eduardo
ALMEIDA, Igor
CAVALCANTE, André Mendes

(51) H04W 28/18
H04W 76/00
H04W 28/02
H04W 88/08
H04L 47/2491
H04L 47/2408
H04W 80/02
H04L 5/00
(11) EP4017093
(21) EP19941642.1
(47) 21.05.2025
(87) CN2019100839
18.02.2021
(22) 15.08.2019
(54) CONFIGURATION METHOD, COMMUNICATION DEVICE AND COMMUNICATION SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) ZHU, Yuanping
SHI, Yulong
DAI, Mingzeng

(51) H04W 36/00
(11) EP4072196
(21) EP19958309.7
(47) 21.05.2025
(87) CN2019130642
08.07.2021
(22) 31.12.2019
(54) METHOD AND APPARATUS FOR HANDOVER
(73) Huawei Technologies Co., Ltd.
(72) YAN, Le
ZENG, Qinghai
ZHANG, Hongping
GENG, Tingting

(51) H04W 36/00
H04W 12/08
H04W 92/02
H04W 12/037
H04W 12/041
H04W 12/108
(11) EP3861791
(21) EP18936081.1
(47) 21.05.2025
(87) FI2018050714
09.04.2020
(22) 04.10.2018
(54) METHOD AND APPARATUS FOR SECURITY CONTEXT HANDLING DURING INTER-SYSTEM CHANGE
(73) Nokia Technologies Oy
(72) WON, Sung Hwan

(51) H04W 36/00
H04W 36/04
H04W 36/30
H04W 36/38
H04W 36/36
(11) EP3753291
(21) EP18905954.6
(47) 21.05.2025
(87) FI2018050103
22.08.2019
(22) 14.02.2018
(54) CONDITIONAL HANDOVER
(73) Nokia Technologies Oy
(72) JOKELA, Tommi
SÄILY, Mikko
VIERING, Ingo
KOSKELA, Timo

(51) H04W 36/00
H04W 36/08
H04W 36/18
(11) EP4009703
(21) EP21206478.6
(47) 21.05.2025
(22) 07.08.2012
(54) HANDOVER PROCESSING METHOD AND BASE STATION
(73) Huawei Technologies Co., Ltd.
(72) CHAI, Li
LIN, Bo
SHI, Jie

(51) H04W 36/00
H04W 36/14
H04W 36/12
H04W 36/38
H04W 76/15
H04W 8/24
(11) EP3557903
(21) EP16925599.9
(47) 21.05.2025
(87) CN2016113866
05.07.2018
(22) 30.12.2016
(54) SWITCHING METHOD, CORE NETWORK DEVICE, ACCESS NETWORK DEVICE, AND TERMINAL DEVICE
(73) Huawei Technologies Co., Ltd.
(72) LI, Bingzhao
QUAN, Wei
ZHANG, Jian

(51) H04W 36/00
H04W 36/32
H04W 8/08
H04W 76/27
(11) EP4044684
(21) EP19951327.6
(47) 21.05.2025
(87) CN2019116852
14.05.2021
(22) 08.11.2019
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Hongping
HU, Xingxing
ZENG, Qinghai

(51) H04W 36/00
H04W 36/36
H04W 88/08
H04W 76/15
(11) EP4297487
(21) EP23209788.1
(47) 21.05.2025
(22) 31.10.2019
(54) RADIO ACCESS NETWORK NODE, RADIO TERMINAL, AND METHOD THEREFOR
(73) NEC Corporation
(72) FUTAKI, Hisashi
HAYASHI, Sadafuku
(31) 2019003563
(32) 11.01.2019
(33) Japan

(51) H04W 36/00
H04W 76/15
H04W 36/22
H04W 88/06
H04W 92/20
(11) EP4360359
(21) EP21947292.5
(47) 21.05.2025
(87) SE2021050613
29.12.2022
(22) 21.06.2021
(54) STEERING DATA TRAFFIC IN COMMUNICATION WITH USER EQUIPMENT IN A WIRELESS COMMUNICATIONS NETWORK
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) HENRIKSSON, Daniel
FAXEN, Linnea
JOHANSSON, Stefan
DEGERFALK, Magnus

(51) H04W 36/00
H04W 92/20
(11) EP4021077
(21) EP21217093.0
(47) 21.05.2025
(22) 01.11.2018
(54) METHOD AND APPARATUS FOR FREQUENCY MEASUREMENT AND GAP CONFIGURATION
(73) ZTE Corporation
(72) LIU, Jing
SHI, Xiaojuan
HUANG, He

(51) H04W 36/00
H04W 92/24
H04L 12/46
H04W 76/12
H04W 76/15
(11) EP4037262
(21) EP22163955.2
(47) 21.05.2025
(22) 14.02.2019
(54) MECHANISM FOR REALIZING LWA/LWIP AGGREGATOR FUNCTION
(73) Cisco Technology, Inc.
(72) LAKKARAJU, Sangram, Kishore
SRIVASTAVA, Vimal
PISE, Vivek

GUNDAVELLI, Srinath
(31) 201815904182
(32) 23.02.2018
(33) United States of America

(51) H04W 36/06
H04W 36/00
H04W 36/30
(11) EP4038968
(21) EP20771362.9
(47) 21.05.2025
(87) IB2020058271
08.04.2021
(22) 04.09.2020
(54) METHODS OF CONFIGURING SSB/ PCI FOR USE BY A UE AND RELATED USER EQUIPMENT AND NETWORK NODES
(73) TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
(72) MÄÄTTANEN, Helka-Liina
FOLKE, Mats
FRENNE, Mattias
TIDESTAV, Claes
(31) 201962909114 P
(32) 01.10.2019
(33) United States of America

(51) H04W 36/18
(11) EP4312450
(21) EP23187163.3
(47) 21.05.2025
(22) 24.07.2023
(54) INTERWORKING WITHOUT N26 INTERFACE SUPPORT OR NOT SUPPORTED RECEIVED IN NON-3GPP ACCESS
(73) MEDIATEK INC.
(72) LIN, Yuan-Chieh
YANG, Yung-Chun
LIN, Yu-Hsin
(31) 202318218099
202263369669 P
(32) 04.07.2023
28.07.2022
(33) United States of America
United States of America

(51) H04W 36/24
H04W 36/32
H04W 36/36
(11) EP3952455
(21) EP19923480.8
(47) 21.05.2025
(87) JP2019014314
08.10.2020
(22) 29.03.2019
(54) BASE STATION, COMMUNICATION SYSTEM, COMMUNICATION METHOD, AND PROGRAM
(73) HONDA MOTOR CO., LTD.
(72) OTAKA, Masaru
MATSUNAGA, Hideki
TSUCHIYA, Masamitsu

(51) H04W 40/24
H04W 76/15
H04L 69/323
H04L 69/14
H04W 36/06
H04W 48/14
H04W 48/12
H04W 84/12
(11) EP4124160
(21) EP21771923.6
(47) 21.05.2025
(87) KR2021003221
23.09.2021
(22) 16.03.2021
(54) TECHNIQUE FOR PERFORMING MULTI-LINK COMMUNICATION IN WIRELESS COMMUNICATION SYSTEM
(73) LG Electronics, Inc.
(72) KIM, Namyeong
KIM, Jeongki
CHOI, Jinsoo
PARK, Sungjin
SONG, Taewon
JANG, Insun
(31) 20200032199
(32) 16.03.2020
(33) Korea (Republic)

(51) H04W 48/00
(11) EP4024957
(21) EP20859866.4
(47) 21.05.2025
(87) CN2020113161
11.03.2021
(22) 03.09.2020
(54) BLUETOOTH PAIRING METHOD, AND RELATED DEVICE
(73) Huawei Technologies Co., Ltd.
(72) ZHU, Yuhong
ZHANG, Jingjing
DU, Yamei
NI, Guanjun
(31) 201910844159
(32) 06.09.2019
(33) China

(51) H04W 48/02
H04W 74/08
(11) EP3963947
(21) EP19927557.9
(47) 21.05.2025
(87) CN2019085313
05.11.2020
(22) 30.04.2019
(54) SYSTEMS AND METHODS OF ENHANCED RANDOM ACCESS PROCEDURE
(73) ZTE Corporation
(72) QIU, Zhihong
HUANG, He

(51) H04W 48/06
H04W 4/00
(11) EP4033817
(21) EP21208265.5
(47) 21.05.2025
(22) 25.11.2016
(54) METHOD AND APPARATUS FOR CONTROLLING A RADIO ACCESS CONNECTION TO A TELECOMMUNICATIONS NETWORK
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) Liberg, Olof
Sundberg, Mårten

(51) H04W 48/12
(11) EP3403444
(21) EP16804750.4
(47) 21.05.2025
(87) EP2016079061
20.07.2017
(22) 29.11.2016
(54) DISCOVERY SIGNAL BLOCK MAPPING
(73) Nokia Solutions and Networks Oy
(72) HAKOLA, Sami-Jukka
TIIROLA, Esa Tapani
PAJUKOSKI, Kari Pekka
LÄHETKANGAS, Eeva
(31) 201614993296
(32) 12.01.2016
(33) United States of America

(51) H04W 48/12
H04L 5/00
H04W 72/23
(11) EP3694283
(21) EP17927976.5
(47) 21.05.2025
(87) JP2017036551
11.04.2019
(22) 06.10.2017
(54) USER TERMINAL AND WIRELESS COMMUNICATION METHOD
(73) NTT DOCOMO, INC.
(72) HARADA, Hiroki
TAKEDA, Daiki
MURAYAMA, Daisuke
NAGATA, Satoshi

(51) H04W 48/16
H04W 48/18
(11) EP4329379
(21) EP24152171.5
(47) 21.05.2025
(22) 10.10.2017
(54) FINDING AN APPROPRIATE SESSION MANAGEMENT NETWORK FUNCTION IN A HOME PLMN THROUGH A NETWORK FUNCTION REPOSITORY FUNCTION
(73) Samsung Electronics Co., Ltd.
(72) Baek, Youngkyo
Kim, Sunghoon
Son, Jungje
Lee, Hoyeon
(31) 20160129252
(32) 06.10.2016
(33) Korea (Republic)

(51) H04W 52/02
(11) EP3509358
(21) EP17845079.7
(47) 21.05.2025
(87) CN2017093582
08.03.2018
(22) 19.07.2017
(54) COMMUNICATION METHOD AND COMMUNICATION APPARATUS FOR WIRELESS LOCAL AREA NETWORK, AND ACCESS POINT AND STATION
(73) Meizu Technology Co., Ltd.
(72) DONG, Xiandong
(31) 201610800926
(32) 01.09.2016
(33) China

(51) H04W 52/02
H04L 27/04
H04L 5/00
H04L 27/20
(11) EP3788751

(21) EP19725801.5
(47) 21.05.2025
(87) US2019029922
07.11.2019
(22) 30.04.2019
(54) MULTICARRIER ON-OFF KEYING SYMBOL RANDOMIZER
(73) QUALCOMM INCORPORATED
(72) SHELLHAMMER, Stephen Jay
VAN NEE, Didier Johannes Richard
TIAN, Bin
(31) 201916397140
201862665293 P
(32) 29.04.2019
01.05.2018
(33) United States of America
United States of America

(51) H04W 52/02
H04W 52/28
H04B 7/06
(11) EP4106419
(21) EP21764427.7
(47) 21.05.2025
(87) CN2021079226
10.09.2021
(22) 05.03.2021
(54) ENERGY-SAVING METHOD APPLIED TO MULTILINK COMMUNICATION, AND COMMUNICATION APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) GUO, Yuchen
(31) 202010151289
(32) 06.03.2020
(33) China

(51) H04W 52/02
H04W 76/28
H04W 72/12
(11) EP3288317
(21) EP16795711.7
(47) 21.05.2025
(87) CN2016075805
24.11.2016
(22) 07.03.2016
(54) METHOD AND DEVICE FOR MONITORING AND TRANSMITTING DOWNLINK SCHEDULING DATA
(73) Huawei Technologies Co., Ltd.
(72) YU, Yinghui
LIU, Lei
YU, Feng
TIE, Xiaolei
(31) 201510257300
(32) 19.05.2015
(33) China

(51) H04W 52/24
(11) EP3777356
(21) EP18714758.2
(47) 21.05.2025
(87) EP2018057960
03.10.2019
(22) 28.03.2018
(54) UPLINK SCHEDULING BASED ON UPPER AND LOWER SNR TARGETS
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) JALDÉN, Niklas
BERGMAN, Svante
NORDSTRÖM, Fredrik

(51) H04W 52/24
H04W 52/26
H04W 52/38
H04W 52/36
H04W 52/22
H04W 52/54
H04L 5/00
(11) EP3637876
(21) EP18831759.8
(47) 21.05.2025
(87) CN2018090572
17.01.2019
(22) 11.06.2018
(54) POWER CONTROL METHOD AND TERMINAL DEVICE
(73) Huawei Technologies Co., Ltd.
(72) LU, Zhenwei
LIU, Deping
GAO, Lei
(31) 201710567573
(32) 12.07.2017
(33) China

(51) H04W 52/34
H04W 52/40
H04W 52/14
(11) EP3909313
(21) EP20704154.2
(47) 21.05.2025
(87) US2020013131
16.07.2020
(22) 10.01.2020
(54) METHOD AND APPARATUS FOR UPLINK POWER CONTROL FOR DUAL CONNECTIVITY
(73) QUALCOMM INCORPORATED
(72) HOSSEINI, Seyedkianoush
WANG, Xiao Feng
CHEN, Wanshi
LUO, Tao
ANG, Peter Pui Lok
JI, Tingfang
(31) 202016739000
201962791538 P
(32) 09.01.2020
11.01.2019
(33) United States of America
United States of America

(51) H04W 60/00
H04W 88/18
H04W 48/18
H04W 8/20
H04W 8/02
H04W 60/06
(11) EP4055920
(21) EP20888012.0
(47) 21.05.2025
(87) KR2020016100
20.05.2021
(22) 16.11.2020
(54) METHOD AND APPARATUS FOR IMPROVING NETWORK SLICE CONTROL ACCURACY IN WIRELESS COMMUNICATION SYSTEM
(73) Samsung Electronics Co., Ltd.
(72) JEONG, Sangsoo
LEE, Hoyeon
(31) 20190146954
(32) 15.11.2019
(33) Korea (Republic)

(51) H04W 64/00
(11) EP4364483
(21) EP22737812.2
(47) 21.05.2025
(87) EP2022066804
05.01.2023
(22) 21.06.2022
(54) INCREASING RELIABILITY OF POSITIONS OF A TERMINAL BASED ON ONE OR SEVERAL IDENTIFIERS OF NEARBY TRANSMITTERS
(73) UNABIZ
(72) ISSON, Olivier
MARTY, Renaud
ZUNIGA, Juan Carlos
BOITE, Julien
(31) 2106964
(32) 29.06.2021
(33) France

(51) H04W 64/00
G01S 1/04
G01S 1/20
G01S 5/00
G01S 5/02
G01S 5/10
H04L 5/00
(11) EP3742829
(21) EP19740687.9
(47) 21.05.2025
(87) CN2019070180
25.07.2019
(22) 03.01.2019
(54) POSITIONING OPERATION BASED ON PRS AND SPRS MEASUREMENT RESULTS
(73) Datang Mobile Communications Equipment Co., Ltd.
(72) DA, Ren
LI, Hui
QUAN, Haiyang
GAO, Qiubin
(31) 201810053856
(32) 19.01.2018
(33) China

(51) H04W 64/00
G01S 5/02
G01S 5/10
H04W 4/40
H04W 4/029
G01S 5/00
H04W 16/14
H04W 74/0808
H04L 67/12
(11) EP4018737
(21) EP20761437.1
(47) 21.05.2025
(87) US2020045721
04.03.2021
(22) 11.08.2020
(54) RANGING SIGNAL TRANSMISSION IN UNLICENSED BAND
(73) QUALCOMM INCORPORATED
(72) ZHANG, Xiaoxia
YERRAMALLI, Srinivas
YOO, Taesang
LI, Junyi
WEI, Yongbin
BAGHEL, Sudhir Kumar

PATIL, Shailesh
GULATI, Kapil
CHOI, Chang-Sik
(31) 202016989745
201962890917 P
(32) 10.08.2020
23.08.2019
(33) United States of America
United States of America

(51) H04W 64/00
H04L 5/00
H04W 4/02
H04W 24/10
H04W 88/06
(11) EP4115664
(21) EP20838860.3
(47) 21.05.2025
(87) US2020066350
10.09.2021
(22) 21.12.2020
(54) LOW LAYER RADIO ACCESS TECHNOLOGY (RAT)-INDEPENDENT MEASUREMENT REPORTING
(73) QUALCOMM INCORPORATED
(72) MANOLAKOS, Alexandros
DUAN, Weimin
MUKKAVILLI, Krishna Kiran
(31) 20200100221
20200100118
(32) 04.05.2020
03.03.2020
(33) Greece
Greece

(51) H04W 68/02
(11) EP3821657
(21) EP18743433.7
(47) 21.05.2025
(87) EP2018068773
16.01.2020
(22) 11.07.2018
(54) PAGING A WIRELESS DEVICE IN A GROUP OF WIRELESS DEVICES
(73) TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)
(72) NADER, Ali
FRYKING, Per

(51) H04W 72/00
H04W 28/08
H04L 5/00
H04W 72/566
H04W 28/02
H04W 92/18
(11) EP4030838
(21) EP19948164.9
(47) 21.05.2025
(87) CN2019109746
08.04.2021
(22) 30.09.2019
(54) COMMUNICATION METHOD AND DEVICE
(73) Huawei Technologies Co., Ltd.
(72) LI, Xiangyu
WANG, Jun
XU, Haibo
PENG, Wenjie
DAI, Mingzeng

(51) H04W 72/04
H04L 5/00
(11) EP4068878
(21) EP19956692.8
(47) 21.05.2025
(87) CN2019126114
24.06.2021
(22) 17.12.2019
(54) METHOD AND APPARATUS FOR INDICATING NUMBER OF REPEATED TRANSMISSIONS
(73) Huawei Technologies Co., Ltd.
(72) YU, Yawei
GUO, Zhiheng
XIE, Xinqian
FEI, Yongqiang

(51) H04W 72/04
H04W 16/28
H04L 5/00
(11) EP3941127
(21) EP19919471.3
(47) 21.05.2025
(87) JP2019010626
17.09.2020
(22) 14.03.2019
(54) TERMINAL, RADIO COMMUNICATION METHOD, BASE STATION AND SYSTEM
(73) NTT DOCOMO, INC.
(72) MATSUMURA, Yuki
NAGATA, Satoshi

(51) H04W 72/04
H04W 72/23
(11) EP4213555
(21) EP20953737.2
(47) 21.05.2025
(87) CN2020116317
24.03.2022
(22) 18.09.2020
(54) COMMUNICATION METHOD AND APPARATUS
(73) Huawei Technologies Co. Ltd.
(72) LI, Ruijie
GUAN, Lei
LI, Shengyu

(51) H04W 72/0446
H04W 88/04
H04W 76/14
(11) EP3994937
(21) EP20764222.4
(47) 21.05.2025
(87) US2020046220
18.02.2021
(22) 13.08.2020
(54) WIRELESS DEVICE SIDELINK INFORMATION
(73) Ofinno, LLC
(72) PARK, Kyungmin
DINAN, Esmael
CHAE, Hyukjin
KIM, Taehun
RYU, JinSook
YI, Yunjung
ZHOU, Hua
(31) 201962886291 P
(32) 13.08.2019
(33) United States of America

(51) H04W 72/0453
H04W 72/54
(11) EP3682692
(21) EP17784279.6
(47) 21.05.2025
(87) EP2017076239
18.04.2019
(22) 13.10.2017
(54) METHOD AND CONTROL UNIT FOR EXCHANGING BACKHAUL INFORMATION BETWEEN RADIO NODES
(73) Huawei Technologies Co., Ltd.
(72) GAMBINI, Jonathan
LOMBARDI,Renato

(51) H04W 72/0453
H04W 84/12
(11) EP4229998
(21) EP21900083.3
(47) 21.05.2025
(87) CN2021135181
09.06.2022
(22) 02.12.2021
(54) METHODS AND APPARATUSES FOR SOLICITING TRIGGER-BASED PHYSICAL LAYER PROTOCOL DATA UNIT TRANSMISSION IN WIRELESS LOCAL AREA NETWORK
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) HUANG, Lei
(31) 10202012038U
(32) 02.12.2020
(33) Singapore

(51) H04W 72/12
G06N 3/04
G06N 3/08
(11) EP4057751
(21) EP20899755.1
(47) 21.05.2025
(87) CN2020126756
17.06.2021
(22) 05.11.2020
(54) SCHEDULING METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) XU, Chen
WANG, Jian
HUANGFU, Yourui
LI, Rong
WANG, Jun
(31) 201911285268
(32) 13.12.2019
(33) China

(51) H04W 72/23
H04W 72/0446
(11) EP3506698
(21) EP16920674.5
(47) 21.05.2025
(87) CN2016104707
11.05.2018
(22) 04.11.2016
(54) COMMUNICATION METHOD, TERMINAL, AND NETWORK DEVICE
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) LIN, Yanan

(51) H04W 72/23
H04W 72/12
(11) EP3525534
(21) EP16921126.5

(47) 21.05.2025
(87) CN2016105471
17.05.2018
(22) 11.11.2016
(54) TERMINAL DEVICE SCHEDULING METHOD, NETWORK DEVICE, AND TERMINAL DEVICE
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) TANG, Hai
YANG, Ning
XU, Hua

(51) H04W 72/23
H04W 72/1268
(11) EP3928578
(21) EP19916450.0
(47) 21.05.2025
(87) CN2019075960
27.08.2020
(22) 22.02.2019
(54) RESOURCE CONFIGURATION FOR NB-IOT
(73) Nokia Technologies OY
(72) CHAO, Hua
SELVAGANAPATHY, Srinivasan

(51) H04W 72/25
H04W 72/54
(11) EP4171073
(21) EP21841633.7
(47) 21.05.2025
(87) CN2021106166
20.01.2022
(22) 14.07.2021
(54) INFORMATION SENDING METHOD AND COMPUTER PROGRAM
(73) Huawei Technologies Co., Ltd.
(72) PENG, Lan
LI, Xueru
(31) 202010975473
202010694431
(32) 16.09.2020
17.07.2020
(33) China
China

(51) H04W 72/54
H04W 72/23
H04L 1/1829
(11) EP4005318
(21) EP20847510.3
(47) 21.05.2025
(87) CN2020106418
04.02.2021
(22) 31.07.2020
(54) METHOD AND APPARATUS FOR ENHANCED SEMI-PERSISTENT SCHEDULING CONFIGURATION
(73) Huawei Technologies Co., Ltd.
(72) LYU, Yongxia
ZHANG, Liqing
MA, Jianglei
(31) 202016939905
201962881138 P
(32) 27.07.2020
31.07.2019
(33) United States of America
United States of America

(51) H04W 74/00
(11) EP3496496
(21) EP16919221.8
(47) 21.05.2025
(87) CN2016102286
26.04.2018
(22) 17.10.2016
(54) METHOD AND APPARATUS FOR TRANSMITTING INFORMATION
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) LIN, Yanan

(51) H04W 74/00
H04W 56/00
H04W 74/0833
(11) EP4140238
(21) EP21822590.2
(47) 21.05.2025
(87) CN2021096644
16.12.2021
(22) 28.05.2021
(54) WIRELESS COMMUNICATION METHOD AND USER EQUIPMENT FOR UL PRACH TRANSMISSION
(73) Sharp Kabushiki Kaisha
(72) CHENG, Chienchun
CHEN, Hungchen
WANG, Haihan
(31) 202063038684 P
(32) 12.06.2020
(33) United States of America

(51) H04W 74/08
(11) EP3799510
(21) EP20193989.9
(47) 21.05.2025
(22) 26.09.2012
(54) METHOD FOR ENSURING PARALLEL DATA RANDOM ACCESS AND USER EQUIPMENT
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) CHEN, Yuhua
ZENG, Qinghai
CHANG, Junren
ZHANG, Jian
HAN, Guanglin
(31) 201110288396
(32) 26.09.2011
(33) China

(51) H04W 74/08
H04W 74/00
H04W 72/12
H04W 52/36
H04W 52/14
H04W 52/42
H04L 1/18
H04W 74/0833
H04W 52/50
H04B 7/0426
(11) EP4050960
(21) EP20869904.1
(47) 21.05.2025
(87) KR2020013074
01.04.2021
(22) 25.09.2020
(54) METHOD FOR TRANSMITTING AND RECEIVING SIGNALS FOR PERFORMING RANDOM ACCESS PROCESS IN UNLICENSED BAND, AND APPARATUS THEREFOR
(73) LG Electronics Inc.
(72) LEE, Jeongsu
YOON, Sukhyon
KO, Hyunsoo
YANG, Suckchel
KIM, Seonwook
LEE, Youngdae
SHIN, Seokmin
(31) 20190120136
20190118400
(32) 27.09.2019
25.09.2019
(33) Korea (Republic)
Korea (Republic)

(51) H04W 74/0808
(11) EP3412108
(21) EP17709472.9
(47) 21.05.2025
(87) IB2017000199
10.08.2017
(22) 30.01.2017
(54) METHOD AND APPARATUS FOR DETERMINING CHANNEL SENSING THRESHOLD IN UPLINK CHANNEL ACCESS
(73) Alcatel Lucent
(72) GU, Junrong
LIU, Jianguo
TAO, Tao
MENG, Yan
YE, Sigen
SHEN, Gang
(31) 201610084049
(32) 05.02.2016
(33) China

(51) H04W 74/0808
H04L 27/26
H04L 5/00
H04L 27/00
H04W 16/14
(11) EP3977804
(21) EP19936183.3
(47) 21.05.2025
(87) CN2019093966
07.01.2021
(22) 29.06.2019
(54) CHANNEL ACCESS METHOD AND APPARTUS FOR TRANSMISSION OF A SIGNAL IN UNLICENSED SPECTRUM
(73) Huawei Technologies Co. Ltd.
(72) MAZZARESE, David Jean-Marie
ZHANG, Jiayin

(51) H04W 74/0808
H04W 74/0833
H04W 74/00
H04W 16/14
(11) EP3836722
(21) EP19846841.5
(47) 21.05.2025
(87) JP2019030130
13.02.2020
(22) 01.08.2019
(54) WIRELESS COMMUNICATION DEVICE, WIRELESS COMMUNICATION METHOD, AND COMPUTER PROGRAM
(73) Sony Group Corporation
(72) KUSASHIMA, Naoki
(31) 2018150339

(32) 09.08.2018
(33) Japan

(51) H04W 74/0816
(11) EP3562253
(21) EP19151836.4
(47) 21.05.2025
(22) 15.01.2019
(54) CHANNEL SCHEDULING FOR SPATIAL REUSE
(73) Hewlett Packard Enterprise Development LP
(72) Han, Jianpo
Zhou, Qiang
Ran, Guangzhi
(31) 201810396001
(32) 27.04.2018
(33) China

(51) H04W 74/0816
H04W 84/12
H04W 74/00
(11) EP4344344
(21) EP24156731.2
(47) 21.05.2025
(22) 14.03.2017
(54) INTEGRATED CIRCUIT FOR A WIRELESS STATION
(73) Panasonic Intellectual Property Corporation of America
(72) NUNOME, Tomoya
IWAI, Takashi
URABE, Yoshio
(31) 2016097177
(32) 13.05.2016
(33) Japan

(51) H04W 74/0833
H04L 5/00
(11) EP3549301
(21) EP17892779.4
(47) 21.05.2025
(87) CN2017102652
26.07.2018
(22) 21.09.2017
(54) METHOD AND DEVICE FOR TWO-STEP RANDOM ACCESSING
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) LIU, Jinhua
SAHLIN, Henrik
IRUKULAPATI, Naga Vishnu Kanth
(31) PCT/CN2017/072254
(32) 23.01.2017
(33) World Intellectual Property Office (WIPO)

(51) H04W 74/0833
H04L 5/00
H04L 27/26
H04W 74/0838
H04W 56/00
(11) EP3573413
(21) EP18772323.4
(47) 21.05.2025
(87) CN2018077103
27.09.2018
(22) 24.02.2018
(54) RANDOM ACCESS METHOD, USER EQUIPMENT, AND BASE STATION
(73) Huawei Technologies Co., Ltd.
(72) ZHAO, Hongyi
ZHANG, Jinfang
LU, Lei
(31) 201710166657
(32) 20.03.2017
(33) China

(51) H04W 74/0833
H04L 5/00
H04W 72/12
(11) EP3920649
(21) EP20755049.2
(47) 21.05.2025
(87) CN2020075231
20.08.2020
(22) 14.02.2020
(54) RANDOM ACCESS METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) GONG, Zhengwei
WU, Yiqun
CHEN, Yan
(31) 201910118189
(32) 15.02.2019
(33) China

(51) H04W 74/0833
H04L 69/324
H04W 74/00
(11) EP3855850
(21) EP19867588.6
(47) 21.05.2025
(87) CN2019108431
02.04.2020
(22) 27.09.2019
(54) RANDOM ACCESS METHOD AND COMMUNICATION APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) WU, Yiqun
CHEN, Yan
(31) 201811140232
(32) 28.09.2018
(33) China

(51) H04W 74/0833
H04W 74/00
(11) EP3821573
(21) EP18925774.4
(47) 21.05.2025
(87) CN2018095064
16.01.2020
(22) 10.07.2018
(54) RANDOM ACCESS RESOURCE ALLOCATION FOR INTEGRATED ACCESS AND BACKHAUL NODES
(73) ZTE Corporation
(72) ZHANG, Junfeng
BI, Feng
HAO, Peng

(51) H04W 74/0833
H04W 74/00
H04W 56/00
H04W 16/14
H04W 74/0808
(11) EP3906748
(21) EP20763094.8
(47) 21.05.2025
(87) KR2020002867
03.09.2020
(22) 28.02.2020
(54) METHOD AND APPARATUS FOR VALID RACH OCCASION DETERMINATION IN NR UNLICENSED
(73) Samsung Electronics Co., Ltd.
(72) LI, Yingzhe
SI, Hongbo
(31) 202016799636
201962888179 P
201962835866 P
201962811922 P
(32) 24.02.2020
16.08.2019
18.04.2019
28.02.2019
(33) United States of America
United States of America
United States of America
United States of America

(51) H04W 74/0833
H04W 74/08
H04W 76/15
H04W 74/00
H04W 84/04
(11) EP4280794
(21) EP23189431.2
(47) 21.05.2025
(22) 07.11.2013
(54) NODES AND METHODS FOR RANDOM ACCESS IN DUAL CONNECTIVITY
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) Rahman, Imadur
Song, Xinghua
Chen Larsson, Daniel
Li, Shaohua
Guo, Zhiheng
Yang, Yu
(31) 201361863578 P
(32) 08.08.2013
(33) United States of America

(51) H04W 76/11
H04W 36/00
H04L 61/5007
H04L 61/5061
(11) EP3829143
(21) EP20213981.2
(47) 21.05.2025
(22) 24.12.2016
(54) METHOD AND APPARATUS FOR COMMUNICATION BETWEEN USER EQUIPEMNTS
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) ZHOU, Han
XIA, Yuan
YAO, Qi

(51) H04W 76/11
H04W 76/12
H04W 76/22
H04W 8/00
H04W 60/00
(11) EP4085726
(21) EP20838631.8
(47) 21.05.2025
(87) IB2020062556
08.07.2021
(22) 30.12.2020
(54) USING DNAI TO IDENTIFY A SMF SUPPORTING CONNECTION TO A LOCAL DN
(73) Telefonaktiebolaget LM Ericsson (publ)
(72) HALLENSTÅL, Magnus
(31) 201962954846 P
(32) 30.12.2019

(33) United States of America

(51) H04W 76/12
H04L 1/08
H04W 76/15
H04W 76/22
H04W 28/02
(11) EP3962165
(21) EP20796435.4
(47) 21.05.2025
(87) CN2020082591
29.10.2020
(22) 31.03.2020
(54) CONFIGURATION METHOD AND DEVICE FOR REDUNDANT PROTOCOL DATA UNIT SESSION, STORAGE MEDIUM AND ELECTRONIC APPARATUS
(73) ZTE Corporation
(72) MA, Wei
LIU, Hongjun
WEN, Wu
(31) 201910346241
(32) 26.04.2019
(33) China

(51) H04W 76/14
H04W 88/04
H04W 72/54
(11) EP3603327
(21) EP18711954.0
(47) 21.05.2025
(87) EP2018057366
27.09.2018
(22) 22.03.2018
(54) TERMINAL DEVICES, INFRASTRUCTURE EQUIPMENT AND METHODS
(73) InterDigital Patent Holdings, Inc.
(72) MARTIN, Brian Alexander
WONG, Shin Horng
BEALE, Martin Warwick
UCHIYAMA, Hiromasa
WAKABAYASHI, Hideji
TSUDA, Shinichiro
(31) 17162886
(32) 24.03.2017
(33) European Patent Office (EPO)

(51) H04W 76/15
H04L 5/00
H04B 7/06
H04W 74/0833
H04W 74/00
H04W 76/27
H04W 74/0838
(11) EP4151043
(21) EP21899318.6
(47) 21.05.2025
(87) CN2021109172
02.02.2023
(22) 29.07.2021
(54) PDCCH HANDLING DURING SCG ACTIVATION
(73) Apple Inc.
(72) PALLE VENKATA, Naveen Kumar R.
HU, Haijing
XU, Fangli
ZHANG, Dawei
CHEN, Yuqin
CUI, Jie

(51) H04W 76/15
H04W 84/12
H04W 88/10
(11) EP4175400
(21) EP21842007.3
(47) 21.05.2025
(87) CN2021106128
20.01.2022
(22) 13.07.2021
(54) DATA TRANSMISSION METHOD AND APPARATUS
(73) Huawei Technologies Co., Ltd.
(72) GAN, Ming
LIANG, Dandan
GUO, Yuchen
LI, Yunbo
YU, Jian
(31) 202010671573
(32) 13.07.2020
(33) China

(51) H04W 76/28
H04L 5/00
H04W 52/02
(11) EP3826213
(21) EP19838133.7
(47) 21.05.2025
(87) CN2019096688
23.01.2020
(22) 19.07.2019
(54) CHANNEL DETECTION INSTRUCTION METHOD, TERMINAL, AND NETWORK DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) JIANG, Dajie
PAN, Xueming
(31) 201810806639
(32) 20.07.2018
(33) China

(51) H04W 88/04
H04W 40/22
H04W 72/04
(11) EP4124168
(21) EP22181731.5
(47) 21.05.2025
(22) 12.08.2015
(54) DATA TRANSMISSION METHOD, USER EQUIPMENT, AND BASE STATION
(73) Huawei Technologies Co., Ltd.
(72) ZHOU, Guohua
WEI, Dongdong
TANG, Zhenfei

(51) H04W 88/04
H04W 76/14
(11) EP4075918
(21) EP20911441.2
(47) 21.05.2025
(87) CN2020070446
15.07.2021
(22) 06.01.2020
(54) COMMUNICATION METHOD AND DEVICE
(73) Huawei Technologies Co. Ltd.
(72) XU, Shengfeng
YING, Jiangwei
LI, Meng

(51) H04W 88/04
H04W 76/14
(11) EP4185071
(21) EP20947286.9
(47) 21.05.2025
(87) CN2020106316
03.02.2022
(22) 31.07.2020
(54) SESSION ESTABLISHMENT METHOD, ELECTRONIC DEVICE AND STORAGE MEDIUM
(73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.
(72) LIU, Jianhua

(51) H04W 88/08
(11) EP3886531
(21) EP20216776.3
(47) 21.05.2025
(22) 04.11.2015
(54) BASE STATION
(73) Huawei Technologies Co., Ltd.
(72) Wang, Chenglong
Ohlsson, Fredrik
Tsoi, Vadim
(31) 201510003741
(32) 04.01.2015
(33) China

(51) H04W 88/08
F21K 9/23
H04B 10/114
(11) EP3939375
(21) EP20770869.4
(47) 21.05.2025
(87) US2020022174
17.09.2020
(22) 11.03.2020
(54) RADICALLY INEXPENSIVE AND FLEXIBLE WIRELESS DEPLOYMENT SYSTEM AND METHOD
(73) Omnifi Inc.
(72) Epstein, Joseph Alan
(31) 201962817461 P
(32) 12.03.2019
(33) United States of America

(51) H04W 92/12
H04L 45/00
H04W 76/11
(11) EP3917217
(21) EP20755141.7
(47) 21.05.2025
(87) CN2020075376
20.08.2020
(22) 14.02.2020
(54) COMMUNICATION METHOD AND RELATED DEVICE
(73) Huawei Technologies Co., Ltd.
(72) ZHU, Yuanping
CAO, Zhenzhen
DAI, Mingzeng
(31) 201910118117
(32) 15.02.2019
(33) China

(51) H05B 3/48
F24H 9/18
F24H 9/20
H01R 25/00
H05B 3/06
(11) EP4147536
(21) EP21723391.5
(47) 21.05.2025
(87) IB2021053513

11.11.2021
(22) 28.04.2021
(54) PLUG-IN CONNECTION SYSTEM BETWEEN CANDLE RESISTANCES AND THERMOSTAT
(73) Thermowatt S.p.A.
(72) NERI, Giampaolo
PERELLI, Lucio
(31) 202000009877
(32) 05.05.2020
(33) Italy

(51) H05B 6/12
(11) EP3732939
(21) EP18834058.2
(47) 21.05.2025
(87) IB2018060440
04.07.2019
(22) 20.12.2018
(54) COUNTERTOP WITH INDUCTION HOB
(73) Breton SPA
(72) TONCELLI, Luca
BETTIOL, Mauro
DONI, Angelo
ZERBETTO, Marcello
GIANNINI, Francesco
DUGHIERO, Fabrizio
(31) 201700150969
(32) 29.12.2017
(33) Italy

(51) H05B 6/64
H05B 6/78
H05B 6/80
(11) EP3756419
(21) EP19710962.2
(47) 21.05.2025
(87) US2019020286
06.09.2019
(22) 01.03.2019
(54) METHOD FOR CONTROLLING MICROWAVE HEATING SYSTEMS
(73) 915 Labs, Inc.
(72) MAGANA, Moses Alexander
(31) 201862636886 P
(32) 01.03.2018
(33) United States of America

(51) H05B 6/68
H05B 6/80
H05B 6/70
(11) EP4430920
(21) EP22817233.4
(47) 21.05.2025
(87) EP2022081638
19.05.2023
(22) 11.11.2022
(54) METHOD AND APPARATUS FOR HEATING A MEDIUM USING AN HF SIGNAL
(73) TRUMPF Hüttinger GmbH + Co. KG
(72) WASSENBERG, Sebastian
TRABER, Thomas
(31) 102021129565
(32) 12.11.2021
(33) Germany

(51) H05B 45/10
(11) EP4464127
(21) EP22835829.7
(47) 21.05.2025
(87) EP2022086558
13.07.2023
(22) 19.12.2022
(54) LUMINOUS PANEL WITH POWER SUPPLY MEANS FOR SUPPLYING POWER TO ATTACHED DEVICE
(73) Signify Holding B.V.
(72) VAN DE SLUIS, Bartel, Marinus
KRIJN, Marcellinus, Petrus, Carolus, Michael
ROZENDAAL, Leendert, Teunis
VISSENBERG, Michel, Cornelis, Josephus, Marie
(31) 22150634
(32) 10.01.2022
(33) European Patent Office (EPO)

(51) H05B 45/10
H05B 45/34
H05B 45/325
G09G 5/10
G09G 3/34
(11) EP4301094
(21) EP21954349.3
(47) 21.05.2025
(87) KR2021018129
23.02.2023
(22) 02.12.2021
(54) DISPLAY APPARATUS AND CONTROL METHOD THEREFOR
(73) Samsung Electronics Co., Ltd.
(72) LEE, Jiwon
JOO, Sungyong
WON, Junhyun
(31) 20210110498
(32) 20.08.2021
(33) Korea (Republic)

(51) H05B 45/10
H05B 45/3725
H05B 45/46
(11) EP3232738
(21) EP15866579.4
(47) 21.05.2025
(87) JP2015081072
16.06.2016
(22) 04.11.2015
(54) LIGHTING DEVICE
(73) Rohm Co., Ltd.
(72) TAKIZAWA, Noboru
NAKAYAMA, Masaaki
(31) 2014251776
2014251770
(32) 12.12.2014
12.12.2014
(33) Japan
Japan

(51) H05B 45/20
A61L 2/10
H05B 47/115
A61L 9/20
A61L 2/24
(11) EP4140257
(21) EP20720812.5
(47) 21.05.2025
(87) EP2020061071
28.10.2021
(22) 21.04.2020
(54) UV LIGHT CONTROL SYSTEM
(73) BrainLit AB
(72) WINGREN, Tord

(51) H05B 45/325
H05B 45/33
(11) EP4098084
(21) EP21705406.3
(47) 21.05.2025
(87) US2021015824
05.08.2021
(22) 29.01.2021
(54) DRIVE CIRCUIT FOR A LIGHT-EMITTING DIODE LIGHT SOURCE
(73) Lutron Technology Company LLC
(72) DEJONGE, Stuart, W.
(31) 202062968566 P
(32) 31.01.2020
(33) United States of America

(51) H05B 45/36
(11) EP4305928
(21) EP22713390.7
(47) 21.05.2025
(87) EP2022055682
15.09.2022
(22) 07.03.2022
(54) LED DRIVING CIRCUIT, LED POWERING CIRCUIT, AND LED LIGHTING DEVICE
(73) Signify Holding B.V.
(72) SHAN, Qing
DE BONDT, Guy, Louis, Paul
TIAN, Junwei
CVORIC, Dalibor
SHEN, Mo
VOS, Hermanus, Johannes, Maria
DE JONGH, Frits, Tobi
(31) PCT/CN2021/079758
21185094
(32) 09.03.2021
12.07.2021
(33) World Intellectual Property Office (WIPO)
European Patent Office (EPO)

(51) H05B 45/385
H02J 9/02
H05B 47/105
H05B 47/17
(11) EP4381903
(21) EP22760899.9
(47) 21.05.2025
(87) EP2022071569
09.02.2023
(22) 01.08.2022
(54) REDUNDANT LIGHTING DRIVER SYSTEM
(73) Signify Holding B.V.
(72) JANIK, Raymond, George
MOGHAL, Khurram, Z.
TRASK, Russel, Scott
(31) 202163228744 P
21191185
(32) 03.08.2021
13.08.2021
(33) United States of America
European Patent Office (EPO)

(51) H05B 47/115
H05B 47/175
(11) EP4209119
(21) EP21769476.9
(47) 21.05.2025
(87) EP2021074315
10.03.2022

(22) 02.09.2021
(54) DETERMINING A LOCATION FOR A PRESENCE SENSOR OR LIGHT SWITCH BASED ON A CONTROL HISTORY
(73) Signify Holding B.V.
(72) WONG, Chu, Fai, Chu, Leun
(31) 20194502
(32) 04.09.2020
(33) European Patent Office (EPO)

(51) H05B 47/18
(11) EP3949689
(21) EP20712597.2
(47) 21.05.2025
(87) EP2020058394
01.10.2020
(22) 25.03.2020
(54) POWER SUPPLY CONFIGURATION ACROSS ISOLATION BARRIER
(73) Signify Holding B.V.
(72) CLAUBERG, Bernd
FANG, Yuhong
(31) 201962825115 P
19169592
(32) 28.03.2019
16.04.2019
(33) United States of America
European Patent Office (EPO)

(51) H05B 47/19
(11) EP4369868
(21) EP23164887.4
(47) 21.05.2025
(22) 29.03.2023
(54) DISTRIBUTED INDUCTION-CONTROLLED SOLAR LIGHTING SYSTEM
(73) Shenzhen JinDian Electronic Technology Co., Ltd.
(72) Tang, Shifu
(31) 202211414945
(32) 11.11.2022
(33) China

(51) H05B 47/19
H05B 35/00
H04W 4/33
H04L 41/12
H05B 47/10
H04L 12/28
(11) EP4470342
(21) EP23701501.1
(47) 21.05.2025
(87) EP2023051557
03.08.2023
(22) 23.01.2023
(54) COMMISSIONING DEVICE USING A SHORT-RANGE SIGNAL
(73) Signify Holding B.V.
(72) GROSSE, Debora, Yoon
AOITA, Maina
MORRIS, Tyler, Brian
SONAWANE, Parag
(31) 202263303686 P
22155106
(32) 27.01.2022
04.02.2022
(33) United States of America
European Patent Office (EPO)

(51) H05H 3/06
G01V 5/10
G21B 3/00
(11) EP4169358
(21) EP21735894.4
(47) 21.05.2025
(87) EP2021066638
30.12.2021
(22) 18.06.2021
(54) NEUTRON GENERATOR
(73) Kollewe, Dieter
(72) Kollewe, Dieter
(31) 102020116549
(32) 23.06.2020
(33) Germany

(51) H05K 1/18
H05K 1/16
H01G 4/30
H01G 4/33
(11) EP2496059
(21) EP12158054.2
(47) 21.05.2025
(22) 05.03.2012
(54) Printed wiring board with PWB-embedded capacitor mounted thereon and method for fabricating the same
(73) Baker Hughes Holdings LLC
(72) Abawi, Daniel Z.
(31) 201113040841
(32) 04.03.2011
(33) United States of America

(51) H05K 5/00
H05K 3/28
H05K 5/06
H05K 1/03
H05K 1/14
H01L 23/522
H01L 23/538
B29C 39/12
B29C 45/16
B32B 27/08
G06F 3/044
G06F 3/04883
B32B 17/10
H01L 21/56
H05K 1/02
H05K 1/18
H05K 3/40
H05K 3/46
B32B 3/06
B32B 3/26
G06F 3/01
G06F 3/0354
G06F 3/041
G06F 3/0488
(11) EP4164346
(21) EP22205517.0
(47) 21.05.2025
(22) 11.04.2017
(54) MULTILAYER STRUCTURE WITH EMBEDDED MULTILAYER ELECTRONICS
(73) TactoTek Oy
(72) SÄÄSKI, Jarmo
TORVINEN, Jarkko
RAAPPANA, Pasi
HEIKKINEN, Mikko
(31) 201662321771 P
(32) 13.04.2016
(33) United States of America

(51) H05K 5/02
H04M 1/02
G06F 1/16
(11) EP4280830
(21) EP22879623.1
(47) 21.05.2025
(87) CN2022142341
05.10.2023
(22) 27.12.2022
(54) FOLDABLE MECHANISM AND FOLDABLE TERMINAL
(73) Honor Device Co., Ltd.
(72) DONG, Shaohong
CHEN, Ruihao
SU, Shuai
PENG, Gaofeng
JIN, Kaifang
(31) 202210336293
(32) 31.03.2022
(33) China

(51) H05K 7/14
(11) EP3461246
(21) EP18191534.9
(47) 21.05.2025
(22) 29.08.2018
(54) MULTIPLE INPUT POWER DISTRIBUTION SHELF AND BUS BAR ASSEMBLY THEREOF
(73) Delta Electronics, Inc.
(72) HUANG, Yu-Hung
(31) 201711228317
201762553188 P
(32) 29.11.2017
01.09.2017
(33) China
United States of America

(51) H05K 7/14
(11) EP4240124
(21) EP22159428.6
(47) 21.05.2025
(22) 01.03.2022
(54) WALL MOUNT RACK FOR ELECTRONIC EQUIPMENT
(73) EFB-Elektronik GmbH
(72) SÖRENSEN, Kim H.
SCHMIDT, Kristian Kjaerholt

(51) H05K 7/14
H01M 10/42
H02M 7/00
(11) EP3785500
(21) EP19731218.4
(47) 21.05.2025
(87) EP2019065391
19.12.2019
(22) 12.06.2019
(54) ENERGY STORAGE DEVICE
(73) Liebherr-Electronics and Drives GmbH
(72) WELSER, Sven
WANNER, Harald
RIED, Daniel
SCHULER, Michael
EICHLER, Markus
SIGG, Dietmar
(31) 102018114462
(32) 15.06.2018
(33) Germany

(51) H05K 9/00
(11) EP3586578
(21) EP18706259.1
(47) 21.05.2025
(87) EP2018054109
30.08.2018
(22) 20.02.2018
(54) HOSE COMBINATION WITH AN ELECTROMAGNETIC SHIELD, HOSE WITH AN ELECTROMAGNETIC SHIELD, AND USE OF SUCH A HOSE COMBINATION AND/OR OF SUCH A HOSE
(73) Fränkische Industrial Pipes GmbH & Co. KG
(72) BIERMAIER, Peter
BLÜMMERT, Dominik
(31) 102017202944
(32) 23.02.2017
(33) Germany

(51) H05K 13/04
H05K 13/00
(11) EP4025030
(21) EP19942667.7
(47) 21.05.2025
(87) JP2019033743
04.03.2021
(22) 28.08.2019
(54) AUTOMATIC BACK-UP PIN ARRANGEMENT SYSTEM FOR COMPONENT MOUNTING MACHINE
(73) Fuji Corporation
(72) KURODA, Hideya
SUGITA, Hiroyoshi

(51) H10B 12/00
H10B 51/30
H10D 30/47
H10D 30/67
H10D 64/01
H10D 64/23
H10D 99/00
H10D 62/10
H10D 62/80
H10D 30/01
H10D 64/62
B82Y 10/00
(11) EP4391081
(21) EP23218845.8
(47) 21.05.2025
(22) 20.12.2023
(54) MICROELECTRONIC DEVICE INCLUDING LARGE CONTACT SURFACES BETWEEN THE CONDUCTION CHANNEL AND THE SOURCE AND DRAIN REGIONS
(73) Commissariat à l'Energie Atomique et aux Energies Alternatives
(72) BARRAUD, Sylvain
COQUAND, Rémi
REBOH, Shay
(31) 2214255
2214254
(32) 22.12.2022
22.12.2022
(33) France
France

(51) H10B 12/00
H10D 30/67
H10D 64/60
(11) EP4199085
(21) EP22865907.4
(47) 21.05.2025
(87) CN2022070590
27.04.2023
(22) 06.01.2022
(54) SEMICONDUCTOR STRUCTURE AND FABRICATION METHOD THEREFOR
(73) Changxin Memory Technologies, Inc.
(72) GUO, Shuai
(31) 202111231509
(32) 22.10.2021
(33) China

(51) H10D 8/60
H10D 30/63
H10D 30/66
H10D 62/80
H01L 21/34
H01L 21/467
H01L 21/02
H10D 62/10
H10D 64/00
(11) EP3823045
(21) EP20206833.4
(47) 21.05.2025
(22) 11.11.2020
(54) SEMICONDUCTOR DEVICE AND SYSTEM INCLUDING SEMICONDUCTOR
(73) Flosfia Inc.
(72) Amazutsumi, Koji
Norimatsu, Kazuyoshi
Okigawa, Mitsuru
(31) 2020176965
2019206570
(32) 21.10.2020
14.11.2019
(33) Japan
Japan

(51) H10D 30/66
H10D 30/01
H10D 62/10
(11) EP3863065
(21) EP20155344.3
(47) 21.05.2025
(22) 04.02.2020
(54) SEMICONDUCTOR DIE AND METHOD OF MANUFACTURING THE SAME
(73) Infineon Technologies Austria AG
(72) BLANK, Oliver
ALTSTAETTER, Christof
NEUMANN, Ingmar

(51) H10D 62/17
H10D 64/62
H10D 64/00
H10D 64/23
H10D 30/60
H10D 30/01
(11) EP3863062
(21) EP20156150.3
(47) 21.05.2025
(22) 07.02.2020
(54) SEMICONDUCTOR TRANSISTOR DEVICE AND METHOD OF MANUFACTURING THE SAME
(73) Infineon Technologies Austria AG
(72) YIP, Li Juin
BLANK, Oliver
HOFER, Heimo
HUTZLER, Michael
SIEMIENIEC, Ralf

(51) H10D 89/60
H10D 84/00
H10D 84/03
H01L 23/482
H01L 23/60
(11) EP3288068
(21) EP16782935.7
(47) 21.05.2025
(87) JP2016059534
27.10.2016
(22) 25.03.2016
(54) SEMICONDUCTOR CHIP HAVING ON-CHIP NOISE PROTECTION CIRCUIT
(73) Hitachi Astemo, Ltd.
(72) YANAGAWA Yoshimitsu
MATSUMOTO Masahiro
NAKANO Hiroshi
KOTABE Akira
ASANO Satoshi
(31) 2015088034
(32) 23.04.2015
(33) Japan

(51) H10F 19/30
H10F 71/00
H10F 77/20
(11) EP4295417
(21) EP22922737.6
(47) 21.05.2025
(87) CN2022074362
03.08.2023
(22) 27.01.2022
(54) METHOD FOR FORMING CRISSCROSSED CONDUCTIVE LINES OF THIN-FILM SOLAR MODULE
(73) Triumph Science & Technology Group Co., Ltd
CNBM RESEARCH INSTITUTE FOR ADVANCED GLASS MATERIALS GROUP CO., LTD
(72) SHEN, Yilei
GADDIGOPULA, Bala-Krishna

(51) H10H 20/831
H10H 20/857
(11) EP4040514
(21) EP22154673.2
(47) 21.05.2025
(22) 02.02.2022
(54) LIGHT EMITTING ELEMENT AND LIGHT EMITTING DEVICE
(73) NICHIA CORPORATION
(72) FURUHA, Naoto
FUKUTA, Hiroki
(31) 2021197641
2021016363
(32) 06.12.2021
04.02.2021
(33) Japan
Japan

(51) H10H 29/01
H10H 29/32
H10H 29/49
H10H 29/03
H10H 29/80
(11) EP4071838

(21) EP22166104.4
(47) 21.05.2025
(22) 31.03.2022
(54) DISPLAY DEVICE AND MANUFACTURING METHOD THEREOF
(73) Samsung Display Co., Ltd.
(72) PARK, Jeong Su
KIM, Hyun
SONG, Myeong Hun
WANG, Jeong Kook
LEE, Jong Chan
CHO, Yong Tae
(31) 20210044823
(32) 06.04.2021
(33) Korea (Republic)

(51) H10H 29/30
H10H 29/851
(11) EP3703133
(21) EP18893087.9
(47) 21.05.2025
(87) KR2018015915
27.06.2019
(22) 14.12.2018
(54) DISPLAY APPARATUS
(73) Samsung Electronics Co., Ltd.
(72) KIM, Sung Yeol
KIM, Dae Sik
SHIN, Seung Yong
JUNG, Jong Hoon
(31) 20170174156
(32) 18.12.2017
(33) Korea (Republic)

(51) H10K 30/82
H10K 30/15
H10K 30/50
(11) EP4024487
(21) EP20873810.4
(47) 21.05.2025
(87) JP2020036512
15.04.2021
(22) 28.09.2020
(54) LAMINATE, ORGANIC THIN FILM SOLAR CELL, METHOD FOR MANUFACTURING LAMINATE, AND METHOD FOR MANUFACTURING ORGANIC THIN FILM SOLAR CELL
(73) JFE Steel Corporation
National University Corporation Hokkaido University
(72) SUTO, Mikito
MASUOKA, Hiroyuki
MATSUZAKI, Akira
HABAZAKI, Hiroki
KOBAYASHI, Hikaru
(31) 2019185052
(32) 08.10.2019
(33) Japan

(51) H10K 50/11
(11) EP3598518
(21) EP19168054.5
(47) 21.05.2025
(22) 09.04.2019
(54) ORGANIC LIGHT-EMITTING DEVICE
(73) Samsung Electronics Co., Ltd.
(72) SIM, Myungsun
IHN, Sooghang
KIM, Joonghyuk
KOISHIKAWA, Yasushi
KIM, Jongsoo
LEE, Hasup
JEON, Soonok
CHUNG, Yeonsook
(31) 20190011305
20180084766
(32) 29.01.2019
20.07.2018
(33) Korea (Republic)
Korea (Republic)

(51) H10K 50/19
H10K 85/60
H10K 101/30
(11) EP4333590
(21) EP22192905.2
(47) 21.05.2025
(22) 30.08.2022
(54) ORGANIC ELECTROLUMINESCENT DEVICE COMPRISING A COMPOUND OF FORMULA (I) AND A COMPOUND OF FORMULA (II), AND DISPLAY DEVICE COMPRISING THE ORGANIC ELECTROLUMINESCENT DEVICE
(73) Novaled GmbH
(72) LUSCHTINETZ, Regina
SCHULZE, Benjamin
ROSENOW, Thomas
NÜLLEN, Max Peter
WUDARCZYK, Jakob Jacek

(51) H10K 59/122
H10K 50/824
H10K 50/814
(11) EP3766100
(21) EP18855146.9
(47) 21.05.2025
(87) CN2018078713
19.09.2019
(22) 12.03.2018
(54) ORGANIC LIGHT EMITTING DIODE ARRAY SUBSTRATE, DISPLAY PANEL AND DISPLAY APPARATUS, AND FABRICATING METHOD THEREOF
(73) BOE Technology Group Co., Ltd.
(72) WANG, Guoying
SONG, Zhen

(51) H10K 59/122
H10K 59/173
H10K 71/13
(11) EP3846212
(21) EP19831971.7
(47) 21.05.2025
(87) CN2019084929
05.03.2020
(22) 29.04.2019
(54) PIXEL DEFINITION STRUCTURE, DISPLAY PANEL AND PREPARATION METHOD THEREFOR, AND DISPLAY APPARATUS
(73) BOE TECHNOLOGY GROUP CO., LTD.
(72) HU, Chunjing
HOU, Wenjun
(31) 201811010429
(32) 31.08.2018
(33) China

(51) H10K 59/122
H10K 59/80
H10K 59/131
H10K 59/124
(11) EP3939088
(21) EP19858660.4
(47) 21.05.2025
(87) CN2019077691
17.09.2020
(22) 11.03.2019
(54) DISPLAY SUBSTRATE, DISPLAY APPARATUS, METHOD OF FABRICATING DISPLAY SUBSTRATE
(73) BOE TECHNOLOGY GROUP CO., LTD.
(72) ZHANG, Song
SHI, Ling

(51) H10K 59/124
H10K 59/131
H10K 102/00
(11) EP4053901
(21) EP19945410.9
(47) 21.05.2025
(87) CN2019114061
06.05.2021
(22) 29.10.2019
(54) DISPLAY SUBSTRATE AND MANUFACTURING METHOD THEREOF, AND DISPLAY DEVICE
(73) BOE Technology Group Co., Ltd.
Chengdu BOE Optoelectronics Technology Co., Ltd.
(72) MA, Hongwei
DONG, Xiangdan
WANG, Rui

(51) H10K 59/126
H10K 59/131
H10K 59/65
(11) EP4113622
(21) EP22182445.1
(47) 21.05.2025
(22) 01.07.2022
(54) ELECTRONIC DEVICE AND DISPLAY PANEL INCLUDED THEREIN
(73) Samsung Display Co., Ltd.
(72) Oh, Sanghoon
Lee, Donghyeok
Kim, Jongseok
Jung, Jingoo
Joo, Yunsik
Choi, Kyung Hyun
(31) 20210087319
(32) 02.07.2021
(33) Korea (Republic)

(51) H10K 59/131
H10K 77/10
H05B 33/04
H05B 33/14
H10K 59/80
H10K 102/00
(11) EP4258844
(21) EP23188939.5
(47) 21.05.2025
(22) 25.09.2015
(54) FLEXIBLE ORGANIC LIGHT EMITTING DISPLAY DEVICE
(73) LG Display Co., Ltd.
(72) LEE, JaeYoung
YANG, Wonjae
PARK, JoonWon
KIM, Tae-Kyung
LEE, Sangheun
HUH, HaeRi

HEO, HunHoe
KIM, Ji-Min
(31) 20140180560
20140169336
20140131810
20140131653
(32) 15.12.2014
30.11.2014
30.09.2014
30.09.2014
(33) Korea (Republic)
Korea (Republic)
Korea (Republic)
Korea (Republic)

(51) H10K 59/65
H10K 59/80
G06V 40/13
H04M 1/02
G06F 21/32
(11) EP3930297
(21) EP20790753.6
(47) 21.05.2025
(87) CN2020076591
22.10.2020
(22) 25.02.2020
(54) MOBILE TERMINAL, COVER PLATE, AND DISPLAY ASSEMBLY
(73) Huawei Technologies Co., Ltd.
(72) CAI, Qi
LIN, Jiao
PENG, Xu
(31) 201910310113
(32) 17.04.2019
(33) China

(51) H10K 85/60
H10K 30/30
H10K 39/32
(11) EP4024488
(21) EP21218364.4
(47) 21.05.2025
(22) 30.12.2021
(54) PHOTOELECTRIC DEVICE, IMAGE SENSOR AND ELECTRONIC DEVICE INCLUDING THE SAME
(73) Samsung Electronics Co., Ltd.
Seoul National University R & DB Foundation
(72) CHOI, Yeong Suk
PARK, Soo Young
YUN, Sung Young
KIM, Hyeong-Ju
CHOI, Min-Woo
KIM, Su-Yeon
KIM, Jin Hong
JUNG, Seyoung
(31) 20200188467
(32) 30.12.2020
(33) Korea (Republic)

(51) H10K 99/00
H10K 50/00
(11) EP4410074
(21) EP22786040.0
(47) 21.05.2025
(87) EP2022076739
06.04.2023
(22) 27.09.2022
(54) MATERIALS FOR ELECTRONIC DEVICES
(73) Merck Patent GmbH
(72) STOESSEL, Philipp
(31) 21199277
(32) 28.09.2021
(33) European Patent Office (EPO)

(51) H10N 30/857
H10N 30/045
H10N 30/084
H10N 30/098
B29C 55/06
G01N 25/16
B29C 71/02
C08J 7/00
(11) EP3764412
(21) EP18908347.0
(47) 21.05.2025
(87) JP2018039056
12.09.2019
(22) 19.10.2018
(54) PIEZOELECTRIC BODY FILM, PIEZOELECTRIC BODY FILM PRODUCTION METHOD, AND PIEZOELECTRIC BODY DEVICE
(73) Kureha Corporation
(72) SATO, Yusuke
TERASHIMA, Hisaaki
SATO, Nobufumi
KANNO, Kazuyuki
AITA, Keiko
(31) 2018038532
(32) 05.03.2018
(33) Japan

(51) H10N 69/00
H10N 60/12
H10N 60/01
G06N 10/00
B82Y 10/00
(11) EP3956930
(21) EP20715316.4
(47) 21.05.2025
(87) EP2020058405
22.10.2020
(22) 25.03.2020
(54) VERTICAL SUPERINDUCTOR DEVICE
(73) International Business Machines Corporation
(72) SANDBERG, Martin
ADIGA, Vivekananda
TOPALOGLU, Rasit Onur
(31) 201916387420
(32) 17.04.2019
(33) United States of America

(51) H10N 70/00
H10N 70/20
(11) EP4315443
(21) EP22715997.7
(47) 21.05.2025
(87) EP2022056814
29.09.2022
(22) 16.03.2022
(54) PHASE CHANGE MEMORY
(73) International Business Machines Corporation
(72) OK, Injo
REZNICEK, Alexander
SEO, Soon-Cheon
KIM, Youngseok
PHILIP, Timothy
(31) 202117209932
(32) 23.03.2021
(33) United States of America

EP3

Voor Nederland verleende Europese octrooien waarvoor een vertaling is ingediend ex artikel 52 lid 1 van de Rijksoctrooiwet 1995.
European patents granted for the Netherlands in which a translation was filed ex Article 52 par. 1 of the NL Patent Law 1995.

(51) A01C 5/06
(11) EP3874930
(21) EP21401010.0
(22) 01.03.2021
(54) PRESSURE ROLLER FOR AN AGRICULTURAL WORKING DEVICE
(73) Amazonen-Werke H. Dreyer GmbH & Co. KG
(72) Johannaber, Stefan Jan
Wiebusch, Thorsten
Breuer, Jan Henrik
(74) ir. W.J.J.M. Kempes
(31) 102020105443
(32) 02.03.2020
(33) Germany
(47) 09.04.2025

(51) A01D 34/135
(11) EP4321009
(21) EP23185540.4
(22) 14.07.2023
(54) DUAL KNIFE CUTTING SYSTEM
(73) ESM Ennepetaler Schneid- u. Mähtechnik GmbH & Co. KG
(72) Rutz, Detlef
(31) 102022127922
102022120467
(32) 21.10.2022
12.08.2022
(33) Germany
Germany
(47) 05.03.2025

(51) A01G 7/00
(11) EP4175459
(21) EP21733964.7
(22) 17.06.2021
(54) METHODS AND SYSTEMS FOR DETERMINING THE GROWTH STAGE OF A PLANT
(73) Signify Holding B.V.
(72) NICOLE, Céline Catherine Sarah
SEKULOVSKI, Dragan
BROERS, Harry
DE SAMBER, Marc Andre
(31) 20183964
(32) 03.07.2020
(33) European Patent Office (EPO)
(47) 19.03.2025

(51) A01J 9/02
A01J 5/013
A01J 7/02
(11) EP4208013
(21) EP21794622.7
(22) 02.09.2021
(54) MILK FILTER AND MILKING DEVICE PROVIDED THEREWITH
(73) Lely Patent N.V.
(72) VAN EEDEN, Bart
(74) ir. M.J.F.M. Corten
(31) 2026405
(32) 03.09.2020
(33) Netherlands
(47) 30.04.2025

(51) A01K 31/00
A01K 39/00
A01K 29/00
(11) EP4312528
(21) EP22712395.7
(22) 10.03.2022
(54) SYSTEM AND METHOD FOR SUPPLYING SUSTENANCE TO AN ANIMAL SPECIES
(73) Signify Holding B.V.
(72) BROERS, Harry
DE SAMBER, Marc, Andre
STEPHAN, Aaron, Benjamin
PIJLMAN, Fetze
(31) 202163164637 P
21166001
(32) 23.03.2021
30.03.2021
(33) United States of America
European Patent Office (EPO)
(47) 26.02.2025

(51) A01N 37/02
A01N 37/10
A01N 37/36
A01P 1/00
(11) EP3337320
(21) EP16750183.2
(22) 11.08.2016
(54) DISINFECTANT HAVING ORGANIC ACIDS
(73) Bode Chemie GmbH
(72) DR. GERDES, Herta
LINKE, Christoph
(74) ir. W.J.J.M. Kempes
(31) 102015113641
(32) 18.08.2015
(33) Germany
(47) 26.02.2025

(51) A23B 7/01
A23B 7/00
A23B 7/005
A23G 3/48
A23G 4/06
A23G 4/02
(11) EP3727000
(21) EP18893003.6
(22) 17.12.2018
(54) A METHOD OF PREPARING A CHEWING GUM OR CONFECTIONERY PRODUCT
(73) Wm. Wrigley Jr. Company
(72) UNLU, Emine
VISWANATHAN, Thiruvenkadam
(74) dr. W.A.H.M. Van Borm
(31) 201762607030 P
(32) 18.12.2017
(33) United States of America
(47) 16.04.2025

(51) A23G 1/40
A23G 3/42
B65D 65/38
B65D 85/60
A23G 1/32
A23G 1/36
A23G 1/54
B65D 75/28
B65D 81/38
(11) EP3469914
(21) EP18207619.0
(22) 24.09.2013
(54) HEAT RESISTANT CHOCOLATE
(73) Mars, Incorporated
(72) Lease, Shirley
Glazier, Barry David
Wild, Karyn
Hausman, David
Myers, Mary
Hess, Marilyn
Wentzel, Joanna
(74) dr. W.A.H.M. Van Borm
(31) 201361789863 P
201261707330 P
(32) 15.03.2013
28.09.2012
(33) United States of America
United States of America
(47) 09.04.2025

(51) A23G 3/50
A23G 1/30
A23G 3/34
A23G 3/02
A23G 3/12
A23G 3/54
A23G 3/46
A23G 3/20
(11) EP3905888
(21) EP20752737.5
(22) 01.02.2020
(54) A CONFECTIONERY PRODUCTION METHOD WITH CARAMEL SHELL
(73) Solen Cikolata Gida Sanayi Ve Ticaret Anonim Sirketi
(72) COBAN, Erdogan
(74) ir. W.J.J.M. Kempes
(31) 201901817
(32) 06.02.2019
(33) Türkiye
(47) 26.03.2025

(51) A23L 7/157
(11) EP3412155
(21) EP17747504.3
(22) 02.02.2017
(54) METHOD FOR PRODUCING MODIFIED WHEAT FLOUR FOR FRIED FOOD

COATING AND COATING MATERIAL FOR COATED FRIED FOOD
(73) Nisshin Seifun Welna Inc.
(72) FUJIMURA, Ryosuke
OHMURA, Masato
HIWATASHI, Souichiro
SAKAKIBARA, Michihiro
(74) ir. B.Ch. Ledeboer c.s
(31) 2016018157
(32) 02.02.2016
(33) Japan
(47) 23.04.2025

(51) A23L 27/30
C12P 19/18
(11) EP4333645
(21) EP22747178.6
(22) 23.06.2022
(54) MOGROSIDE COMPOUNDS AND THEIR COMESTIBLE USE
(73) Firmenich Incorporated
(72) NORIEGA, Chris Edano
MANAM, Rama Rao
WILLIAMS, Mark
DITSCHUN, Tanya
(74) ir. B.Ch. Ledeboer c.s
(31) 202163216014 P
(32) 29.06.2021
(33) United States of America
(47) 05.03.2025

(51) A23L 33/16
A23L 33/175
A61K 31/198
A61K 45/06
(11) EP3873236
(21) EP19801243.7
(22) 01.11.2019
(54) POWDERS CONTAINING A BUFFER SALT AND AN AMINO ACID, RECONSTITUTION OF SUCH A POWDER INTO A NUTRITIONAL PRODUCT, AND METHODS OF USING SUCH A NUTRITIONAL PRODUCT
(73) Société des Produits Nestlé S.A.
(72) GEMILI, Seyhun
(74) dr. R.C. van Duijvenbode c.s.
(31) 201862754918 P
(32) 02.11.2018
(33) United States of America
(47) 26.02.2025

(51) A24F 40/05
A24F 40/10
A24F 40/40
A24F 40/42
A24F 40/44
A61M 15/06
B05B 17/06
(11) EP3855949
(21) EP19870059.3
(22) 15.12.2019
(54) ULTRASONIC MIST INHALER
(73) Shaheen Innovations Holding Limited
(72) ALSHAIBA SALEH GHANNAM ALMAZROUEI, Mohammed
(74) dr. R.C. van Duijvenbode c.s.
(47) 07.05.2025

(51) A42B 3/28
(11) EP4162831
(21) EP22200703.1
(22) 11.10.2022
(54) SURGICAL HELMET INCLUDING AN ADJUSTMENT MECHANISM
(73) Stryker Corporation
(72) DAVIE, Daniel
KRENTZ, Steve
WEIMER, Blake
(74) J.M.H. Duyver lic.
(31) 202163254304 P
(32) 11.10.2021
(33) United States of America
(47) 23.04.2025

(51) A43B 13/12
A43B 13/18
(11) EP4284209
(21) EP22700627.7
(22) 13.01.2022
(54) SOLE WITH VARIABLE DAMPING PROPERTIES
(73) On Clouds GmbH
(72) DELLION, Kevin
DESPOTS ALLAIRE, Renaud
VOELCHERT, Johannes
RUEGG, Martin
ALTROGGE, Nils Arne
HEITZ, Ilmarin
(74) dr. R.C. van Duijvenbode c.s.
(31) 882021
(32) 29.01.2021
(33) Switzerland
(47) 02.04.2025

(51) A46B 9/04
A46B 5/02
A46B 5/00
B29C 45/16
(11) EP3995037
(21) EP20206110.7
(22) 06.11.2020
(54) HANDLE FOR A PERSONAL CARE IMPLEMENT AND PERSONAL CARE IMPLEMENT
(73) The Gillette Company LLC
(72) JUNGNICKEL, Uwe
(74) ir. W.J.J.M. Kempes
(47) 16.04.2025

(51) A47F 3/04
F25D 19/00
F25D 21/04
F25D 21/14
(11) EP4000468
(21) EP20855864.3
(22) 14.08.2020
(54) COLD STORAGE
(73) PHC Corporation
(72) MORI, Eiichi
DOI, Eiji
TSUKUI, Nobuyuki
(74) dr. R.C. van Duijvenbode c.s.
(31) 2019155915
(32) 28.08.2019
(33) Japan
(47) 16.04.2025

(51) A47J 36/32
A47J 37/06
(11) EP3993677
(21) EP20735404.4
(22) 02.07.2020
(54) A COOKING DEVICE AND COOKING METHOD
(73) Versuni Holding B.V.
(72) VAUPOT, Jan
SAUER, Stefan, Hans
MIKULA, Christian
EGGER, Christian
(74) J.M.H. Duyver lic.
(31) 19184751
(32) 05.07.2019
(33) European Patent Office (EPO)
(47) 09.04.2025

(51) A47L 9/24
A47L 11/20
A47L 11/40
(11) EP4360525
(21) EP23204754.8
(22) 19.10.2023
(54) ACCESSORY TOOL WITH INTEGRAL CLEANOUT ASSEMBLY
(73) BISSELL Inc.
(72) Stuive, Eric
(74) ir. W.J.J.M. Kempes
(31) 202263418741 P
(32) 24.10.2022
(33) United States of America
(47) 16.04.2025

(51) A47L 11/20
A47L 11/30
A47L 11/40
(11) EP4094661
(21) EP22179888.7
(22) 25.02.2019
(54) EXTRACTION CLEANER
(73) Bissell Inc.
(72) Royale, Victoria J.
(74) ir. B.Ch. Ledeboer c.s
(31) 201862638477 P
(32) 05.03.2018
(33) United States of America
(47) 23.04.2025

(51) A47L 11/34
A47L 11/40
A47L 13/22
(11) EP3875015
(21) EP21167652.3
(22) 26.01.2018
(54) STEAM CLEANING APPARATUS
(73) Bissell Inc.
(72) Krebs, Alan J.
Li, Chi Keung
Yang, Jing
Luo, Ming
(74) ir. B.Ch. Ledeboer c.s
(31) 201762452699 P
(32) 31.01.2017
(33) United States of America
(47) 16.04.2025

(51) A61B 1/00
A61B 1/05
G02B 23/24
G09B 23/28
(11) EP3735163
(21) EP18836784.1
(22) 21.12.2018
(54) SURGICAL SIMULATION CAMERA SCOPE
(73) Applied Medical Resources Corporation

(72) FILEK, Jacob
KENNEDAY, Sean
HO, Jimmy
DANTES, Richard
(74) ir. B.Ch. Ledeboer c.s
(31) 201862724720 P
201862613696 P
(32) 30.08.2018
04.01.2018
(33) United States of America
United States of America
(47) 16.04.2025

(51) A61B 3/113
G02B 27/01
G02B 6/10
G02B 6/26
G02B 27/28
G02B 27/00
G02C 11/00
(11) EP4235258
(21) EP23171485.8
(22) 21.03.2018
(54) METHOD AND SYSTEM FOR TRACKING EYE MOVEMENT IN CONJUNCTION WITH A LIGHT SCANNING PROJECTOR
(73) Magic Leap, Inc.
(72) MELVILLE, Charles David
SCHOWENGERDT, Brian T.
WATSON, Mathew D.
FRANK, Scott
(74) ir. W.J.J.M. Kempes
(31) 201762474497 P
(32) 21.03.2017
(33) United States of America
(47) 23.04.2025

(51) A61B 5/00
A61B 5/08
A61B 5/097
A61M 16/00
A61M 16/06
A61M 16/08
A61B 5/091
A61B 5/083
A61B 5/087
(11) EP3890593
(21) EP19893370.7
(22) 06.12.2019
(54) RESCUE BREATHING DEVICE
(73) University of Cincinnati
(72) BENOIT, Justin
GUTMARK, Ephraim
MCMULLAN, Jason
(74) dr. A. Krebs
(31) 201862776657 P
(32) 07.12.2018
(33) United States of America
(47) 16.04.2025

(51) A61B 5/00
A61B 5/145
(11) EP3871591
(21) EP21169157.1
(22) 16.10.2013
(54) SYSTEMS AND METHODS FOR PROVIDING SENSITIVE AND SPECIFIC ALARMS
(73) Dexcom, Inc.
(72) KAMATH, Apurv, Ullas
ZECCHIN, Chiara
SPARACINO, Giovanni
HAMPAPURAM, Hari
COBELLI, Claudio
BHAVARAJU, Naresh, C.
FACCHINETTI, Andrea
DAVIS, Anna, Leigh
(74) dr. W.A.H.M. Van Borm
(31) 201313742694
201313742841
201261720286 P
(32) 16.01.2013
16.01.2013
30.10.2012
(33) United States of America
United States of America
United States of America
(47) 12.03.2025

(51) A61B 5/00
A61B 5/145
(11) EP3871592
(21) EP21169205.8
(22) 16.10.2013
(54) SYSTEMS AND METHODS FOR PROVIDING SENSITIVE AND SPECIFIC ALARMS
(73) Dexcom, Inc.
(72) FACCHINETTI, Andrea
SPARACINO, Giovanni
COBELLI, Claudio
DAVIS, Anna, Leigh
HAMPAPURAM, Hari
BHAVARAJU, Naresh, C.
KAMATH, Apurv, Ullas
ZECCHIN, Chiara
(74) dr. W.A.H.M. Van Borm
(31) 201313742694
201313742841
201261720286 P
(32) 16.01.2013
16.01.2013
30.10.2012
(33) United States of America
United States of America
United States of America
(47) 19.03.2025

(51) A61B 5/00
A61B 5/145
G16H 40/63
G16H 40/67
H04L 67/12
G16H 10/60
G16H 15/00
(11) EP4254909
(21) EP23192913.4
(22) 19.12.2013
(54) REMOTE MONITORING OF ANALYTE MEASUREMENTS
(73) Dexcom, Inc.
(72) REIHMAN, Eli
GRUBSTEIN, Katherine Yerre
MAYOU, Phil
TRAVEN, Angela Marie
COHEN, Eric
MENSINGER, Michael Robert
DRAEGER, Rian
(74) dr. W.A.H.M. Van Borm
(31) 201313843382
201313842679
201261747717 P
(32) 15.03.2013
15.03.2013
31.12.2012
(33) United States of America
United States of America
United States of America
(47) 12.03.2025

(51) A61B 5/021
A61B 5/1455
A61B 5/145
A61B 5/01
A61B 5/00
(11) EP4076166
(21) EP20842621.3
(22) 17.12.2020
(54) WEARABLE HEALTH MONITORING DEVICE
(73) Rythmos LLC
(72) BHATTACHARYA, Manojeet
(74) ir. W.J.J.M. Kempes
(31) 201916723078
(32) 20.12.2019
(33) United States of America
(47) 02.04.2025

(51) A61B 5/05
A61B 5/00
(11) EP4122383
(21) EP22172497.4
(22) 06.05.2011
(54) SEM SCANNER SENSING APPARATUS FOR EARLY DETECTION OF ULCERS
(73) THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
Bruin Biometrics, LLC
(72) Sarrafzadeh, Majid
Kaiser, William
Mehrnia, Alireza
Bates-Jensen, Barbara
Wang, Frank
Lam, Yeung
Flesch, Michael
Boystak, Joseph
(74) dr. R.C. van Duijvenbode c.s.
(31) 201161453852 P
33275510 P
(32) 17.03.2011
08.05.2010
(33) United States of America
United States of America
(47) 12.02.2025

(51) A61B 8/08
A61B 5/103
A61B 5/00
A61B 5/11
A61B 8/00
A61B 34/10
A61B 34/20
G06N 3/084
G16H 40/63
G16H 50/50
(11) EP3968220
(21) EP21199275.5
(22) 02.02.2010
(54) A METHOD OF EVALUATING A PHYSIOLOGICAL CONDITION OF BODILY TISSUE

(73) Jointvue, LLC
(72) Wasielewski, Ray C.
Komistek, Rick
Mahfouz, Mohamed Rashwan
(74) dr. A. Krebs
(31) 364267
(32) 02.02.2009
(33) United States of America
(47) 09.04.2025

(51) A61B 8/10
A61B 8/08
G01S 7/52
A61B 8/00
(11) EP3558135
(21) EP17884252.2
(22) 18.12.2017
(54) ULTRASOUND SYSTEM FOR IMAGING AND PROTECTING OPHTHALMIC OR OTHER SENSITIVE TISSUES
(73) Fujifilm Sonosite, Inc.
(72) KELLY, Gina
LUNDBERG, Andrew
WILLIAMS, Keith
DUNBAR, Lee, D.
(74) ir. A.R. Aalbers
(31) 201615389428
(32) 22.12.2016
(33) United States of America
(47) 05.03.2025

(51) A61B 17/00
A61B 17/3207
A61B 17/22
(11) EP3344157
(21) EP16843162.5
(22) 03.09.2016
(54) SYSTEMS FOR MANIPULATING MEDICAL DEVICES
(73) Walk Vascular, LLC
(72) LOOK, David M.
CULBERT, Bradley S.
(31) 201615256488
201662286429 P
201562214192 P
(32) 02.09.2016
24.01.2016
03.09.2015
(33) United States of America
United States of America
United States of America
(47) 02.04.2025

(51) A61B 17/04
(11) EP3989843
(21) EP20804047.7
(22) 15.10.2020
(54) FILAMENT CUTTING DEVICES
(73) Boston Scientific Scimed, Inc.
(72) CALVO, Yeison
CASTRO, Julian Fuentes
PEREZ, Rosa A.
ORTIZ GARCIA, Juan P.
SLUTI, Anne
GAMBOA, John
WEITZNER, Barry
RODRIGUEZ SALAZAR, Juan C.
HOWARD, John F.
(74) ir. A.R. Aalbers
(31) 202063011388 P
201962923042 P
(32) 17.04.2020
18.10.2019
(33) United States of America
United States of America
(47) 19.03.2025

(51) A61B 17/16
A61C 3/02
A61C 8/00
A61B 17/00
(11) EP3720367
(21) EP17838122.4
(22) 08.12.2017
(54) BONE DRILL BIT AND HANDPIECE FOR USING THE BONE DRILL BIT
(73) Abboud, Marcus
(72) Abboud, Marcus
(74) dr. W.A.H.M. Van Borm
(47) 12.02.2025

(51) A61B 17/29
(11) EP4216843
(21) EP21786582.3
(22) 21.09.2021
(54) MEDICAL ARTICULATION DEVICES
(73) BOSTON SCIENTIFIC LIMITED
(72) SHARMA, Deepak Kumar
SCUTTI, James J.
G, Sharath Kumar
(74) ir. A.R. Aalbers
(31) 202063081807 P
(32) 22.09.2020
(33) United States of America
(47) 19.03.2025

(51) A61B 17/34
A61B 10/02
A61B 8/00
A61B 8/08
A61B 8/12
A61B 90/00
A61B 17/00
(11) EP3937795
(21) EP20769933.1
(22) 13.03.2020
(54) NEEDLE GUIDE FOR AN ANGLED ENDOCAVITY TRANSDUCER
(73) Exact Imaging Inc.
(72) WEN, Jerrold
SMOLEN, Jerzy A.
BEVERLY, Emma E.
CERMAK, Craig J.
(74) dr. W.A.H.M. Van Borm
(31) 201962817684 P
(32) 13.03.2019
(33) United States of America
(47) 12.02.2025

(51) A61B 17/34
A61M 25/06
A61M 25/00
(11) EP3551103
(21) EP17832615.3
(22) 11.12.2017
(54) INTRODUCER WITH EXPANDABLE CAPABILITIES
(73) Boston Scientific Scimed, Inc.
(72) ESCALONA, Floriza Q.
INO, Takashi H.
FITTERER, Mimi Trinh
CALOMENI, Michael P.
(74) dr. R.C. van Duijvenbode c.s.
(31) 201662431972 P
(32) 09.12.2016
(33) United States of America
(47) 12.03.2025

(51) A61B 18/12
A61B 18/14
(11) EP3880099
(21) EP19858700.8
(22) 05.11.2019
(54) ELECTROSURGICAL SYSTEM
(73) Applied Medical Resources Corporation
(72) POPE, Ryan
SIAZON, Kevin
NGUYEN, Duy
RODRIGUEZ, Vincent
MARBUT, Molly
(74) ir. B.Ch. Ledeboer c.s
(31) 201862768782 P
(32) 16.11.2018
(33) United States of America
(47) 26.03.2025

(51) A61B 18/12
H03K 3/53
A61N 1/00
A61N 1/32
(11) EP4011307
(21) EP20850145.2
(22) 31.07.2020
(54) REAL-TIME PULSE MONITORING CIRCUIT AND TUMOR TREATMENT APPARATUS
(73) Shenzhen Neumann Technology Co., Ltd.
(72) LAI, Shen
(74) ir. B.Ch. Ledeboer c.s
(31) 201910720830
(32) 06.08.2019
(33) China
(47) 19.02.2025

(51) A61C 5/42
(11) EP4294317
(21) EP22701322.4
(22) 12.01.2022
(54) METHOD FOR PRODUCING A WORKING AREA FOR A ROOT CANAL INSTRUMENT AND FOR PRODUCING A ROOT CANAL INSTRUMENT, AND ROOT CANAL INSTRUMENT
(73) Gebr. Brasseler GmbH & Co. KG
(72) KRUMSIEK, Michael
(74) ir. B.Ch. Ledeboer c.s
(31) 102021104165
(32) 22.02.2021
(33) Germany
(47) 02.04.2025

(51) A61C 13/00
B33Y 80/00
(11) EP4374818
(21) EP22209984.8
(22) 28.11.2022
(54) METHOD FOR PRODUCING A DENTAL RESTORATION
(73) Ivoclar Vivadent AG
(72) Atilim, Eser
Hendrik, John
(74) J.M.H. Duyver lic.
(47) 09.04.2025

(51) A61F 2/24
A46B 1/00
A61B 34/10
(11) EP3870112
(21) EP19801457.3
(22) 21.10.2019
(54) SYSTEM AND METHOD OF PLANNING A CATHETER BASED INTERVENTION
(73) Materialise NV
(72) HUYSMANS, Lotte
DE WINDE, Lio
MAES, Julie
GEEBELEN, Benjamin
(74) dr. R.C. van Duijvenbode c.s.
(31) 2021849
(32) 22.10.2018
(33) Netherlands
(47) 09.04.2025

(51) A61F 13/472
A61F 13/551
A61F 13/15
(11) EP3914212
(21) EP20708307.2
(22) 23.01.2020
(54) PACKAGED FEMININE HYGIENE PAD PRODUCT ADAPTED FOR DISCREET CARRY AND ACCESS, AND MANUFACTURING PROCESS
(73) The Procter & Gamble Company
(72) DARCY, Angila A.
AGAMI, Sion
BITTNER, Dale F.
VANVALKENBURGH, Curtis
SAKSA, Andrew
HILPERT, Mathias J.
GOODMAN, Benjamin P.
BREEHNE, Ryan
(74) ir. W.J.J.M. Kempes
(31) 201962795745 P
(32) 23.01.2019
(33) United States of America
(47) 16.04.2025

(51) A61F 13/49
A61F 13/494
A61F 13/495
A61F 13/496
(11) EP4110255
(21) EP21710872.9
(22) 25.02.2021
(54) PANT-TYPE ABSORBENT ARTICLE
(73) The Procter & Gamble Company
(72) SURUSHE, Abhishek Prakash
YANG, Qi
MORIMOTO, Koichi
GAO, Xu
FUJIKAWA, Hiroshi
(74) ir. W.J.J.M. Kempes
(31) PCT/CN2020/104295
PCT/CN2020/077152
(32) 24.07.2020
28.02.2020
(33) World Intellectual Property Office (WIPO)
World Intellectual Property Office (WIPO)
(47) 16.04.2025

(51) A61F 13/551
(11) EP3914215
(21) EP20706045.0
(22) 23.01.2020
(54) PACKAGED FEMININE HYGIENE PAD PRODUCT ADAPTED FOR DISCREET CARRY AND ACCESS, AND MANUFACTURING PROCESS
(73) The Procter & Gamble Company
(72) VANVALKENBURGH, Curtis
DARCY, Angila, Ann
GOODMAN, Benjamin, Philip
AGAMI, Sion
BITTNER, Dale, F.
HILPERT, Mathias, J.
BREEHNE, Ryan
SAKSA, Andrew
(74) ir. W.J.J.M. Kempes
(31) 201962795745 P
(32) 23.01.2019
(33) United States of America
(47) 23.04.2025

(51) A61K 9/00
A61K 9/127
A61K 31/7028
(11) EP3954360
(21) EP21185152.2
(22) 16.09.2014
(54) PHARMACEUTICAL PREPARATION OF CARBOHYDRATES FOR THERAPEUTIC USE
(73) Glycomine, Inc.
(72) RAFALKO, Agnes
CHERNENKO, Tatyana
(74) J.M.H. Duyver lic.
(31) 201361878591 P
(32) 16.09.2013
(33) United States of America
(47) 12.02.2025

(51) A61K 9/00
A61M 15/00
(11) EP4188332
(21) EP22716648.5
(22) 23.03.2022
(54) DEVICE FOR TREATING ANAPHYLAXIS
(73) KOKUA PHARMA INC.
(72) LUCIUK, George Harry
MARTIN, Andrew Robert
RUZYCKI, Conor Aidan
FINLAY, Warren Hugh
(74) dr. R.C. van Duijvenbode c.s.
(31) 202163165102 P
(32) 23.03.2021
(33) United States of America
(47) 12.02.2025

(51) A61K 9/16
A61K 9/50
A61K 31/57
A61K 31/436
A61K 31/337
A61P 35/00
A61K 9/00
(11) EP2520287
(21) EP12178874.9
(22) 09.02.2007
(54) LOADING OF HYDROPHOBIC DRUGS INTO HYDROPHILIC POLYMER DELIVERY SYSTEMS
(73) Boston Scientific Medical Device Limited
(72) LEWIS, Andrew Lennard
GONZALEZ-FAJARDO, Maria Victoria
TANG, Yiqing
(74) dr. R.C. van Duijvenbode c.s.
(31) 06250742
(32) 10.02.2006
(33) European Patent Office (EPO)
(47) 26.03.2025

(51) A61K 9/24
A61K 31/4178
A61P 31/04
(11) EP4032530
(21) EP21153203.1
(22) 25.01.2021
(54) PROLONGED-RELEASE FURAZIDIN COMPOSITION
(73) Adamed Pharma S.A.
(72) Trela, Jolanta
Kubiak, Bartlomiej
Kiryluk, Anna
Niemczyk, Katarzyna
(74) ir. W.J.J.M. Kempes
(47) 09.04.2025

(51) A61K 9/70
A61K 31/167
A61K 47/10
A61K 47/12
A61P 23/00
A61P 29/00
(11) EP3569227
(21) EP19180829.4
(22) 10.05.2011
(54) NON-AQUEOUS PATCH
(73) Itochu Chemical Frontier Corporation
Oishi Koseido Co., Ltd
(72) Saida, Naoyuki
Mori, Tatsuya
(74) dr. ir. F.M. van Bouwelen
(47) 09.04.2025

(51) A61K 31/192
A61P 1/16
A61K 9/00
A61K 45/06
(11) EP3435996
(21) EP17713332.9
(22) 30.03.2017
(54) ELAFIBRANOR FOR USE IN THE TREATMENT OF PRIMARY BILIARY CHOLANGITIS
(73) Genfit
(72) HANF, Rémy
(74) dr. R.C. van Duijvenbode c.s.
(31) 16305381
(32) 31.03.2016
(33) European Patent Office (EPO)
(47) 30.04.2025

(51) A61K 31/366
A61K 31/7048
A61P 21/00
A61P 21/04
A61P 25/00
A61P 25/24
A61P 25/28
A61P 29/00
A61P 3/04
A61P 31/00
A61P 35/00
A61P 43/00
A61P 7/00
A61P 7/02

A61P 9/00
A61P 9/10
A23L 33/105
A61K 31/352
A61K 36/185
A61P 21/02
A61P 25/16
(11) EP3369420
(21) EP18166897.1
(22) 23.12.2011
(54) NON-THERAPEUTIC USE OF UROLITHIN A FOR IMPROVING COGNITIVE FUNCTION.
(73) Amazentis SA
(72) SCHNEIDER, Bernard
SANDI, Carmen
HOUTKOOPER, Richardus
PIRINEN, Eija
BLANCO-BOSE, William
MOUCHIROUD, Laurent
GENOUX, David
RINSCH, Christopher
ANDREUX, Penelope
AUWERX, Johan
THOMAS, Charles
(74) ir. A. Blokland c.s.
(31) 201061426957 P
(32) 23.12.2010
(33) United States of America
(47) 12.03.2025

(51) A61K 31/366
A61K 31/7048
A61P 21/00
A61P 25/00
A61P 25/28
A61P 35/00
A61P 43/00
A61P 7/00
A61P 9/10
A23L 33/105
A61K 31/352
A61K 36/185
A61P 21/02
A61P 25/16
A61P 25/24
A61P 29/00
A61P 3/02
A61P 7/02
(11) EP3372228
(21) EP18166896.3
(22) 23.12.2011
(54) NON-THERAPEUTIC METHOD OF INCREASING OR MAINTAINING MITOCHONDRIAL FUNCTION
(73) Amazentis SA
(72) RINSCH, Christopher
ANDREUX, Penelope
SCHNEIDER, Bernard
SANDI, Carmen
AUWERX, Johan
PIRINEN, Eija
THOMAS, Charles
HOUTKOOPER, Richardus
BLANCO-BOSE, William
MOUCHIROUD, Laurent
GENOUX, David
(74) ir. A. Blokland c.s.
(31) 201061426957 P
(32) 23.12.2010
(33) United States of America
(47) 12.03.2025

(51) A61K 31/366
A61K 45/06
A61K 31/00
C07D 493/00
C07D 493/06
A61P 9/00
A61P 29/00
A61P 25/00
A61P 3/04
A61P 3/06
A61P 3/10
A61P 35/00
A61P 43/00
(11) EP4233858
(21) EP23175506.7
(22) 27.06.2013
(54) ENHANCING AUTOPHAGY OR INCREASING LONGEVITY BY ADMINISTRATION OF UROLITHINS OR PRECURSORS THEREOF
(73) Amazentis SA
(72) RINSCH, Christopher L.
BLANCO-BOSE, William
SCHNEIDER, Bernard
MOUCHIROUD, Laurent
RYU, Dongryeol
ANDREUX, Penelope
AUWERX, Johan
(74) dr. R.C. van Duijvenbode c.s.
(31) 201361791137 P
201261712886 P
201261665137 P
(32) 15.03.2013
12.10.2012
27.06.2012
(33) United States of America
United States of America
United States of America
(47) 12.02.2025

(51) A61K 31/4045
A61P 25/24
(11) EP4349407
(21) EP24157425.0
(22) 24.02.2020
(54) 5-METHOXY-N,N-DIMETHYLTRYPTAMINE (5-MEO-DMT) FOR TREATING MAJOR DEPRESSION
(73) GH Research Ireland Limited
(72) Terwey, Theis
(74) dr. R.C. van Duijvenbode c.s.
(31) 19158774
(32) 22.02.2019
(33) European Patent Office (EPO)
(47) 09.04.2025

(51) A61K 31/439
A61P 27/10
A61K 9/00
A61K 47/38
A61K 47/40
(11) EP3542798
(21) EP19171214.0
(22) 22.08.2014
(54) ACECLIDINE FOR USE IN THE TREATMENT OF PRESBYOPIA
(73) Lenz Therapeutics Operations, Inc.
(72) HORN, Gerald
NORDAN, Lee
(74) dr. R.C. van Duijvenbode c.s.
(31) 201461938438 P
201361917620 P
201361904510 P
201361882998 P
201361871215 P
(32) 11.02.2014
18.12.2013
15.11.2013
26.09.2013
28.08.2013
(33) United States of America
United States of America
United States of America
United States of America
United States of America
(47) 19.03.2025

(51) A61K 31/4418
A61P 27/16
A61K 9/00
(11) EP4452267
(21) EP22844112.7
(22) 23.12.2022
(54) 4-PHENYL-TETRAHYDROPYRIDINE DERIVATIVES FOR TREATING HEARING DISEASES
(73) Cilcare Dev
(72) NAERT, Gaëlle
BELLINE, Célia
PASDELOU, Marie-Pierre
PUCHEU, Sylvie
SAGE, Cyrille
SCHUE, Mathieu
(74) ir. A. Blokland c.s.
(31) 21306931
(32) 23.12.2021
(33) European Patent Office (EPO)
(47) 23.04.2025

(51) A61K 31/4965
A61K 9/16
A61K 9/20
A61P 7/02
A61P 9/10
A61P 9/12
A61P 11/00
A61P 13/12
A61P 11/06
(11) EP4331607
(21) EP23214939.3
(22) 01.12.2016
(54) SOLID PHARMACEUTICAL COMPOSITION CONTAINING 2-{4-[N-(5,6-DIPHENYLPYRAZIN-2-YL)-N-ISOPROPYLAMINO]BUTYLOXY}-N-(METHYLSULFONYL)ACETAMIDE
(73) Nippon Shinyaku Co., Ltd.
(72) MUKAI, Hironori
FURUTA, Shouji
(74) ir. B.Ch. Ledeboer c.s
(31) 2015236034
(32) 02.12.2015
(33) Japan
(47) 30.04.2025

(51) A61K 31/593
A61K 9/00
A61K 45/06

A61K 31/519
A61P 17/00
A61P 17/06
A61P 17/10
A61P 17/14
A61P 35/00
A61P 37/06
(11) EP4255442
(21) EP21841055.3
(22) 03.12.2021
(54) JAK INHIBITOR WITH A VITAMIN D ANALOG FOR TREATMENT OF SKIN DISEASES
(73) Incyte Corporation
(72) SMITH, Paul
ZHANG, Zheng
PARKER, Melissa
FIDGE, James
(74) dr. R.C. van Duijvenbode c.s.
(31) 202163199876 P
202063121531 P
(32) 29.01.2021
04.12.2020
(33) United States of America
United States of America
(47) 19.03.2025

(51) A61K 31/714
A61K 31/198
A61K 33/24
A61K 33/30
A61K 33/32
A61K 33/34
A61K 47/10
A23K 50/10
A23K 20/20
A23K 20/174
(11) EP3996720
(21) EP20838886.8
(22) 07.07.2020
(54) INJECTABLE NUTRITIONAL SUPPLEMENT
(73) Chemvet Australia Pty Ltd
(72) GRANT, Murray, Graham
(74) ir. J.C. Volmer c.s.
(31) 2019902471
(32) 12.07.2019
(33) Australia
(47) 12.02.2025

(51) A61K 38/08
A61K 9/48
A61P 5/06
(11) EP3253401
(21) EP16747195.2
(22) 03.02.2016
(54) TREATING ACROMEGALY WITH ORAL OCTREOTIDE
(73) Amryt Endo, Inc.
(72) MAMLUK, Roni
(74) dr. R.C. van Duijvenbode c.s.
(31) 201562136012 P
201562111369 P
(32) 20.03.2015
03.02.2015
(33) United States of America
United States of America
(47) 02.04.2025

(51) A61K 38/39
A61K 45/06
A61K 47/34
A61K 9/14
A61L 26/00
(11) EP3710044
(21) EP18878999.4
(22) 16.11.2018
(54) WOUND TREATMENT CONTAINING COLLAGEN AND A GELATIN-REDUCING AGENT, AND METHOD FOR PROMOTING WOUND HEALING
(73) Medline Industries, Inc.
(72) CHAKRAVARTHY, Debashish
MATTORANO, Brian
FREI, Anthony
(74) J.M.H. Duyver lic.
(31) 201762587844 P
(32) 17.11.2017
(33) United States of America
(47) 26.03.2025

(51) A61K 38/47
A61K 9/19
A61P 25/00
A61P 43/00
A61K 38/51
A61K 9/00
A61K 47/02
A61K 47/10
A61K 47/26
(11) EP3760220
(21) EP19760698.1
(22) 27.02.2019
(54) A PACKAGE COMPRISING LYOPHILIZED CHONDROITINASE ABC AND METHOD FOR MANUFACTURING THE SAME
(73) Seikagaku Corporation
(72) HIGUCHI, Mine
(74) dr. ir. G.J.C. Verdijck c.s.
(31) 2018141542
2018035884
(32) 27.07.2018
28.02.2018
(33) Japan
Japan
(47) 19.02.2025

(51) A61K 39/09
A61K 47/64
A61P 31/04
(11) EP3562503
(21) EP17840524.7
(22) 29.12.2017
(54) POLYPEPTIDE-ANTIGEN CONJUGATES WITH NON-NATURAL AMINO ACIDS
(73) VAXCYTE, INC.
(72) CHAN, Wei
HEINRICHS, Jon
FAIRMAN, Jeffery
(74) dr. R.C. van Duijvenbode c.s.
(31) 201762591160 P
201762568201 P
201762530803 P
201662441115 P
(32) 27.11.2017
04.10.2017
10.07.2017
30.12.2016
(33) United States of America
United States of America
United States of America
United States of America
(47) 23.04.2025

(51) A61K 47/42
A61K 47/36
A61K 9/00
A61K 9/22
A61K 9/52
A61K 9/48
A61K 31/4045
A61K 31/405
A61K 31/198
A61K 31/045
A61K 31/522
A61K 35/747
A61K 31/706
A61K 36/8962
A61K 38/16
A61K 36/064
A61K 31/375
A61K 36/534
A61K 36/9068
A61K 9/20
(11) EP3937983
(21) EP20901042.0
(22) 16.12.2020
(54) ORAL DELIVERY SYSTEMS BASED ON IN SITU FORMING PROTEIN/POLYSACCHARIDE COACERVATES
(73) 9286-3620 Québec Inc.
(72) CAILLARD, Romain
(31) 201962949130 P
(32) 17.12.2019
(33) United States of America
(47) 05.02.2025

(51) A61K 48/00
C12N 15/11
C12N 15/113
(11) EP3442602
(21) EP17783236.7
(22) 14.04.2017
(54) ADENO-ASSOCIATED VIRUS VECTOR DELIVERY OF MICRO-DYSTROPHIN TO TREAT MUSCULAR DYSTROPHY
(73) Research Institute at Nationwide Children's Hospital
(72) RODINO-KLAPAC, Louise
MENDELL, Jerry, R.
HELLER, Kristin, N.
(74) dr. R.C. van Duijvenbode c.s.
(31) 201762473253 P
201662323163 P
(32) 17.03.2017
15.04.2016
(33) United States of America
United States of America
(47) 19.02.2025

(51) A61L 24/00
A61P 7/00
A61K 9/00
A61K 47/02
A61K 38/39
A61K 9/06
(11) EP3324856
(21) EP16857928.2
(22) 20.07.2016

(54) SHEAR-THINNING COMPOSITIONS AS AN INTRAVASCULAR EMBOLIC AGENT
(73) The Brigham and Women's Hospital, Inc.
The General Hospital Corporation
(72) OKLU, Rahmi
KHADEMHOSSEINI, Alireza
(74) dr. R.C. van Duijvenbode c.s.
(31) 201562194644 P
(32) 20.07.2015
(33) United States of America
(47) 23.04.2025

(51) A61M 5/19
A61M 5/31
A61M 5/315
(11) EP3888723
(21) EP18941194.5
(22) 27.11.2018
(54) TWO-CHAMBER TYPE COMBINED CONTAINER-SYRINGE
(73) Daewoong Pharmaceutical Co., Ltd.
(72) KIM, Jun Sik
LIM, Duck Soo
LEE, Tae Ho
PARK, Sung Hoon
(74) dr. R.C. van Duijvenbode c.s.
(47) 26.02.2025

(51) A61M 16/06
(11) EP4094796
(21) EP22173764.6
(22) 17.05.2022
(54) BANDING WITH SPECTACLE AREA
(73) Löwenstein Medical Technology S.A.
(72) Eifler, Martin
(74) ir. W.J.J.M. Kempes
(31) 102021002733
(32) 27.05.2021
(33) Germany
(47) 12.03.2025

(51) A61M 25/00
A61M 25/09
(11) EP4117760
(21) EP21716882.2
(22) 10.03.2021
(54) SLOTTED CATHETER WITH FILLERS
(73) Stryker Corporation
Stryker European Operations Limited
(72) MURPHY, Murtagh, M.
(74) ir. W.J.J.M. Kempes
(31) 202062988363 P
(32) 11.03.2020
(33) United States of America
(47) 16.04.2025

(51) A61M 25/10
A61M 25/00
A61M 25/01
(11) EP2992922
(21) EP15183539.4
(22) 02.09.2015
(54) BALLOON CATHETER
(73) ABBOTT CARDIOVASCULAR SYSTEMS INC.
(72) Doratt, George
Williams Kerry J.
(74) dr. R.C. van Duijvenbode c.s.
(31) 201562163839 P
201462046157 P
(32) 19.05.2015
04.09.2014
(33) United States of America
United States of America
(47) 16.04.2025

(51) A61M 60/13
A61M 60/237
A61M 60/857
A61M 60/861
A61M 60/865
(11) EP4058078
(21) EP20764539.1
(22) 19.08.2020
(54) CIRCULATORY SUPPORT PUMP CENTERING ANCHORING & CENTERING DEVICE
(73) Boston Scientific Scimed Inc.
(72) STRUTHERS, Brett C.
JANCARIC, Thomas P.
CHOUINARD, Paul F.
ANAND, Umang
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962889674 P
(32) 21.08.2019
(33) United States of America
(47) 26.02.2025

(51) A61N 1/372
(11) EP4255558
(21) EP21820811.4
(22) 10.11.2021
(54) MEDICAL DEVICE PROGRAMMING
(73) Medtronic, Inc
(72) TORGERSON, Nathan
(74) ir. W.J.J.M. Kempes
(31) 202063122176 P
(32) 07.12.2020
(33) United States of America
(47) 23.04.2025

(51) A62C 35/68
A62C 37/11
(11) EP3991806
(21) EP20205122.3
(22) 02.11.2020
(54) SPRINKLER SYSTEM AND METHOD FOR MOUNTING A SHIELDING COVER FOR A FIRE EXTINGUISHING SYSTEM
(73) Calanbau Brandschutzanlagen GmbH
(72) Thoma, Markus
(74) J.M.H. Duyver lic.
(47) 12.03.2025

(51) A63F 3/06
(11) EP4144424
(21) EP22192940.9
(22) 30.08.2022
(54) SYSTEM AND METHOD FOR COMPOSING PERSONALIZED SCRATCH-OFF LOTTERY TICKETS
(73) Scientific Games, LLC
(72) Martineck, Sr., Jeffrey D.
Garrison, Scott B.
(74) dr. A. Krebs
(31) 202117464034
(32) 01.09.2021
(33) United States of America
(47) 05.03.2025

(51) B01D 15/34
G01N 30/86
G01N 33/28
G01N 30/88
(11) EP3864405
(21) EP19783868.3
(22) 25.09.2019
(54) SYSTEM AND METHOD OF CHARACTERIZING CRUDE OIL BY GEL PERMEATION CHROMATOGRAPHY (GPC)
(73) Saudi Arabian Oil Company
(72) KOSEOGLU, Omer, Refa
PANDA, Saroj, Kumar
MULLER, Hendrik
(74) ir. W.J.J.M. Kempes
(31) 201816157222
(32) 11.10.2018
(33) United States of America
(47) 16.04.2025

(51) B01D 46/00
B01D 46/44
(11) EP4074403
(21) EP22164532.8
(22) 25.03.2022
(54) FILTER MONITORING USING DIFFERENTIAL ACOUSTIC ATTENUATION
(73) Carrier Corporation
(72) HERMANN, Theodore
YARDE, Bryan
(74) J.M.H. Duyver lic.
(31) 202163174785 P
(32) 14.04.2021
(33) United States of America
(47) 23.04.2025

(51) B01D 53/92
B01D 46/24
(11) EP3845293
(21) EP19877394.7
(22) 05.09.2019
(54) GAS PURIFICATION DEVICE, SHIP WITH SAME, AND GAS PURIFICATION METHOD
(73) MITSUBISHI HEAVY INDUSTRIES, LTD.
(72) INUI, Masayuki
OTANI, Akihito
SUSAKI, Makoto
(74) ir. J.C. Volmer c.s.
(31) 2018199676
(32) 24.10.2018
(33) Japan
(47) 02.04.2025

(51) B01J 20/28
B01J 20/10
B01J 20/30
B01J 20/32
A61B 10/00
(11) EP3765188
(21) EP19714719.2
(22) 15.03.2019
(54) SURFACE FUNCTIONALISED MATERIALS FOR SAMPLING BIOLOGICAL MOLECULES
(73) Jones, Paul Antonio
(72) Jones, Paul Antonio
(74) dr. A. Krebs
(31) 201804217
(32) 16.03.2018
(33) United Kingdom
(47) 16.04.2025

(51) B02C 18/14

B02C 23/18
B02C 18/18
(11) EP3954462
(21) EP21187763.4
(22) 26.07.2021
(54) COMMINUTING DEVICE WITH COOLING DEVICE AND METHOD OF OPERATING THE SAME
(73) Vecoplan AG
(72) Baldus, Martin
Udert, Marcel
(74) ir. C.G.C. Veldman-Dijkers
(31) 102020119889
(32) 28.07.2020
(33) Germany
(47) 19.03.2025

(51) B05C 5/02
B05C 11/10
H01M 4/04
H01M 4/139
B05C 9/06
(11) EP4338853
(21) EP24154843.7
(22) 16.09.2020
(54) ELECTRODE SLURRY COATING APPARATUS AND METHOD FOR FORMING DOUBLE ACTIVE MATERIAL LAYERS
(73) LG Energy Solution, Ltd.
(72) LEE, Taek Soo
JO, Young Joon
CHOY, Sang Hoon
KIM, Ki Tae
YOON, Jihee
KIM, Cheol-Woo
(74) dr. R.C. van Duijvenbode c.s.
(31) 20190128891
(32) 17.10.2019
(33) Korea (Republic)
(47) 23.04.2025

(51) B07C 1/04
B65G 47/31
B65G 47/68
B65G 59/12
B65G 47/14
B65G 47/28
B07C 5/02
(11) EP3758860
(21) EP19720330.0
(22) 16.04.2019
(54) POWERED, ANGLED-ROLLER ARRAY DELAMINATION EQUIPMENT
(73) Körber Supply Chain LLC
(72) CARPENTER, Michael D.
(74) dr. R.C. van Duijvenbode c.s.
(31) 201862659967 P
(32) 19.04.2018
(33) United States of America
(47) 02.04.2025

(51) B21D 43/18
B21D 51/44
(11) EP4041472
(21) EP20807731.3
(22) 16.11.2020
(54) METHOD AND DEVICE FOR PRODUCING TEAR-OPEN LIDS
(73) Soudronic AG
(72) GYSI, Peter
OBERHOLZER, Marcel
(74) dr. R.C. van Duijvenbode c.s.
(31) 14782019
(32) 22.11.2019
(33) Switzerland
(47) 23.04.2025

(51) B22F 9/08
B22D 41/08
B22D 41/16
B22D 41/015
B22D 11/118
(11) EP4377031
(21) EP22735232.5
(22) 23.06.2022
(54) ATOMIZER RESERVOIR
(73) ArcelorMittal
(72) GALPIN, Jean-Marie
BELE, Bertrand
UMLAUF, William P
BRANNBACKA, Johnny C
(74) dr. R.C. van Duijvenbode c.s.
(31) PCT/IB2021/056711
(32) 26.07.2021
(33) World Intellectual Property Office (WIPO)
(47) 30.04.2025

(51) B22F 10/00
B23K 26/00
B23K 26/12
B23K 26/342
B23K 26/352
B23K 26/362
B23K 26/40
B41J 2/44
B41J 3/407
B41J 29/02
B41J 29/13
B23K 26/70
B23K 37/00
F16P 1/06
F16P 3/00
(11) EP4244004
(21) EP21798276.8
(22) 04.10.2021
(54) DEVICE FOR MARKING A COMPONENT, COMPRISING A MULTI-PART HOUSING
(73) Schaeffler Technologies AG & Co. KG
(72) VOLK, Wolfgang
(74) drs. C.M.A. Quintelier
(31) 102020129975
(32) 13.11.2020
(33) Germany
(47) 19.03.2025

(51) B23K 26/21
B23K 26/322
C21D 1/18
C21D 9/50
C21D 9/46
B23K 101/00
B23K 103/04
C21D 1/673
B23K 101/18
(11) EP3758886
(21) EP19712842.4
(22) 26.02.2019
(54) METHOD FOR PRODUCING A PRESS-HARDENED LASER WELDED STEEL PART AND PRESS-HARDENED LASER WELDED STEEL PART
(73) ArcelorMittal
(72) GAIED, Sadok
SCHMIT, Francis
POIRIER, Maria
(74) dr. R.C. van Duijvenbode c.s.
(31) PCT/IB2018/051237
(32) 27.02.2018
(33) World Intellectual Property Office (WIPO)
(47) 23.04.2025

(51) B26B 19/38
B26B 19/04
B26B 19/06
(11) EP3907047
(21) EP20173675.8
(22) 08.05.2020
(54) ELECTRIC BEARD TRIMMER
(73) Braun GmbH
(72) XU, Xiaolan
RÖDER, Roman
PETER, Andreas
(74) ir. W.J.J.M. Kempes
(47) 16.04.2025

(51) B29C 65/08
B23K 20/10
B23K 20/22
B26D 5/00
B26D 7/08
B23K 103/00
(11) EP4108427
(21) EP22179920.8
(22) 20.06.2022
(54) METHOD FOR CONTROLLING A PROCESSING PROCESS
(73) MS Ultraschall Technologie GmbH
(72) GEHRING, Tobias
GROß, Markus
(74) J.M.H. Duyver lic.
(31) 102021116526
(32) 25.06.2021
(33) Germany
(47) 26.03.2025

(51) B29C 70/30
B29C 70/48
B29C 70/68
B29C 70/84
B29D 99/00
F03D 1/06
B29C 70/54
B29C 70/56
B29C 37/00
B29L 31/08
(11) EP4019233
(21) EP20216420.8
(22) 22.12.2020
(54) METHOD OF MANUFACTURING AN ADAPTABLE CARBON-FIBRE BEAM
(73) Siemens Gamesa Renewable Energy A/S
(72) Hurup, Allan
Nielsen, Mogens
Sun, Wei
(74) ir. W.J.J.M. Kempes
(47) 12.03.2025

(51) B29D 30/30
B29D 30/26
(11) EP3984730

(21) EP20826424.2
(22) 21.04.2020
(54) DEVICE AND METHOD FOR PRODUCING UNVULCANIZED RING-SHAPED RUBBER MEMBER
(73) The Yokohama Rubber Co., Ltd.
(72) OISHI, Jyumpei
KONDO, Masatomo
ZENYOJI, Chihiro
KUNIMORI, Teruaki
HASEGAWA, Haruhisa
(74) dr. R.C. van Duijvenbode c.s.
(31) 2019112133
(32) 17.06.2019
(33) Japan
(47) 19.02.2025

(51) B31C 11/02
B31D 5/00
A47G 21/18
B31C 5/00
(11) EP4195980
(21) EP21758437.4
(22) 28.07.2021
(54) FOOD STRAW AND THE METHOD FOR MAKING IT
(73) G.D S.p.A.
(72) EUSEPI, Ivan
BALDANZA, Nicola
GAMBERINI, Giuliano
(74) dr. R.C. van Duijvenbode c.s.
(31) 202000019942
(32) 11.08.2020
(33) Italy
(47) 02.04.2025

(51) B32B 1/08
B32B 5/02
B32B 27/12
B32B 27/28
(11) EP4359207
(21) EP22737627.4
(22) 24.06.2022
(54) THERMOPLASTIC COMPOSITE HOSE FOR TRANSPORTING FLUID AND FLEXIBLE PIPE COMPRISING SAME
(73) TechnipFMC Subsea France
(72) EPSZTEIN, Thomas
DO, Anh-Tuan
LUGIERY, Loic
(74) ir. B.Ch. Ledeboer c.s
(31) 2106833
(32) 25.06.2021
(33) France
(47) 09.04.2025

(51) B41J 11/68
B41J 11/00
B41J 11/66
B26D 5/00
B26D 11/00
B26D 9/00
B26D 1/14
B26F 1/00
B41J 11/70
(11) EP4279233
(21) EP23199902.0
(22) 13.08.2020
(54) ADJUSTABLE SLITTERS FOR ACCURATE TRANSPORT-WISE CUTTING OF PRINTED MEDIA
(73) Kodak Alaris Inc.
(72) REPASS, Joseph
MINDLER, Robert
PAOLETTI, Richard
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962890249 P
(32) 22.08.2019
(33) United States of America
(47) 16.04.2025

(51) B41M 5/46
B41J 2/475
B41M 5/34
(11) EP4129704
(21) EP21776165.9
(22) 24.03.2021
(54) HEAT SENSITIVE MEDIUM AND LASER RECORDING DEVICE
(73) Kabushiki Kaisha Toshiba
Toshiba Infrastructure Systems & Solutions Corporation
(72) NEMOTO, Nobuki
NAKAMURA, Yuuichi
KADOKURA, Yuuma
MIHARA, Naoto
(74) dr. R.C. van Duijvenbode c.s.
(31) 2020053200
(32) 24.03.2020
(33) Japan
(47) 30.04.2025

(51) B60T 8/17
B60T 8/24
B60W 30/02
B62D 53/08
(11) EP4253173
(21) EP23163265.4
(22) 21.03.2023
(54) TRACTOR-TRAILER AND METHOD FOR CONTROLLING THE SPEED OF ADVANCE OF THE TRACTOR-TRAILER
(73) TOYOTA MATERIAL HANDLING MANUFACTURING ITALY S.p.A
(72) MASTROIANNI, Francesco
NOCCO, Igino
PESSO, Tommaso
(74) dr. R.C. van Duijvenbode c.s.
(31) 202200006293
(32) 30.03.2022
(33) Italy
(47) 12.02.2025

(51) B62D 53/08
(11) EP3996977
(21) EP20735389.7
(22) 30.06.2020
(54) ANTI-THEFT DEVICE FOR SEMITRAILERS, KINGPIN AND SEMITRAILER
(73) JOST-WERKE Deutschland GmbH
(72) ALGÜERA, José Manuel
(74) ir. H.J.G. Lips c.s.
(31) 102019118398
(32) 08.07.2019
(33) Germany
(47) 26.02.2025

(51) B63B 35/32
B63B 1/12
(11) EP4177147
(21) EP22189916.4
(22) 11.08.2022
(54) GARBAGE COLLECTION WATERCRAFT
(73) Yamaha Hatsudoki Kabushiki Kaisha
(72) Ishida, Takuma
Tsukada, Junya
Onoue, Junya
(74) dr. R.C. van Duijvenbode c.s.
(31) 2021180000
(32) 04.11.2021
(33) Japan
(47) 30.04.2025

(51) B63B 39/06
(11) EP4219285
(21) EP23163194.6
(22) 17.12.2018
(54) FIN STABILIZER
(73) Naiad Maritime Group, Inc.
(72) VENABLES, John D.
VENABLES, Steven J.
COSTEN, Cameron
(74) dr. ir. G.J.C. Verdijck c.s.
(31) 201715843446
(32) 15.12.2017
(33) United States of America
(47) 12.02.2025

(51) B65B 5/02
B65B 9/20
(11) EP4382436
(21) EP23214131.7
(22) 04.12.2023
(54) BAGMAKING AND PACKAGING APPARATUS
(73) Ishida Co., Ltd.
(72) NAGASHIMA, Ryota
HASHIMOTO, Satoshi
(74) ir. J.C. Volmer c.s.
(31) 2023002167
2022196189
(32) 11.01.2023
08.12.2022
(33) Japan
Japan
(47) 09.04.2025

(51) B65D 1/02
B65D 1/10
(11) EP4286287
(21) EP23201653.5
(22) 11.09.2020
(54) GLASS CONTAINER WITH RING PULL CAP RIM
(73) Owens-Brockway Glass Container Inc.
(72) PAREDES, Raul M.
DELAGRANGE, Donald P.
(74) ir. W.J.J.M. Kempes
(31) 201916569082
(32) 12.09.2019
(33) United States of America
(47) 23.04.2025

(51) B65D 71/50
B65B 17/02
(11) EP4182241
(21) EP21752361.2
(22) 15.07.2021
(54) CONTAINER CARRIER
(73) Illinois Tool Works Inc.
(72) SLOVIK, Rachell, L.
VAN THOLEN, Patrick, R.
OLSEN, Robert, C.

SAMARAS, Christopher, J.
(74) dr. W.A.H.M. Van Borm
(31) 202117375844
202063052064 P
(32) 14.07.2021
15.07.2020
(33) United States of America
United States of America
(47) 19.02.2025

(51) B65D 81/07
(11) EP4053043
(21) EP22157871.9
(22) 22.02.2022
(54) PACKAGE FOR AN ARTICLE
(73) Buhl-PaperForm GmbH
(72) Buhl, Christoph
(74) ir. B.Ch. Ledeboer c.s
(31) 102021104978
(32) 02.03.2021
(33) Germany
(47) 09.04.2025

(51) B65G 1/137
B65G 47/61
(11) EP3581523
(21) EP19177187.2
(22) 29.05.2019
(54) DEVICE AND METHOD FOR THE ORDER-BASED PROVISION OF INDIVIDUAL GOODS FOR A PLURALITY OF ORDERS FROM A PACKING LOCATION
(73) Dürkopp Fördertechnik GmbH
(72) Völker, Sigurd
(74) dr. R.C. van Duijvenbode c.s.
(31) 102018209266
(32) 11.06.2018
(33) Germany
(47) 23.04.2025

(51) B65G 39/02
B65G 13/10
(11) EP3577043
(21) EP17832774.8
(22) 20.12.2017
(54) CONVEYOR UNIT COMPRISING ADJUSTABLE TRANSPORT ROLLERS
(73) Körber Supply Chain Logistics GmbH
(72) ASCHPURWIS, Carsten
FRÖHLICH, Thomas
(74) dr. R.C. van Duijvenbode c.s.
(31) 17154325
(32) 02.02.2017
(33) European Patent Office (EPO)
(47) 09.04.2025

(51) B65G 67/20
B65G 43/02
A01D 41/00
A01D 41/12
A01D 41/127
A01D 43/08
A01D 90/02
A01D 90/10
(11) EP4163238
(21) EP22199717.4
(22) 05.10.2022
(54) COMPONENT FOR A MOBILE WORKING MACHINE WITH A CONVEYOR
(73) Maschinenfabrik Bernard Krone GmbH & Co. KG
(72) Keuter, Jan
(74) dr. ir. G.J.C. Verdijck c.s.
(31) 102021125929
(32) 06.10.2021
(33) Germany
(47) 12.03.2025

(51) B65H 3/08
B65H 3/44
B65H 3/36
B65H 5/24
B65H 1/14
B65H 1/26
B65H 1/28
B65H 3/46
(11) EP4003887
(21) EP20745222.8
(22) 29.07.2020
(54) DENESTING APPARATUS
(73) Anheuser-Busch InBev S.A.
(72) DUPERRAY, Philippe
DEKOCKER, Wim
(74) ir. B.Ch. Ledeboer c.s
(31) 19219765
19189073
(32) 27.12.2019
30.07.2019
(33) European Patent Office (EPO)
European Patent Office (EPO)
(47) 12.02.2025

(51) B66B 1/46
B66B 3/00
(11) EP4384467
(21) EP22743841.3
(22) 20.07.2022
(54) ELEVATOR OPERATING DEVICE WITH TRAFFIC DEPENDENT FUNCTIONALITY
(73) INVENTIO AG
(72) FINSCHI, Lukas
(74) dr. R.C. van Duijvenbode c.s.
(31) 21191042
(32) 12.08.2021
(33) European Patent Office (EPO)
(47) 02.04.2025

(51) B66C 1/10
B66C 3/00
(11) EP4242158
(21) EP23182887.2
(22) 24.09.2020
(54) SYSTEM AND METHOD FOR CONTROLLING THE LIFTING AND HANDLING OF A LOAD
(73) Helmerich & Payne Technologies UK Limited
(72) JAMIESON, Angus Lamberton
(74) drs. A.A. Jilderda
(31) 201913783
(32) 24.09.2019
(33) United Kingdom
(47) 26.03.2025

(51) B66C 23/82
B66C 23/36
(11) EP3943438
(21) EP21185649.7
(22) 14.07.2021
(54) MOBILE CRANE WITH SEPARABLE A FRAME
(73) Liebherr-Werk Nenzing GmbH
(72) Torghele, Herr Manuel
Torghele, Herr Richard
(74) dr. R.C. van Duijvenbode c.s.
(31) 202020104192 U
(32) 21.07.2020
(33) Germany
(47) 30.04.2025

(51) B66F 11/04
(11) EP3578502
(21) EP19189570.5
(22) 31.05.2013
(54) APPARATUSES AND METHODS FOR PROVIDING HIGH ELECTRICAL RESISTANCE FOR AERIAL WORK PLATFORM COMPONENTS
(73) Time Manufacturing Company
(72) CHRISTIAN, James Randall
PALICAN, Andrew Keith
(74) dr. R.C. van Duijvenbode c.s.
(31) 201213487012
(32) 01.06.2012
(33) United States of America
(47) 30.04.2025

(51) C01B 3/34
C01B 13/02
B01J 19/08
(11) EP4257544
(21) EP23000050.7
(22) 28.03.2023
(54) APPARATUS AND METHOD FOR PRODUCING ALCOHOL SYNTHESIS GAS
(73) EurA AG
(72) Kliemke, Hardy
Schmidt, Dirk
(74) ir. H.J.G. Lips c.s.
(31) 102022001148
(32) 04.04.2022
(33) Germany
(47) 12.03.2025

(51) C01B 39/48
C01B 39/08
B01J 29/89
B01J 35/30
(11) EP3802423
(21) EP19811778.0
(22) 26.04.2019
(54) METHODS OF PREPARING CRYSTALLINE GERMANOSILICATE MATERIALS OF CIT-13 TOPOLOGY
(73) California Institute of Technology
(72) DAVIS, Mark, E.
KANG, Jong, Hun
(74) ir. J.D. de Zeeuw
(31) 201862678517 P
(32) 31.05.2018
(33) United States of America
(47) 02.04.2025

(51) C02F 1/66
F01N 3/08
B65G 53/30
C02F 1/68
C02F 101/10
C02F 101/20
C02F 103/00

C02F 103/18
(11) EP3927667
(21) EP20705085.7
(22) 20.02.2020
(54) METHOD FOR THE REMOVAL OF AT LEAST ONE CONTAMINANT FROM AN AQUEOUS LIQUOR OR A GAS
(73) SOLVAY SA
(72) BEDEL, Sabrina
DAVOINE, Perrine
COUDRY, Eric
DELPLANCHE, Thierry
(74) dr. R.C. van Duijvenbode c.s.
(31) 19158786
(32) 22.02.2019
(33) European Patent Office (EPO)
(47) 02.04.2025

(51) C03C 15/02
G02B 5/10
G02B 13/18
G02B 13/14
G02B 5/08
(11) EP3931160
(21) EP20714379.3
(22) 25.02.2020
(54) METHOD FOR FIGURE CONTROL OF OPTICAL SURFACES
(73) ZYGO CORPORATION
(72) NELSON, Andrew
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962812663 P
(32) 01.03.2019
(33) United States of America
(47) 09.04.2025

(51) C07C 5/333
C07C 11/09
B01J 23/42
B01J 23/08
C07C 11/167
B01J 8/02
B01J 19/24
(11) EP4003945
(21) EP20847637.4
(22) 30.04.2020
(54) DEHYDROGENATION PROCESS AND SYSTEM WITH REACTOR RE-SEQUENCING
(73) TPC Group LLC
(72) NUTT, Michael, O.
HAGER, David, S.
DUFF, Joseph, G.
VALDEZ, Gilbert, D.
COMEAUX, Joseph, A.
(74) ir. B.Ch. Ledeboer c.s
(31) 201916587161
201962878864 P
(32) 30.09.2019
26.07.2019
(33) United States of America
United States of America
(47) 19.03.2025

(51) C07D 251/54
C07D 251/60
(11) EP4349817
(21) EP23158350.1
(22) 23.02.2023
(54) MELAMINE PROCESS WITH A TWO-STAGE PURIFICATION OF MELAMINE OFFGAS
(73) CASALE SA
(72) GAMBA, Simone
(74) ir. J.C. Volmer c.s.
(31) 22200402
(32) 07.10.2022
(33) European Patent Office (EPO)
(47) 23.04.2025

(51) C07D 307/68
(11) EP4025567
(21) EP20860517.0
(22) 25.08.2020
(54) EFFICIENT PROCESS FOR PRODUCING 5-(ALKOXYCARBONYL)-FURAN-2-CARBOXYLIC ACIDS
(73) Eastman Chemical Company
(72) JANKA, Mesfin Ejerssa
(74) ir. B.Ch. Ledeboer c.s
(31) 201962896178 P
(32) 05.09.2019
(33) United States of America
(47) 23.04.2025

(51) C07D 487/04
A61P 35/00
A61K 31/519
C07D 519/00
A61K 31/5383
(11) EP3762385
(21) EP19764330.7
(22) 26.02.2019
(54) SUBSTITUTED 1,2-DIHYDRO-3H-PYRAZOLO[3,4-D]PYRIMIDIN-3-ONES
(73) Recurium IP Holdings, LLC
(72) HUANG, Peter Qinhua
BUNKER, Kevin Duane
BOREN, Brant Clayton
HEGDE, Sayee Gajanan
LIU, Hui
UNNI, Aditya Krishnan
ABRAHAM, Sunny
HOPKINS, Chad Daniel
PALIWAL, Sunil
(74) dr. R.C. van Duijvenbode c.s.
(31) 201862755163 P
201862641149 P
(32) 02.11.2018
09.03.2018
(33) United States of America
United States of America
(47) 12.02.2025

(51) C07K 14/415
C12N 15/82
(11) EP2478006
(21) EP10760791.3
(22) 20.09.2010
(54) CLONING AND EXPLOITATION OF A FUNCTIONAL R-GENE FROM SOLANUM CHACOENSE
(73) Wageningen Universiteit
(72) VOSSEN, Jacobus Hubertus
JACOBSEN, Evert
VAN DER VOSSEN, Edwin Andries Gerard
ARENS-DE REUVER, Marion Johanna Barbara
VISSER, Richard Gerardus Franciscus
NIJENHUIS, Maarten
(74) ir. B.Ch. Ledeboer c.s
(31) 09170769
(32) 18.09.2009
(33) European Patent Office (EPO)
(47) 26.02.2025

(51) C07K 16/10
A61P 31/18
A61K 39/00
(11) EP4257600
(21) EP23176826.8
(22) 02.07.2019
(54) ANTIBODIES THAT TARGET HIV GP120 AND METHODS OF USE
(73) Gilead Sciences, Inc.
(72) THOMSEN, Nathan D.
BALAKRISHNAN, Mini
HUNG, Magdeleine S.
SCHENAUER, Matthew Robert
KANWAR, Manu
CARR, Brian A.
STEPHENSON, Heather Theresa
SERAFINI, Loredana
PACE, Craig S.
REHDER, Doug
YU, Helen
ZHANG, Xue
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962810191 P
201862693642 P
(32) 25.02.2019
03.07.2018
(33) United States of America
United States of America
(47) 23.04.2025

(51) C07K 16/32
A61K 47/68
A61K 39/00
A61P 35/00
(11) EP3074424
(21) EP14866161.4
(22) 27.11.2014
(54) BISPECIFIC ANTIGEN-BINDING CONSTRUCTS TARGETING HER2
(73) Zymeworks BC Inc.
(72) NG, Gordon Yiu Kon
WEISSER, Nina E.
ESCOBAR-CABRERA, Eric
SANCHES, Mario
WICKMAN, Grant Raymond
DIXIT, Surjit Bhimarao
(74) dr. A. Krebs
(31) 201462009125 P
201462000908 P
201361910026 P
(32) 06.06.2014
20.05.2014
27.11.2013
(33) United States of America
United States of America
United States of America
(47) 12.02.2025

(51) C08B 37/02
C08B 37/16
C08B 37/08
A61K 8/49
A61Q 17/04
C08B 15/00

(11) EP4013374
(21) EP20853893.4
(22) 18.08.2020
(54) COMPOSITIONS FOR SUNSCREEN COMPOUNDS AND METHODS THEREOF
(73) PMIDG, LLC
(72) GRAVETT, David
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962910902 P
201962888526 P
(32) 04.10.2019
18.08.2019
(33) United States of America
United States of America
(47) 19.02.2025

(51) C08F 4/64
C08F 210/16
C07F 7/00
(11) EP4298135
(21) EP22711727.2
(22) 25.02.2022
(54) BIS-PHENOXY-ETHER LIGANDS FOR GROUP IV POLYOLEFIN CATALYSIS
(73) Dow Global Technologies LLC
(72) MUKHOPADHYAY, Sukrit
GRIGG, Robert David
WALKER, James A.
BAILEY, Brad C.
(74) ir. W.J.J.M. Kempes
(31) 202163153978 P
(32) 26.02.2021
(33) United States of America
(47) 16.04.2025

(51) C08F 4/657
C08F 210/16
C08F 2/06
(11) EP3802631
(21) EP19735430.1
(22) 29.05.2019
(54) ZIEGLER-NATTA CATALYST SYSTEM HAVING A TREATED MAGNESIUM CHLORIDE COMPONENT
(73) Dow Global Technologies LLC
(72) DEMIRORS, Mehmet
HIRSEKORN, Kurt F.
CHEN, Linfeng
(74) ir. W.J.J.M. Kempes
(31) 201862679279 P
(32) 01.06.2018
(33) United States of America
(47) 23.04.2025

(51) C08F 8/12
C08F 120/58
C08F 265/10
C09K 8/00
(11) EP4361183
(21) EP23202940.5
(22) 11.10.2023
(54) HIGH MOLECULAR WEIGHT ANIONIC POLYACRYLAMIDES
(73) SNF Group
(72) FAVERO, Cédrick
KIEFFER, Johann
BOISSE, Nicolas
LING, Jing
(74) dr. R.C. van Duijvenbode c.s.
(31) 202211275522
(32) 18.10.2022
(33) China
(47) 07.05.2025

(51) C08F 210/18
C08F 4/64
(11) EP3947484
(21) EP20721035.2
(22) 27.03.2020
(54) TRI-FUNCTIONAL LONG-CHAIN BRANCHED POLYOLEFIN
(73) Dow Global Technologies LLC
(72) KASHYAP, Teresita
REDWINE, Oscar D.
FROESE, Robert D.J.
ARRIOLA, Daniel J.
DEN DOELDER, Cornelis F.J.
SAMMLER, Robert L.
(74) ir. W.J.J.M. Kempes
(31) 201962826274 P
(32) 29.03.2019
(33) United States of America
(47) 23.04.2025

(51) C08F 297/08
C08F 210/02
(11) EP4251667
(21) EP21823972.1
(22) 22.11.2021
(54) ETHYLENE-RICH DIENE TRIBLOCK POLYMER HAVING A STATISTICAL BLOCK AND TWO TERMINAL POLYETHYLENE BLOCKS
(73) COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN
Centre National de la Recherche Scientifique
Ecole Superieure de Chimie, Physique, Electronique de Lyon
Université Claude Bernard Lyon 1
(72) BAULU, Nicolas
BOISSON, Christophe
D'AGOSTO, Franck
MONTARNAL, Damien
MORESO, Emma
THUILLIEZ, Julien
JEAN-BAPTISTE-DIT-DOMINIQUE, François
(74) ir. W.J.J.M. Kempes
(31) 2012206
(32) 26.11.2020
(33) France
(47) 19.02.2025

(51) C08G 18/48
(11) EP3906269
(21) EP20731608.4
(22) 03.01.2020
(54) MOISTURE CURABLE ADHESIVE COMPOSITIONS
(73) Dow Global Technologies LLC
(72) LOPEZ, Leonardo
KRISHNAN, Bindu
XU, Qiuyun
(74) ir. W.J.J.M. Kempes
(31) 201962788360 P
(32) 04.01.2019
(33) United States of America
(47) 16.04.2025

(51) C08K 5/00
C08K 5/3492
C08K 5/52
C08K 5/5313
C08K 7/14
C08L 77/02
C08L 77/06
(11) EP3423522
(21) EP17707211.3
(22) 20.02.2017
(54) FLAME-RETARDANT POLYAMIDE COMPOSITION
(73) Clariant International Ltd
(72) HÖROLD, Sebastian
SCHLOSSER, Elke
(74) J.M.H. Duyver lic.
(31) 102016203221
(32) 29.02.2016
(33) Germany
(47) 12.02.2025

(51) C08K 5/17
C09J 4/00
(11) EP3898814
(21) EP19816363.6
(22) 12.12.2019
(54) ADHESIVE COMPOSITION WITH RETARDING ADDITIVE
(73) Huntsman Advanced Materials (Switzerland) GmbH
(72) FRAPSAUCE, Astrid
BARON, Catherine
(74) ir. W.J.J.M. Kempes
(31) 18214799
(32) 20.12.2018
(33) European Patent Office (EPO)
(47) 19.03.2025

(51) C08L 23/14
(11) EP4345135
(21) EP22199023.7
(22) 30.09.2022
(54) POLYOLEFIN COMPOSITION COMPRISING POLYPROPYLENE HOMOPOLYMER, POLYPROPYLENE BLOCK COPOLYMER AND RECYCLED PLASTIC MATERIAL
(73) Borealis AG
(72) BRAUN, Hermann
JERABEK, Michael
SACCETTI, Francisco
SALLES, Christophe
KAHLEN, Susanne Margarete
KASTNER, Erwin
(74) ir. B.Ch. Ledeboer c.s
(47) 05.03.2025

(51) C08L 71/02
C08G 65/12
C08G 65/26
C08G 65/30
A61K 47/10
A61K 9/20
(11) EP4242253
(21) EP22818593.0
(22) 31.08.2022
(54) POLYALKYLENE OXIDE PARTICLES, USE THEREOF, AND PHARMACEUTICAL COMPOSITION COMPRISING THE PARTICLES
(73) Sumitomo Seika Chemicals Co., Ltd.
(72) SUKA, Keita
SAINOU, Naoki

(74) ir. J.C. Volmer c.s.
(31) 2022013784
(32) 31.01.2022
(33) Japan
(47) 30.04.2025

(51) C09D 4/06
C09D 133/04
C09D 123/28
C09D 153/00
(11) EP3656822
(21) EP19216780.7
(22) 24.06.2016
(54) COATINGS FOR PLASTIC SUBSTRATES
(73) PPG Industries Ohio, Inc.
(72) JANOSKI, Richard A.
WANG, Wei
HUMBERT, Leigh Ann
ZIEGLER,Terri L.
ZHOU, Hongying
FENN, David Robert
OLSON, Kurt G.
MARTZ, Jonathan T.
(74) dr. W.A.H.M. Van Borm
(31) 201514753126
(32) 29.06.2015
(33) United States of America
(47) 23.04.2025

(51) C09J 7/38
C09J 7/29
C09J 11/04
B32B 7/06
B32B 7/12
(11) EP3978578
(21) EP21171566.9
(22) 29.04.2016
(54) OPAQUE ADHESIVES IN WET CONDITION FOR LABEL APPLICATION
(73) Avery Dennison Corporation
(72) HIRE, Santosh L.
HEEDERIK, Peter J.
MILLIGAN, Darren B.
(74) dr. R.C. van Duijvenbode c.s.
(31) 1726MU2015
(32) 30.04.2015
(33) India
(47) 09.04.2025

(51) C10B 55/00
C10G 9/00
C10B 57/04
C10G 7/00
C10G 55/02
(11) EP4086327
(21) EP20908950.7
(22) 03.12.2020
(54) SYSTEM AND METHOD FOR PRODUCING NEEDLE COKE
(73) China Petroleum & Chemical Corporation
Sinopec Dalian Research Institute of Petroleum and Petrochemicals Co., Ltd.
(72) CHEN, Tianzuo
QIAO, Kai
CHU, Renqing
GUO, Dan
FANG, Xiangchen
GOU, Lianzhong
(74) dr. ir. F.M. van Bouwelen
(31) 201911423745
(32) 31.12.2019
(33) China
(47) 16.04.2025

(51) C10L 1/02
C07C 43/02
C07C 9/10
C07C 15/02
C10L 10/10
C10L 1/185
C10L 1/16
(11) EP4363533
(21) EP22751127.6
(22) 01.07.2022
(54) FUEL COMPOSITION RICH IN AROMATIC COMPOUNDS, PARAFFINS AND ETHER, AND USE THEREOF IN MOTOR VEHICLES
(73) TotalEnergies OneTech
(72) SERVE, Lisa
DELORME, Géraldine
PICARD, Florent
(74) ir. W.J.J.M. Kempes
(31) 2107178
(32) 02.07.2021
(33) France
(47) 19.02.2025

(51) C10L 1/22
C10L 10/08
C10M 133/00
C10M 133/02
C10L 1/222
C10L 1/224
C10L 1/233
C10N 20/00
C10N 30/06
C10N 30/00
C10N 40/04
C10N 40/25
(11) EP4204521
(21) EP21773149.6
(22) 25.08.2021
(54) FRICTION REDUCING ADDITIVES AND PROCESS FOR THEIR PREPARATION
(73) ENI S.p.A.
(72) IASILLI, Giuseppe
CAMBISE, Paolo
ASSANELLI, Giulio
NOTARI, Marcello
PUCCI, Andrea
(74) J.M.H. Duyver lic.
(31) 202000020482
(32) 26.08.2020
(33) Italy
(47) 02.04.2025

(51) C10M 161/00
C10M 169/04
C10M 163/00
C10N 10/02
C10N 10/04
C10N 20/04
C10N 30/04
C10N 30/00
C10N 40/25
C10N 60/14
C10N 70/00
(11) EP3222698
(21) EP17159947.5
(22) 08.03.2017
(54) ADDITIVE CONCENTRATES
(73) Infineum International Limited
(72) Marsh, Adam
Cuckston, Georgina
Woodward, Philip James
(74) ir. B.Ch. Ledeboer c.s
(31) 16161582
(32) 22.03.2016
(33) European Patent Office (EPO)
(47) 16.04.2025

(51) C11D 3/20
C11D 1/22
C11D 11/00
(11) EP4048768
(21) EP20796943.7
(22) 19.10.2020
(54) COMPOSITION FOR SURFACE CARE APPLICATION
(73) Rhodia Brasil S.A.
(72) PEREIRA MENDES, Livia
MARTINS, Sergio
(74) dr. R.C. van Duijvenbode c.s.
(31) PCT/IB2019/059037
(32) 23.10.2019
(33) World Intellectual Property Office (WIPO)
(47) 26.03.2025

(51) C12P 21/00
C12N 5/00
(11) EP3063287
(21) EP14799932.0
(22) 30.10.2014
(54) USE OF MONENSIN TO REGULATE GLYCOSYLATION OF RECOMBINANT PROTEINS
(73) Amgen Inc.
(72) PANDE, Sandhya
MUJACIC, Mirna
(74) ir. W.J.J.M. Kempes
(31) 201361898310 P
(32) 31.10.2013
(33) United States of America
(47) 02.04.2025

(51) C12Q 1/6804
C12Q 1/6869
C07K 16/44
G01N 33/53
(11) EP4112741
(21) EP22174722.3
(22) 04.01.2018
(54) STEPWISE SEQUENCING BY NON-LABELED REVERSIBLE TERMINATORS OR NATURAL NUCLEOTIDES
(73) MGI Tech Co., Ltd.
BGI Shenzhen
(72) DRMANAC, Snezana
DRMANAC, Radoje
LI, Handong
XU, Xun
CALLOW, Matthew J.
ECKHARDT, Leon
YANG, Naibo
(74) dr. A. Krebs
(31) 201762490511 P
201762442263 P
(32) 26.04.2017
04.01.2017
(33) United States of America

United States of America
(47) 26.02.2025

(51) C21B 11/10
C21B 13/00
C21B 13/14
(11) EP3966353
(21) EP20725946.6
(22) 11.05.2020
(54) PROCESS FOR THE SMELTING OF A METALLIFEROUS FEEDSTOCK MATERIAL
(73) AFRICAN RAINBOW MINERALS LIMITED
(72) BOUWER, Petrus Hendrik Ferreira,
(74) dr. A. Krebs
(31) 2023109
(32) 10.05.2019
(33) Netherlands
(47) 09.04.2025

(51) C23C 16/44
C23C 16/455
C23C 16/458
H01L 21/67
H01L 21/687
(11) EP4253596
(21) EP21896855.0
(22) 17.11.2021
(54) SEMICONDUCTOR PROCESS APPARATUS
(73) Beijing NAURA Microelectronics Equipment Co., Ltd.
(72) ZHENG, Bo
QIN, Haifeng
REN, Xiaoyan
ZHANG, Wenqiang
WANG, Hao
SHI, Xiaoping
LAN, Yunfeng
WANG, Yongfei
(74) ir. A. Blokland c.s.
(31) 202011340051
(32) 25.11.2020
(33) China
(47) 09.04.2025

(51) D21H 13/26
D21H 17/54
(11) EP4352300
(21) EP22732490.2
(22) 03.06.2022
(54) MODIFIED ARAMID PULP AND FRICTION MATERIAL COMPRISING MODIFIED ARAMID PULP
(73) Teijin Aramid B.V.
(72) VAN HAREN, Adrianus
NIJHUIS, Walter
VERTOMMEN, Mikael
TIECKEN, Jan-Cees
DIEDERING, Frank
(74) ir. A. Blokland c.s.
(31) 21178251
(32) 08.06.2021
(33) European Patent Office (EPO)
(47) 19.02.2025

(51) E01C 19/10
F26B 11/02
F26B 23/02
(11) EP4357524
(21) EP23202571.8
(22) 10.10.2023
(54) FLAME PROTECTION DEVICE FOR A BURNER AND DRYING DRUM WITH SUCH A FLAME PROTECTION DEVICE
(73) Benninghoven Zweigniederlassung der Wirtgen Mineral Technologies GmbH
(72) Johann, Matthias Walter
Zimmer, Stephan
Genetsch, Jörg
Licht, Ramón
(74) ir. J.C. Volmer c.s.
(31) 102022211109
(32) 20.10.2022
(33) Germany
(47) 26.02.2025

(51) E02D 5/10
E02D 7/20
(11) EP4144920
(21) EP22193468.0
(22) 01.09.2022
(54) METHOD FOR ARRANGING A PILE, SUCH AS A CONCRETE PILE, IN THE GROUND
(73) Stienstra & van der Wal Beheer B.V.
(72) Stienstra, Gerrit
(74) ir. B.J. 't Jong
(31) 2029103
(32) 02.09.2021
(33) Netherlands
(47) 30.04.2025

(51) E03D 9/08
(11) EP4127339
(21) EP21709933.2
(22) 02.03.2021
(54) CLEANING NOZZLE FOR CLEANING A BIDET SHOWER DEVICE
(73) Grohe AG
(72) HEITKAMP, Hendrik
KALKA, Franziska
RÖDIGER, Sascha
TCHANA TCHUINOU, Bertrand
GUO, Pei
VENUS, Stephan
RÜBESAMEN, Paul
BEGEROW, Hendrik
(31) 102020108671
(32) 30.03.2020
(33) Germany
(47) 16.04.2025

(51) E04B 1/68
E06B 1/62
(11) EP3825482
(21) EP19210875.1
(22) 22.11.2019
(54) SEALING TAPE
(73) ISO-Chemie GmbH
(74) ir. F.A. Geurts c.s.
(47) 09.04.2025

(51) E04D 11/02
E04D 13/00
D04H 3/007
B29C 44/00
C02F 1/00
C08G 18/48
D04H 3/03
D04H 3/14
D04H 3/16
E01C 13/00
(11) EP3856968
(21) EP19786884.7
(22) 17.09.2019
(54) WATER CONTAINMENT SYSTEM COMPRISING A HYDROPHILIC COMPOSITE
(73) Dow Global Technologies LLC
(72) SCHOENER, Cody
SRIVASTAVA, Yasmin N.
SHAH, Viraj K.
(74) ir. W.J.J.M. Kempes
(31) 201862738227 P
(32) 28.09.2018
(33) United States of America
(47) 23.04.2025

(51) E04D 13/068
E04D 13/072
E04D 13/064
(11) EP3985196
(21) EP21203045.6
(22) 15.10.2021
(54) GUTTER
(73) Janssen, Bob
(72) Kooistra, Erik Hans
(74) drs. P.A. van Essen c.s.
(31) 20202162
(32) 15.10.2020
(33) European Patent Office (EPO)
(47) 12.03.2025

(51) E04H 4/06
E04H 4/14
E04H 7/06
E04H 4/10
(11) EP4306746
(21) EP23213256.3
(22) 12.10.2020
(54) TUBE FOR PREVENTING WATER FROM ENTERING A BASIN
(73) P.V. FLOOD CONTROL CORP.
(72) VICKERS, Paul
(74) dr. R.C. van Duijvenbode c.s.
(31) 201916659430
(32) 21.10.2019
(33) United States of America
(47) 09.04.2025

(51) E04H 12/08
F03D 13/20
(11) EP4090815
(21) EP21704180.5
(22) 19.01.2021
(54) FLANGE
(73) Siemens Gamesa Renewable Energy A/S
(72) KLAASSEN, Jacobus
DE JONG, Erwin
(74) ir. W.J.J.M. Kempes
(31) 20158766
(32) 21.02.2020
(33) European Patent Office (EPO)
(47) 12.03.2025

(51) E05B 73/00
(11) EP4098830
(21) EP22175994.7
(22) 30.05.2022
(54) WALL ANCHOR
(73) ABUS August Bremicker Söhne KG
(74) dr. R.C. van Duijvenbode c.s.
(31) 102021114427

(32) 04.06.2021
(33) Germany
(47) 16.04.2025

(51) E05D 5/14
E05D 7/00
E05D 15/52
(11) EP3584396
(21) EP19178269.7
(22) 04.06.2019
(54) SUPPORT FOR A LEAF ON A FRAME
(73) Aug. Winkhaus SE & Co. KG
(72) Kushtilov, Boyko
(74) ir. W.J.J.M. Kempes
(31) 102018209872
(32) 19.06.2018
(33) Germany
(47) 26.03.2025

(51) E21B 19/15
E21B 19/00
E21B 19/16
(11) EP4022161
(21) EP20857907.8
(22) 28.08.2020
(54) COMPENSATED DRILL FLOOR
(73) Ensco International Incorporated
(72) VU, Van Van
(74) dr. A. Krebs
(31) 201962893741 P
(32) 29.08.2019
(33) United States of America
(47) 26.03.2025

(51) E21B 29/00
E21B 31/16
E21B 31/20
(11) EP4330513
(21) EP22729830.4
(22) 02.05.2022
(54) AXIAL POSITION-CONTROLLED OPERATION TOOLSTRING AND METHOD
(73) Archer Oiltools AS
(72) KROGSÆTER, Kurt Luis
FAGNA, Jan-Ove
LØLAND, Atle
TORVESTAD, Bjørn Tore
(74) ir. A. Blokland c.s.
(31) 20210537
(32) 30.04.2021
(33) Norway
(47) 12.02.2025

(51) F03D 7/02
(11) EP3810924
(21) EP19730335.7
(22) 12.06.2019
(54) REDUCED POWER OPERATION OF A WIND TURBINE
(73) Wobben Properties GmbH
(72) MESSING, Ralf
MÖLLER, Christian
(74) dr. R.C. van Duijvenbode c.s.
(31) 102018114935
(32) 21.06.2018
(33) Germany
(47) 26.02.2025

(51) F03D 9/00
F03D 9/25
(11) EP4249748
(21) EP23184669.2
(22) 21.08.2017
(54) METHOD FOR CONTROLLING A WIND TURBINE
(73) Wobben Properties GmbH
(72) Schubert, Katharina
Brombach, Johannes
(74) dr. R.C. van Duijvenbode c.s.
(31) 102016115431
(32) 19.08.2016
(33) Germany
(47) 23.04.2025

(51) F16D 7/02
(11) EP4305322
(21) EP22710159.9
(22) 03.03.2022
(54) FURNITURE DRIVE DEVICE WITH ELECTROMOTOR WITH BRAKE
(73) DewertOkin Technology Group Co., Ltd.
(72) MÜLLER, Christian
(74) dr. R.C. van Duijvenbode c.s.
(31) 202021101238 U
(32) 11.03.2021
(33) Germany
(47) 16.04.2025

(51) F16D 55/226
F16D 65/097
(11) EP4045808
(21) EP20793346.6
(22) 16.10.2020
(54) DISK BRAKE FOR A MOTOR VEHICLE AND ARRANGEMENT OF AT LEAST ONE PAD HOLDING SPRING AND A COVER ON A BRAKE PAD
(73) KNORR-BREMSE Systeme für Nutzfahrzeuge GmbH
(72) GRAAF, Jutta
SCHRÖPF, Frederic
SCHÖFBERGER, Tobias
KOTTEDER, Stephan
EBNER, Markus
SCHÖNAUER, Manfred
HABERMANN, Dimitrij
(74) J.M.H. Duyver lic.
(31) 102019128116
(32) 17.10.2019
(33) Germany
(47) 02.04.2025

(51) F16L 21/06
F16L 19/02
F16L 19/08
F16L 19/10
F16L 19/12
F16L 21/00
F16L 21/02
F16L 37/091
F16L 17/04
F16L 21/08
F16L 23/08
(11) EP3978790
(21) EP21208468.5
(22) 15.05.2017
(54) COUPLING, COMBINATION OF A PREASSEMBLED COUPLING AND A FIRST PIPE ELEMENT AND METHOD OF ASSEMBLING THE COMBINATION THEREOF
(73) Victaulic Company
(72) SAVAGE, Thomas C.
MADARA, Scott D.
BOWMAN, Matthew A.
YOVANOVICH, Kathryn
BANCROFT, Philip Wayne
(74) drs. A.A. Jilderda
(31) 201662336879 P
201662336885 P
(32) 16.05.2016
16.05.2016
(33) United States of America
United States of America
(47) 23.04.2025

(51) F16M 11/28
F16B 7/10
F16B 7/04
F16H 1/16
F16M 13/08
G03B 17/56
(11) EP4354009
(21) EP23175931.7
(22) 30.05.2023
(54) A RAPID TELESCOPING SUPPORT POLE, A PHOTOGRAPHIC EQUIPMENT, AND A HIKING POLE
(73) Coman Photo Equipment (Zhongshan) Co., Ltd
(72) LIU, Yao
(31) 202222587094 U
(32) 28.09.2022
(33) China
(47) 12.02.2025

(51) F21V 5/04
F21V 17/10
F21V 14/06
F21Y 115/10
F21V 7/00
G02B 19/00
F21V 5/00
F21V 17/00
F21V 17/02
(11) EP3940290
(21) EP20827438.1
(22) 03.06.2020
(54) LENS AND LAMP
(73) Suzhou Opple Lighting Co., Ltd.
Opple Lighting Co., Ltd.
(72) WANG, Wanlin
(74) J.M.H. Duyver lic.
(31) 201920922164 U
(32) 19.06.2019
(33) China
(47) 02.04.2025

(51) F24F 6/04
F24F 11/00
(11) EP4113023
(21) EP21305910.8
(22) 01.07.2021
(54) SYSTEM FOR HUMIDIFYING AND COOLING AN AIR FLOW AND METHOD FOR CLEANING AN EVAPORATION PANEL OF SUCH A SYSTEM
(73) Devatec
(72) FRAMBOT, Jean-François
(74) dr. R.C. van Duijvenbode c.s.
(47) 12.02.2025

(51) F25B 41/00
(11) EP4018135

(21) EP20758011.9
(22) 30.07.2020
(54) REFRIGERATION SYSTEM WITH A PLURALITY OF STEAM EJECTORS CONNECTED TO A PLURALITY OF FLOW TRAPS
(73) Carrier Corporation
(72) ZHU, Yonghua
TORCHIO, Marcello
(74) J.M.H. Duyver lic.
(31) 201962888824 P
(32) 19.08.2019
(33) United States of America
(47) 23.04.2025

(51) F26B 11/02
F26B 23/02
(11) EP4357710
(21) EP23202570.0
(22) 10.10.2023
(54) DRYING DRUM WITH FLAME PROTECTION DEVICE
(73) Benninghoven Zweigniederlassung der Wirtgen Mineral Technologies GmbH
(72) Licht, Ramón
Genetsch, Jörg
Zimmer, Stephan
Johann, Matthias Walter
(74) ir. J.C. Volmer c.s.
(31) 102022211106
(32) 20.10.2022
(33) Germany
(47) 26.02.2025

(51) F28F 1/02
(11) EP4060275
(21) EP22162563.5
(22) 16.03.2022
(54) MICROCHANNEL HEAT EXCHANGER
(73) Carrier Corporation
(72) JOARDAR, Arindom
SIENEL, Tobias H.
(74) J.M.H. Duyver lic.
(31) 202163162332 P
(32) 17.03.2021
(33) United States of America
(47) 23.04.2025

(51) F28F 21/00
B32B 5/18
B32B 27/18
B32B 27/28
F24F 7/08
F28F 3/08
F28D 21/00
F28F 19/02
(11) EP4019883
(21) EP20854798.4
(22) 17.08.2020
(54) SHEET FOR HEAT EXCHANGE ELEMENT
(73) Toray Industries, Inc.
(72) NISHIOKA, Kazuya
OMORI, Taira
(74) J.M.H. Duyver lic.
(31) 2019150262
(32) 20.08.2019
(33) Japan
(47) 02.04.2025

(51) G01C 21/20
(11) EP3781905
(21) EP19722798.6
(22) 16.04.2019
(54) DETERMINING A VIRTUAL REPRESENTATION OF AT LEAST PART OF AN ENVIRONMENT
(73) A.P. Møller - Mærsk A/S
(72) RODEY, Patrick Michael
(74) ir. W.J.J.M. Kempes
(31) 201806510
(32) 20.04.2018
(33) United Kingdom
(47) 09.04.2025

(51) G01F 1/84
(11) EP4147014
(21) EP21718432.4
(22) 23.03.2021
(54) MASS FLOW METERS/CONTROLLERS AND METHODS HAVING IMPROVED ACCURACY
(73) Illinois Tool Works, Inc.
(72) KRAKHMAN, Vladimir
(74) dr. W.A.H.M. Van Borm
(31) 202016870147
(32) 08.05.2020
(33) United States of America
(47) 12.02.2025

(51) G01N 33/24
(11) EP3743718
(21) EP18713339.2
(22) 23.01.2018
(54) METHOD AND APPARATUS FOR ANALYZING A ROCK SAMPLE
(73) TotalEnergies OneTech
(72) PUJOL, Ghislain
BRUGIDOU, Régis
FAURISSOUX, Pierre
(74) dr. A. Krebs
(47) 26.03.2025

(51) G01R 15/18
G01R 19/25
G01R 22/06
G01R 31/08
G01R 31/12
G01R 31/52
H02H 1/00
(11) EP4097490
(21) EP21705837.9
(22) 26.01.2021
(54) ARC DETECTION ANTENNA IN ELECTRIC METER SYSTEMS
(73) Landis+Gyr Technology, Inc.
(72) BUSEKRUS, Doug
KRAUS, Matthew
(74) ir. B.Ch. Ledeboer c.s
(31) 202016776833
(32) 30.01.2020
(33) United States of America
(47) 05.03.2025

(51) G01R 23/02
G01R 23/12
H02J 13/00
(11) EP4160228
(21) EP20937978.3
(22) 26.05.2020
(54) SYSTEM FREQUENCY DETECTOR
(73) TMEIC Corporation
(72) SHIGEMASA, Takashi
MITSUGI, Yasuaki
(74) dr. R.C. van Duijvenbode c.s.
(47) 23.04.2025

(51) G01S 5/02
(11) EP3736597
(21) EP19315032.3
(22) 06.05.2019
(54) METHOD AND SYSTEM FOR MODIFYING THE SPEED OF A VEHICLE DEPENDING ON THE VALIDATION OF ITS CALCULATED LOCALIZATION FIELD
(73) Easymile
(72) Perrin, Benoit
Roussillon, Cyril
Dumerat, Arnaud
Monnerie, Manon
Telinge, Arnaud
(74) J.M.H. Duyver lic.
(47) 12.02.2025

(51) G01S 7/481
G01S 17/42
G01S 17/10
G02B 26/10
G02B 26/08
(11) EP4155760
(21) EP20942120.5
(22) 26.06.2020
(54) OPTICAL SCANNING DEVICE AND RANGING APPARATUS
(73) MITSUBISHI ELECTRIC CORPORATION
(72) SHODA, Fumio
SHIRAO, Mizuki
(74) J.M.H. Duyver lic.
(47) 02.04.2025

(51) G01T 1/29
(11) EP3825737
(21) EP20209340.7
(22) 23.11.2020
(54) METHOD AND DEVICE FOR MULTIDIMENSIONAL DIRECTIONAL MEASUREMENT OF GAMMA RADIATION IN THE FAR FIELD
(73) Hellma Materials GmbH
(72) PETRAK, Sibylle
(74) dr. R.C. van Duijvenbode c.s.
(31) 102019131695
102019131696
(32) 22.11.2019
22.11.2019
(33) Germany
Germany
(47) 19.02.2025

(51) G01V 1/20
D07B 1/14
A01K 73/02
D07B 5/12
(11) EP3006964
(21) EP15160415.4
(22) 22.05.2009
(54) METHOD TO PRODUCE A HEADLINE SONAR CABLE
(73) Hampidjan HF
Hampidjan USA, Inc.
(72) Erlendsson, Hjortur
(74) ir. A.R. Aalbers
(31) 128907 P
(32) 22.05.2008

(33) United States of America
(47) 05.03.2025

(51) G02B 6/12
H01S 5/026
H01S 5/50
(11) EP4066029
(21) EP20824460.8
(22) 26.11.2020
(54) WAVEGUIDE STRUCTURE FOR A PHOTONIC INTEGRATED CIRCUIT
(73) SMART Photonics Holding B.V.
(72) DEN HAAN, Erik
LEMOS ALVARES DOS SANTOS, Rui Manuel
(74) ir. W.J.J.M. Kempes
(31) 201917186
(32) 26.11.2019
(33) United Kingdom
(47) 19.02.2025

(51) G02B 6/38
B23P 11/00
G02B 6/36
G02B 6/42
(11) EP3729154
(21) EP18890365.2
(22) 19.12.2018
(54) MINI DUPLEX CONNECTOR WITH PUSH-PULL POLARITY MECHANISM AND CARRIER
(73) US Conec, Ltd
(72) WAKJIRA, Jillcha F.
HIGLEY, Jason
HUGHES, Michael E.
CHILDERS, Darrell R.
CLOUD, Mitchell
(74) ir. J.C. Volmer c.s.
(31) 201862634271 P
201762607555 P
(32) 23.02.2018
19.12.2017
(33) United States of America
United States of America
(47) 12.02.2025

(51) G02B 6/42
G02B 6/28
(11) EP3997494
(21) EP20841580.2
(22) 11.07.2020
(54) HYBRID MULTI-WAVELENGTH SOURCE AND ASSOCIATED METHODS
(73) Ayar Labs, Inc.
(72) WADE, Mark
DAVENPORT, Michael
ZHANG, Chong
(74) dr. A. Krebs
(31) 202016925101
201962873429 P
(32) 09.07.2020
12.07.2019
(33) United States of America
United States of America
(47) 09.04.2025

(51) G02B 6/42
G02B 6/38
(11) EP4283361
(21) EP23201966.1
(22) 24.02.2020
(54) PLUGGABLE OPTICAL FIBER MODULE THERMAL MANAGEMENT AND HEAT SHIELD ASSEMBLIES, DEVICES, AND METHODS
(73) Ciena Corporation
(72) MANILOFF, Eric
ALDEA, Victor
GRAHAM, Terence
MACK, Bonnie Lynne
(74) J.M.H. Duyver lic.
(31) 201916653248
201916287266
(32) 15.10.2019
27.02.2019
(33) United States of America
United States of America
(47) 02.04.2025

(51) G02B 21/16
G02B 21/00
G02B 21/32
G02B 13/14
B32B 27/00
G02F 1/13
G02B 27/00
G02B 27/01
(11) EP4058835
(21) EP20886978.4
(22) 12.11.2020
(54) OPTICAL DEVICE FOR AMBIENT LIGHT MANAGEMENT SYSTEMS FOR WEARABLE DEVICES
(73) MAGIC LEAP, INC.
(72) MATHUR, Vaibhav
HADDOCK, Joshua Naaman
DIEHL, Ted
OH, Chulwoo
CARLISLE, Clinton
(74) ir. W.J.J.M. Kempes
(31) 201962935056 P
(32) 13.11.2019
(33) United States of America
(47) 23.04.2025

(51) G02B 27/01
G02B 27/18
G02B 3/00
G09G 3/00
G09G 3/3208
(11) EP3695270
(21) EP18867281.0
(22) 11.10.2018
(54) AUGMENTED REALITY DISPLAY COMPRISING EYEPIECE HAVING A TRANSPARENT EMISSIVE DISPLAY
(73) Magic Leap, Inc.
(72) YEOH, Ivan Li Chuen
EDWIN, Lionel Ernest
(74) dr. R.C. van Duijvenbode c.s.
(31) 201762571203 P
(32) 11.10.2017
(33) United States of America
(47) 26.03.2025

(51) G02B 27/01
G02C 5/02
G02C 5/12
G02C 5/06
G02C 5/04
G06F 1/16
G02C 11/00
(11) EP3504581
(21) EP17847193.4
(22) 14.08.2017
(54) ADJUSTABLE NOSE BRIDGE ASSEMBLY FOR HEADWORN COMPUTER
(73) Mentor Acquisition One, LLC
(72) HEISEY, Andrew Carl
(31) 201615249637
(32) 29.08.2016
(33) United States of America
(47) 09.04.2025

(51) G02B 27/10
G02B 27/14
G02B 15/14
(11) EP3966618
(21) EP19726954.1
(22) 23.05.2019
(54) OPTICAL ZOOM SYSTEM AND CAMERA FOR A MOBILE DEVICE
(73) Huawei Technologies Co., Ltd.
(72) GÄBLER, Volker
HEGELS, Ernst
(74) ir. W.J.J.M. Kempes
(47) 26.03.2025

(51) G02F 1/00
C07D 285/14
G01N 21/64
G01N 33/18
C02F 5/10
C02F 1/00
G01N 21/77
(11) EP4069643
(21) EP20834026.5
(22) 04.12.2020
(54) METHODS AND SYSTEMS FOR MONITORING OR CONTROLLING ANTI-SCALANT CONCENTRATION
(73) Sterling Specialty Chemicals Holding UK Limited
(72) NUUTINEN, Vesa
METSÄLÄ, Erkki Johannes
VUORI, Vesa
HESAMPOUR, Mehrdad
(74) dr. R.C. van Duijvenbode c.s.
(31) 20205065
201962944205 P
(32) 23.01.2020
05.12.2019
(33) Finland
United States of America
(47) 19.03.2025

(51) G03F 7/00
G03F 7/095
G03F 7/11
G03F 7/32
(11) EP3951497
(21) EP20778371.3
(22) 27.03.2020
(54) METHOD OF MANUFACTURING ORIGINAL PRINTING PLATE
(73) TOYOBO MC Corporation
(72) YAMADA, Hiroto
(74) E. Van Malderen
(31) 2019063700
(32) 28.03.2019
(33) Japan
(47) 30.04.2025

(51) G03G 15/20
G03G 15/00
(11) EP3757679
(21) EP20177951.9
(22) 03.06.2020
(54) HEATING DEVICE, FIXING DEVICE, AND IMAGE FORMING APPARATUS
(73) Ricoh Company, Ltd.
(72) SUGIYAMA, Ryohhei
(74) ir. B.Ch. Ledeboer c.s
(31) 2020048747
2019116780
(32) 19.03.2020
24.06.2019
(33) Japan
Japan
(47) 19.03.2025

(51) G05B 19/042
(11) EP4459394
(21) EP23171917.0
(22) 05.05.2023
(54) SLAVE MODULE AND METHOD FOR STARTING THE ITERATIVE REGISTRATION OF SLAVE MODULES OF A MODULAR CONTROLLER SYSTEM
(73) Danfoss A/S
(72) Dametto, Giulio
Boschiero, Denis
De Nardo, Luca
(74) dr. R.C. van Duijvenbode c.s.
(47) 09.04.2025

(51) G05B 19/042
F03D 13/30
(11) EP4152109
(21) EP21197221.1
(22) 16.09.2021
(54) CONTROL AND METHOD FOR A WIND TURBINE AND COMPUTER PROGRAM
(73) Wobben Properties GmbH
(72) Brombach, Johannes
Poolmann, Alexander
Amelsberg, Swantje
Giertz, Helge
(74) dr. R.C. van Duijvenbode c.s.
(47) 16.04.2025

(51) G06F 3/01
G06Q 30/02
G06Q 30/0251
G06Q 30/0282
G06F 16/9535
(11) EP3256931
(21) EP15828465.3
(22) 30.12.2015
(54) PROVIDING RECOMMENDATIONS BASED ON MOOD AND BEHAVIORAL INFORMATION FROM MULTIPLE DATA SOURCES
(73) Google LLC
(72) LIU, Eric, HC
GORAN, Charles
(74) dr. A. Krebs
(31) 201514619863
(32) 11.02.2015
(33) United States of America
(47) 16.04.2025

(51) G06F 3/03
H04W 4/80
G06F 3/01
G06F 3/0346
H04L 67/52
H04L 67/12
H04W 4/02
(11) EP3948500
(21) EP20776591.8
(22) 25.03.2020
(54) SYSTEMS AND METHODS FOR VIRTUAL AND AUGMENTED REALITY
(73) Magic Leap, Inc.
(72) HAND, Randall E.
(74) ir. W.J.J.M. Kempes
(31) 201962823619 P
(32) 25.03.2019
(33) United States of America
(47) 23.04.2025

(51) G06F 3/0481
H04M 1/7243
(11) EP3920013
(21) EP20749048.3
(22) 15.01.2020
(54) INFORMATION DISPLAY METHOD AND TERMINAL
(73) VIVO MOBILE COMMUNICATION CO., LTD.
(72) LIANG, Weitao
(74) J.M.H. Duyver lic.
(31) 201910100621
(32) 31.01.2019
(33) China
(47) 02.04.2025

(51) G06F 3/04842
G06F 40/58
(11) EP4170476
(21) EP22839626.3
(22) 18.08.2022
(54) TRANSLATION METHOD AND ELECTRONIC DEVICE
(73) Honor Device Co., Ltd.
(72) LIU, Junfeng
YAN, Chaojie
(74) ir. W.J.J.M. Kempes
(31) 202210023045
202111028829
(32) 10.01.2022
02.09.2021
(33) China
China
(47) 26.03.2025

(51) G06F 3/0485
(11) EP4320507
(21) EP21724961.4
(22) 23.04.2021
(54) STRETCHING CONTENT TO INDICATE SCROLLING BEYOND THE END OF THE CONTENT
(73) Google LLC
(72) BEARMAN, Nicholas John
ESCUDE, Michel Comin
JAGGI, Jorim Dorian
CINEK, Selim Flavio
DIMARTILE, JT
BAUER, Sebastian
(74) dr. A. Krebs
(31) 202163171023 P
(32) 05.04.2021
(33) United States of America
(47) 23.04.2025

(51) G06F 3/0488
G06F 3/023
(11) EP3686727
(21) EP20162862.5
(22) 09.09.2015
(54) DISAMBIGUATION OF KEYBOARD INPUT
(73) Microsoft Technology Licensing, LLC
(72) PAHUD, Michel
HINCKLEY, Kenneth P.
BUXTON, William A. S.
HUGHES, Richard L.
SPIRIDONOVA, Irina
(74) ir. J.D. de Zeeuw
(31) 201414485720
(32) 13.09.2014
(33) United States of America
(47) 12.02.2025

(51) G06F 3/06
(11) EP3910462
(21) EP19913613.6
(22) 31.01.2019
(54) STORAGE CONTROLLER AND DATA MIGRATION MONITORING METHOD
(73) Huawei Technologies Co., Ltd.
(72) ZHANG, Xianfu
WANG, Zhengbo
(74) ir. W.J.J.M. Kempes
(47) 26.03.2025

(51) G06F 3/06
G06F 13/16
(11) EP3982243
(21) EP21180029.7
(22) 17.06.2021
(54) MEMORY SYSTEM, ELECTRONIC DEVICE INCLUDING THE SAME, AND MEMORY CONTROLLER
(73) Samsung Electronics Co., Ltd.
(72) JANG, Seongyong
YOO, Kyungphil
SEO, Sungho
LEE, Youngmin
JUNG, Haesung
SHIN, Myungsub
(74) J.M.H. Duyver lic.
(31) 20200130278
(32) 08.10.2020
(33) Korea (Republic)
(47) 02.04.2025

(51) G06F 9/445
G06F 9/455
G06F 12/1036
G06F 12/1081
(11) EP3899719
(21) EP18944005.0
(22) 21.12.2018
(54) PROCESS ADDRESS SPACE IDENTIFIER VIRTUALIZATION USING HARDWARE PAGING HINT
(73) INTEL Corporation
(72) KUMAR, Sanjay
LANTZ, Philip R.
LIU, Yi
TIAN, Kun
RAJ, Ashok
SANKARAN, Rajesh M.
(74) ir. W.J.J.M. Kempes

(47) 26.02.2025

(51) G06F 9/451
G06F 3/0484
G06F 3/0488
G06F 3/04847
G06F 3/04883
G06F 3/0489
G06F 3/147
G06F 9/445
G09G 5/30
(11) EP4220392
(21) EP22819059.1
(22) 11.01.2022
(54) DISPLAY METHOD, ELECTRONIC DEVICE AND COMPUTER STORAGE MEDIUM
(73) Honor Device Co., Ltd.
(72) CAI, Lifeng
DU, Hongyan
(74) ir. W.J.J.M. Kempes
(31) 202110650483
(32) 10.06.2021
(33) China
(47) 09.04.2025

(51) G06F 12/02
G06F 12/0868
G06F 12/126
G06F 3/06
G06F 12/0873
(11) EP4343557
(21) EP23180001.2
(22) 19.06.2023
(54) STORAGE SYSTEM AND METHOD PROVIDING CACHE AREA IN MEMORY INCLUDED IN HOST DEVICE
(73) Samsung Electronics Co., Ltd.
(72) LEE, Youngmin
(74) J.M.H. Duyver lic.
(31) 20220119541
(32) 21.09.2022
(33) Korea (Republic)
(47) 09.04.2025

(51) G06F 12/02
G11C 16/10
G11C 11/56
(11) EP4180971
(21) EP22206251.5
(22) 08.11.2022
(54) STORAGE DEVICE AND OPERATING METHOD
(73) Samsung Electronics Co., Ltd.
(72) LEE, Seunghan
(74) J.M.H. Duyver lic.
(31) 20210154290
(32) 10.11.2021
(33) Korea (Republic)
(47) 09.04.2025

(51) G06F 21/56
H04L 9/40
G06F 21/57
(11) EP4044055
(21) EP22165606.9
(22) 20.04.2018
(54) USING SMART GROUPS FOR COMPUTER-BASED SECURITY AWARENESS TRAINING SYSTEMS
(73) Knowbe4, Inc.
(72) KRAS, Greg
IRIMIE, Alin
(74) ir. J.D. de Zeeuw
(31) 201762488474 P
(32) 21.04.2017
(33) United States of America
(47) 02.04.2025

(51) G06N 3/063
G06N 3/0499
G06N 3/082
(11) EP3843012
(21) EP20195045.8
(22) 08.09.2020
(54) METHOD AND APPARATUS WITH NEURAL NETWORK DATA INPUT AND OUTPUT CONTROL
(73) Samsung Electronics Co., Ltd.
(72) KWON, Hyung-Dal
(74) J.M.H. Duyver lic.
(31) 20190176097
(32) 27.12.2019
(33) Korea (Republic)
(47) 02.04.2025

(51) G06N 10/70
G06N 10/20
G06N 7/01
G06N 20/00
H03K 19/195
B82Y 10/00
(11) EP3864584
(21) EP19783805.5
(22) 24.09.2019
(54) BAYESIAN TUNING FOR QUANTUM LOGIC GATES
(73) Microsoft Technology Licensing, LLC
(72) GRANADE, Christopher Evan
WIEBE, Nathan O.
GAMBLE, John King, IV
(74) ir. J.D. de Zeeuw
(31) 201816154552
(32) 08.10.2018
(33) United States of America
(47) 26.02.2025

(51) G06N 10/70
G06N 10/40
G06N 10/20
(11) EP3371752
(21) EP15795313.4
(22) 06.11.2015
(54) IN-SITU QUANTUM ERROR CORRECTION
(73) Google LLC
(72) KELLY, Julian Shaw
(74) dr. A. Krebs
(47) 16.04.2025

(51) G06Q 10/067
G06Q 50/02
E21B 43/00
E21B 41/00
(11) EP3794215
(21) EP19803319.3
(22) 14.05.2019
(54) ARTIFICIAL INTELLIGENCE ASSISTED PRODUCTION ADVISORY SYSTEM AND METHOD
(73) Geoquest Systems B.V.
(72) GAO, Chao
(74) ir. A. Blokland c.s.
(31) 201862671129 P
(32) 14.05.2018
(33) United States of America
(47) 12.02.2025

(51) G06T 15/00
G09G 5/00
(11) EP3596703
(21) EP18766694.6
(22) 16.03.2018
(54) MIXED REALITY SYSTEM WITH VIRTUAL CONTENT WARPING AND METHOD OF GENERATING VIRTUAL CONTENT USING SAME
(73) Magic Leap, Inc.
(72) TAYLOR, Robert, Blake
NOURAI, Reza
(74) ir. W.J.J.M. Kempes
(31) 201762472985 P
(32) 17.03.2017
(33) United States of America
(47) 23.04.2025

(51) G06T 19/00
G06T 7/00
G06F 9/4401
H04N 13/189
H04N 13/271
H04N 13/239
(11) EP3973513
(21) EP20809014.2
(22) 21.05.2020
(54) CACHING AND UPDATING OF DENSE 3D RECONSTRUCTION DATA
(73) Magic Leap, Inc.
(72) KANDRA, Mohan, Babu
STEINBRUECKER, Frank, Thomas
MOLYNEAUX, David, Geoffrey
(74) dr. R.C. van Duijvenbode c.s.
(31) 201962850900 P
(32) 21.05.2019
(33) United States of America
(47) 09.04.2025

(51) G06V 40/18
G06F 3/01
G06F 3/0346
G06F 21/32
(11) EP3676688
(21) EP17923055.2
(22) 01.09.2017
(54) DETAILED EYE SHAPE MODEL FOR ROBUST BIOMETRIC APPLICATIONS
(73) Magic Leap, Inc.
(72) AMAYEH, Gholamreza
CHEN, Jixu
(74) dr. R.C. van Duijvenbode c.s.
(47) 09.04.2025

(51) G07C 9/00
H04M 11/02
H04W 12/06
(11) EP4078542
(21) EP20815814.7
(22) 01.12.2020
(54) METHOD FOR TRANSMITTING PERSONALIZED INFORMATION TO A USER OF A BUILDING
(73) INVENTIO AG
(72) TRÖSCH, Florian
(74) dr. R.C. van Duijvenbode c.s.
(31) 19218505
(32) 20.12.2019

(33) European Patent Office (EPO)
(47) 23.04.2025

(51) G07D 11/20
G07D 11/28
(11) EP4309156
(21) EP22711483.2
(22) 09.03.2022
(54) SYSTEM AND METHOD FOR PROCESSING DOCUMENTS OF VALUE, IN PARTICULAR BANKNOTES
(73) Giesecke+Devrient Currency Technology GmbH
(72) NEUHAUSER, Richard
(74) ir. W.J.J.M. Kempes
(31) 102021001397
(32) 16.03.2021
(33) Germany
(47) 02.04.2025

(51) G08B 13/196
G08B 7/06
(11) EP4224450
(21) EP22155138.5
(22) 04.02.2022
(54) THREAT SAFETY SYSTEM AND METHOD
(73) Siemens Schweiz AG
(72) FRERE, Loic
LORGERY, Franck
(74) dr. R.C. van Duijvenbode c.s.
(47) 02.04.2025

(51) G08G 1/052
G01V 5/22
G01S 17/42
G01S 17/58
G01S 17/88
G08G 1/04
(11) EP3176605
(21) EP16191237.3
(22) 28.09.2016
(54) METHOD AND DEVICE FOR MONITORING STATE OF MOVING OBJECT AND SYSTEM FOR FAST INSPECTING VEHICLE
(73) Nuctech Company Limited
(72) TU, Junjie
XU, Yanwei
YU, Weifeng
WANG, Yongming
(74) ir. W.J.J.M. Kempes
(31) 201510886306
(32) 04.12.2015
(33) China
(47) 12.02.2025

(51) G09G 3/3233
G09G 3/3225
H10K 59/131
(11) EP3817060
(21) EP20194748.8
(22) 07.09.2020
(54) DISPLAY DEVICE
(73) Samsung Display Co., Ltd.
(72) KIM, Tae Woo
KIM, Sun Kwang
CHOI, Jong Hyun
LEE, Sang Hoon
KANG, Ki Nyeng
YANG, Tae Hoon
(74) J.M.H. Duyver lic.
(31) 20190135418
(32) 29.10.2019
(33) Korea (Republic)
(47) 02.04.2025

(51) G10L 25/51
G06F 3/01
G06F 3/0346
G10L 15/22
G06F 3/16
(11) EP3931827
(21) EP20766540.7
(22) 28.02.2020
(54) DETERMINING INPUT FOR SPEECH PROCESSING ENGINE
(73) Magic Leap, Inc.
(72) LEIDER, Colby Nelson
SHEEDER, Anthony Robert
(31) 201962812959 P
(32) 01.03.2019
(33) United States of America
(47) 26.03.2025

(51) G11C 7/10
G11C 7/22
G11C 5/04
G11C 8/06
(11) EP4310843
(21) EP23166152.1
(22) 31.03.2023
(54) REGISTER CLOCK DRIVER, OPERATING METHOD OF REGISTER CLOCK DRIVER, AND MEMORY MODULE INCLUDING REGISTER CLOCK DRIVER AND PLURALITY OF MEMORY DEVICES
(73) Samsung Electronics Co., Ltd.
(72) LEE, Bumsoo
(74) J.M.H. Duyver lic.
(31) 20220084016
202318105341
(32) 07.07.2022
03.02.2023
(33) Korea (Republic)
United States of America
(47) 09.04.2025

(51) G11C 11/56
G11C 16/10
G11C 16/34
G11C 16/04
G11C 11/54
H10B 41/35
H10D 30/68
(11) EP3968330
(21) EP20209530.3
(22) 24.11.2020
(54) PROGRAMMING AND VERIFYING METHOD FOR MULTI-LEVEL MEMORY CELL ARRAY
(73) eMemory Technology Inc.
(72) CHEN, Ying-Je
SUN, Wein-Town
KU, Wei-Ming
(74) ir. J.C. Volmer c.s.
(31) 109131727
(32) 15.09.2020
(33) Taiwan, Chinese Taipei
(47) 23.04.2025

(51) G11C 16/08
G11C 8/08
G11C 5/02
H10B 41/27
H10B 43/40
H10B 43/27
H10B 41/40
(11) EP3985673
(21) EP21186666.0
(22) 20.07.2021
(54) MEMORY DEVICE INCLUDING PASS TRANSISTOR CIRCUIT
(73) Samsung Electronics Co., Ltd.
(72) KWAK, Pansuk
JEON, Hongsoo
BYEON, Daeseok
KIM, Seungyeon
(74) J.M.H. Duyver lic.
(31) 20200134611
(32) 16.10.2020
(33) Korea (Republic)
(47) 02.04.2025

(51) G21C 17/022
(11) EP3994707
(21) EP19742298.3
(22) 03.07.2019
(54) HYDROGENATION SYSTEM FOR A PRESSURIZED WATER REACTOR AND ACCORDING METHOD
(73) FRAMATOME GMBH
(72) BEWER, Marco
NIEDERMEYER, Jörg
BENECKE, Martin
(74) dr. R.C. van Duijvenbode c.s.
(47) 26.02.2025

(51) H01J 35/12
H05G 1/02
(11) EP4141905
(21) EP22189864.6
(22) 11.08.2022
(54) X-RAY TUBE WITH AN INSULATING BODY COMPRISING A CAST BODY
(73) incoatec GmbH
(72) Schulz, Torben
Hans, Karl
Schmidt-May, Jenss
Schlie, Moritz
(74) ir. A. Blokland c.s.
(31) 102021209350
(32) 25.08.2021
(33) Germany
(47) 19.02.2025

(51) H01L 25/075
G09G 3/3233
H01L 33/62
H01L 33/24
H01L 33/00
(11) EP3905331
(21) EP19905505.4
(22) 02.07.2019
(54) DISPLAY DEVICE AND REPAIR METHOD THEREFOR
(73) Samsung Display Co., Ltd.
(72) KANG, Sin Chul
MOON, Su Mi
(74) J.M.H. Duyver lic.
(31) 20180168397
(32) 24.12.2018
(33) Korea (Republic)
(47) 02.04.2025

(51) H01L 25/075
H01L 25/16
H01L 33/20
H01L 33/44
H01L 33/50
H01L 33/58
H01L 33/62
(11) EP3848969
(21) EP19858503.6
(22) 27.02.2019
(54) LIGHT EMITTING ELEMENT BASED DISPLAY DEVICE
(73) Samsung Display Co., Ltd.
(72) LEE, Hee Keun
KONG, Tae Jin
KIM, Dae Hyun
LI, Xinxing
TAE, Chang Il
(74) J.M.H. Duyver lic.
(31) 20180104802
(32) 03.09.2018
(33) Korea (Republic)
(47) 09.04.2025

(51) H01L 27/15
H10K 59/32
H10K 59/38
(11) EP3929997
(21) EP21180605.4
(22) 21.06.2021
(54) DISPLAY DEVICE AND METHOD OF PROVIDING THE SAME
(73) Samsung Display Co., Ltd.
(72) KIM, Jong Hoon
KIM, Jeong Ki
GU, Won Ji
AHN, Jea Heon
YANG, Ji Seong
OH, Hwa Yeul
(74) J.M.H. Duyver lic.
(31) 20200075574
(32) 22.06.2020
(33) Korea (Republic)
(47) 02.04.2025

(51) H01L 31/042
H01L 31/044
(11) EP4062456
(21) EP20842175.0
(22) 18.11.2020
(54) SOLAR MODULE
(73) Hanwha Q CELLS GmbH
(72) METTE, Michael
KÜHNE, Marcel
GERBIG, Christian
(74) J. Hoekstra
(31) 102019131354
(32) 20.11.2019
(33) Germany
(47) 12.02.2025

(51) H01M 4/04
H01M 4/133
H01M 4/134
H01M 4/36
H01M 4/38
(11) EP3900078
(21) EP19831834.7
(22) 19.12.2019
(54) ELECTROACTIVE MATERIALS FOR METAL-ION BATTERIES
(73) Nexeon Limited
(72) FRIEND, Christopher Michael
MASON, Charles A.
TAYLOR, Richard Gregory
(74) J.M.H. Duyver lic.
(31) 201912991
201820695
201916274187
(32) 09.09.2019
19.12.2018
12.02.2019
(33) United Kingdom
United Kingdom
United States of America
(47) 16.04.2025

(51) H01M 4/04
H01M 4/62
H01M 10/0565
H01M 4/139
(11) EP4371163
(21) EP22748355.9
(22) 13.07.2022
(54) BINDER COMPOSITION FOR SECONDARY BATTERIES
(73) Solvay Specialty Polymers Italy S.p.A.
(72) FINSY, Vincent
LIBERALE, Francesco
BISO, Maurizio
PIERI, Riccardo Rino
FANTONI, Matteo
(74) dr. R.C. van Duijvenbode c.s.
(31) 21186199
(32) 16.07.2021
(33) European Patent Office (EPO)
(47) 02.04.2025

(51) H01M 4/78
H01M 4/42
H01M 50/267
H01M 10/04
H01M 6/42
H01M 4/02
(11) EP3504742
(21) EP17758774.8
(22) 22.08.2017
(54) VARIABLE LAYER THICKNESS IN CURVED BATTERY CELL
(73) Microsoft Technology Licensing, LLC
(72) NIKKHOO, Michael
BOOVARAGAVAN, Vijayasekaran
ZENG, Dongli
LIN, Tzu-Yuan
COLLINS, John Christopher
(74) ir. J.D. de Zeeuw
(31) 201615250628
(32) 29.08.2016
(33) United States of America
(47) 12.02.2025

(51) H01M 10/0525
H01M 10/056
C07D 231/12
(11) EP4258408
(21) EP22858781.2
(22) 18.08.2022
(54) NON-AQUEOUS ELECTROLYTE SOLUTION FOR LITHIUM SECONDARY BATTERY AND LITHIUM SECONDARY BATTERY INCLUDING THE SAME
(73) LG Energy Solution, Ltd.
(72) SEO, Young Mi
LEE, Chul Haeng
PARK, Sung Guk
OH, Jeong Woo
PARK, Byung Chun
KIM, Hyung Tae
(74) dr. ir. F.M. van Bouwelen
(31) 20210110204
(32) 20.08.2021
(33) Korea (Republic)
(47) 09.04.2025

(51) H01M 10/0567
H01M 10/0525
H01M 4/505
H01M 4/525
(11) EP4293783
(21) EP22870274.2
(22) 14.09.2022
(54) NON-AQUEOUS ELECTROLYTE SOLUTION FOR LITHIUM SECONDARY BATTERY AND LITHIUM SECONDARY BATTERY INCLUDING THE SAME
(73) LG Energy Solution Ltd.
(72) LEE, Jung Hoon
PARK, Sol Ji
LEE, Chul Haeng
LEE, Jae Won
KANG, Yoo Sun
(74) dr. ir. F.M. van Bouwelen
(31) 20210122326
(32) 14.09.2021
(33) Korea (Republic)
(47) 16.04.2025

(51) H01M 10/42
H01M 50/20
H01M 10/613
H01M 10/627
A62C 35/58
A62C 35/68
A62C 37/38
A62C 3/16
F16L 33/00
F16L 37/00
F16L 11/12
H01M 10/48
H01M 50/204
F16L 41/02
A62C 37/14
(11) EP4191734
(21) EP21883131.1
(22) 14.10.2021
(54) BATTERY RACK, POWER STORAGE DEVICE, AND POWER GENERATION SYSTEM
(73) LG Energy Solution, Ltd.
(72) KIM, Hee-Chan
JEON, Seung-Joon
JUNG, Goan-Su
LEE, Jong-Soo
SON, Kown
LEE, Seung-Jun
LEE, Kyung-Min
(74) dr. ir. F.M. van Bouwelen
(31) 20200135370
(32) 19.10.2020
(33) Korea (Republic)
(47) 16.04.2025

(51) H01M 50/147

H01M 50/342
H01M 50/627
H01M 50/103
H01M 50/186
H01M 50/55
(11) EP4415125
(21) EP23212536.9
(22) 28.11.2023
(54) TOP PATCH, ENERGY-STORAGE APPARATUS, AND ELECTRICITY-CONSUMPTION DEVICE
(73) Hithium Tech HK Limited
(72) XIONG, Yongfeng
WANG, Feng
XU, Weidong
(74) ir. W.J.J.M. Kempes
(31) 202310091038
(32) 09.02.2023
(33) China
(47) 16.04.2025

(51) H01M 50/46
(11) EP3678222
(21) EP19186650.8
(22) 16.07.2019
(54) ELECTRODE ASSEMBLY AND BATTERY
(73) Dongguan Amperex Technology Limited
(72) YIN, Wenwei
YANG, Chao
BIAN, Chunhua
ZHANG, Yanan
(74) J.M.H. Duyver lic.
(31) 201910001479
(32) 02.01.2019
(33) China
(47) 05.03.2025

(51) H01R 4/36
H01R 12/51
H01R 12/58
H01R 101/00
H01R 13/44
(11) EP3804037
(21) EP19740057.5
(22) 28.05.2019
(54) CONDUCTOR CONNECTION DEVICE AS WELL AS PRINTED CIRCUIT BOARD AND UTILITY METER COMPRISING SAME
(73) Landis+Gyr AG
(72) PETITJEAN, Pascal
(74) ir. B.Ch. Ledeboer c.s
(31) 7242018
(32) 06.06.2018
(33) Switzerland
(47) 05.03.2025

(51) H01S 5/22
(11) EP4193430
(21) EP21755753.7
(22) 05.08.2021
(54) DIODE LASER HAVING A CURRENT SHIELD
(73) Ferdinand-Braun-Institut gGmbH, Leibniz-Institut für Höchstfrequenztechnik
(72) ELATTAR, Mohamed
WENZEL, Hans
DELLA CASA, Pietro
CRUMP, Paul
(74) dr. R.C. van Duijvenbode c.s.
(31) 102020120703
(32) 05.08.2020
(33) Germany
(47) 26.02.2025

(51) H02J 50/90
H02J 50/12
H02J 50/80
H02J 50/40
(11) EP3706285
(21) EP18881348.9
(22) 18.07.2018
(54) WIRELESS CHARGING METHOD AND DEVICE AND WIRELESS CHARGING SYSTEM
(73) Huawei Technologies Co., Ltd.
(72) PEI, Changsheng
ZHU, Yongfa
ZENG, Zhiqiang
(74) ir. W.J.J.M. Kempes
(31) 201711178938
(32) 21.11.2017
(33) China
(47) 26.03.2025

(51) H04B 10/118
(11) EP3398266
(21) EP16829477.5
(22) 30.12.2016
(54) BROADBAND SATELLITE COMMUNICATION SYSTEM USING OPTICAL FEEDER LINKS
(73) ViaSat, Inc.
(72) MENDELSOHN, Aaron
(74) dr. W.A.H.M. Van Borm
(31) 201562273730 P
(32) 31.12.2015
(33) United States of America
(47) 05.02.2025

(51) H04L 1/00
H04W 56/00
H04L 5/00
(11) EP3665796
(21) EP17920946.5
(22) 10.08.2017
(54) COMMUNICATION OF COMMON CONTROL BLOCKS
(73) ZTE Corporation
(72) LIU, Xing
HE, Haigang
HAO, Peng
BI, Feng
(74) ir. A.R. Aalbers
(47) 19.03.2025

(51) H04L 1/1822
H04L 1/1867
H04L 5/00
(11) EP3751773
(21) EP19750576.1
(22) 16.01.2019
(54) TRANSMISSION METHOD AND DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) LU, Zhi
PAN, Xueming
CHEN, Xiaohang
(74) J.M.H. Duyver lic.
(31) 201810143339
(32) 11.02.2018
(33) China
(47) 02.04.2025

(51) H04L 5/00
(11) EP3288210
(21) EP16795853.7
(22) 13.05.2016
(54) CONTROL CHANNEL TRANSMISSION METHOD, DEVICE AND COMMUNICATION NODE
(73) Huawei Technologies Co., Ltd.
(72) YU, Zheng
(74) ir. W.J.J.M. Kempes
(31) 201510250208
(32) 15.05.2015
(33) China
(47) 26.03.2025

(51) H04L 5/00
(11) EP3834349
(21) EP19759142.3
(22) 07.08.2019
(54) CARRIER AGGREGATION FOR WIRELESS TRANSMIT/RECEIVE UNIT
(73) InterDigital Patent Holdings, Inc.
(72) BALASUBRAMANIAN, Anantharaman
MAHALINGAM, Nagi
PRAGADA, Ravikumar, V.
PELLETIER, Benoit
(74) dr. R.C. van Duijvenbode c.s.
(31) 201862716706 P
(32) 09.08.2018
(33) United States of America
(47) 26.03.2025

(51) H04L 5/00
(11) EP4179680
(21) EP21749481.4
(22) 09.07.2021
(54) METHODS AND APPARATUS FOR FLEXIBLE APERIODIC SRS TRANSMISSION
(73) InterDigital Patent Holdings, Inc.
(72) LEE, Moon IL
KHAN BEIGI, Nazli
MARINIER, Paul
TOOHER, Patrick
STERN-BERKOWITZ, Janet
HAGHIGHAT, Afshin
KWAK, Young Woo
(74) dr. R.C. van Duijvenbode c.s.
(31) 202163169974 P
202063091597 P
202063049932 P
(32) 02.04.2021
14.10.2020
09.07.2020
(33) United States of America
United States of America
United States of America
(47) 02.04.2025

(51) H04L 5/00
H04L 69/14
H04W 12/106
H04W 88/06
H04W 88/10
H04W 12/108
G06F 21/64
H04L 9/40
(11) EP4246858
(21) EP23166574.6
(22) 20.05.2022

(54) DATA TRANSMISSION METHOD, COMMUNICATION APPARATUS, COMPUTER-READABLE STORAGE MEDIUM AND CHIP
(73) Huawei Technologies Co. Ltd.
(72) GAN, Ming
HUANG, Guogang
LU, Yuxin
LI, Yiqing
GUO, Yuchen
LIU, Chenchen
(74) ir. W.J.J.M. Kempes
(31) 202110621403
202110559186
202110552404
(32) 03.06.2021
21.05.2021
20.05.2021
(33) China
China
China
(47) 19.02.2025

(51) H04L 5/00
H04W 72/53
H04W 72/1263
H04W 72/23
(11) EP4167668
(21) EP21845442.9
(22) 22.07.2021
(54) METHOD FOR DETERMINING CELL SCHEDULING SCHEME, APPARATUS, TERMINAL, AND NETWORK SIDE DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) PAN, Xueming
YANG, Xiaodong
LI, Gen
LIU, Siqi
(74) J.M.H. Duyver lic.
(31) 202010719844
(32) 23.07.2020
(33) China
(47) 02.04.2025

(51) H04L 9/40
(11) EP4282126
(21) EP22703495.6
(22) 18.01.2022
(54) MONITORING SECURED NETWORK USING NETWORK TAP DEVICES
(73) Landis+Gyr Technology, Inc.
(72) HUGOO, Damien
HARTMAN, James P.
CHASKO, Stephen
(74) ir. B.Ch. Ledeboer c.s
(31) 202117154327
(32) 21.01.2021
(33) United States of America
(47) 05.03.2025

(51) H04L 9/40
H04L 43/18
(11) EP3772209
(21) EP20188342.8
(22) 29.07.2020
(54) A CYBER THREAT DEFENSE SYSTEM, COMPONENTS, AND A METHOD FOR USING ARTIFICIAL INTELLIGENCE MODELS TRAINED ON A NORMAL PATTERN OF LIFE FOR SYSTEMS WITH UNUSUAL DATA SOURCES
(73) Darktrace Holdings Limited
(72) FELLOWS, Simon
(74) ir. A. Blokland c.s.
(31) 201962880450 P
(32) 30.07.2019
(33) United States of America
(47) 09.04.2025

(51) H04L 51/18
(11) EP4075760
(21) EP22150267.7
(22) 12.01.2012
(54) METHOD AND MOBILE TERMINAL FOR PROCESSING DATA IN MESSAGE
(73) Huawei Device Co., Ltd.
(72) DING, Yi
YANG, Ning
(74) ir. W.J.J.M. Kempes
(47) 19.03.2025

(51) H04L 65/10
(11) EP4154507
(21) EP20936375.3
(22) 22.05.2020
(54) COMMUNICATION METHOD, MOBILE EQUIPMENT AND NETWORK ENTITY
(73) Vivo Mobile Communication Co., Ltd.
(72) KANG, Yanchao
BUCKLEY, Adrian
(74) J.M.H. Duyver lic.
(47) 02.04.2025

(51) H04L 67/00
H04L 9/40
H04W 12/50
H04L 41/0806
(11) EP4266723
(21) EP23190784.1
(22) 04.04.2019
(54) COMMUNICATION APPARATUS, CONTROL METHOD, AND PROGRAM
(73) CANON KABUSHIKI KAISHA
(72) GOTO, Fumihide
(74) J.M.H. Duyver lic.
(31) 2018084476
(32) 25.04.2018
(33) Japan
(47) 26.02.2025

(51) H04L 69/04
(11) EP3849123
(21) EP19865712.4
(22) 26.09.2019
(54) ETHERNET DATA-BASED COMMUNICATION
(73) Huawei Technologies Co., Ltd.
(72) XU, Xiaoying
HUANG, Qufang
LIU, Xing
ZENG, Qinghai
(74) ir. W.J.J.M. Kempes
(31) 201811142740
(32) 28.09.2018
(33) China
(47) 26.03.2025

(51) H04M 1/72403
G06F 3/048
G06F 1/16
G06F 3/04845
G06F 3/04847
H04N 1/32
H04N 23/63
H04N 23/661
H04N 23/611
H04N 1/00
H04N 7/18
(11) EP3890303
(21) EP19890183.7
(22) 07.11.2019
(54) PHOTOGRAPHING METHOD AND TERMINAL
(73) VIVO MOBILE COMMUNICATION CO., LTD.
(72) CUI, Xiaodong
(74) J.M.H. Duyver lic.
(31) 201811433213
(32) 28.11.2018
(33) China
(47) 02.04.2025

(51) H04M 1/72436
H04M 1/72457
G06F 3/0482
H04L 51/214
(11) EP3916529
(21) EP20745560.1
(22) 13.01.2020
(54) MESSAGE SENDING METHOD, AND TERMINAL DEVICE
(73) VIVO MOBILE COMMUNICATION CO., LTD.
(72) ZONG, Jiaying
(74) J.M.H. Duyver lic.
(31) 201910075839
(32) 25.01.2019
(33) China
(47) 09.04.2025

(51) H04N 19/117
H04N 19/126
H04N 19/172
H04N 19/174
H04N 19/186
H04N 19/70
H04N 19/86
(11) EP3624448
(21) EP19207170.2
(22) 01.07.2013
(54) USE OF CHROMA QUANTIZATION PARAMETER OFFSETS IN DEBLOCKING
(73) Microsoft Technology Licensing, LLC
(72) SULLIVAN, Gary J.
(74) ir. J.D. de Zeeuw
(31) 201213732369
201261707948 P
201261667381 P
(32) 31.12.2012
29.09.2012
02.07.2012
(33) United States of America
United States of America
United States of America
(47) 19.02.2025

(51) H04N 19/119
H04N 19/176
H04N 19/70
(11) EP3915256
(21) EP20825757.6

(22) 19.06.2020
(54) AN ENCODER, A DECODER AND CORRESPONDING METHODS FOR SUB-BLOCK PARTITIONING MODE
(73) Huawei Technologies Co., Ltd.
(72) ZHAO, Zhijie
ESENLIK, Semih
ALSHINA, Elena Alexandrovna
WANG, Biao
BLAESER, Max
GAO, Han
KOTRA, Anand Meher
(74) ir. W.J.J.M. Kempes
(31) PCT/EP2019/066432
(32) 21.06.2019
(33) World Intellectual Property Office (WIPO)
(47) 05.03.2025

(51) H04N 21/2343
H04N 21/2387
H04N 21/41
H04N 21/4363
H04N 21/4367
H04L 65/612
H04L 65/613
H04L 65/75
(11) EP3796660
(21) EP20202444.4
(22) 03.09.2013
(54) WIRELESS MEDIA STREAMING SYSTEM
(73) Adeia Media Solutions Inc.
(72) WATTS, Robert
MINAKAMI, Michael
BAMBHANIA, Bhavya
(74) ir. W.J.J.M. Kempes
(31) 201261696747 P
(32) 04.09.2012
(33) United States of America
(47) 02.04.2025

(51) H04N 23/958
H04N 23/62
H04N 23/63
H04N 23/67
H04N 23/951
(11) EP4096211
(21) EP21743879.5
(22) 20.01.2021
(54) IMAGE PROCESSING METHOD, ELECTRONIC DEVICE AND COMPUTER-READABLE STORAGE MEDIUM
(73) Vivo Mobile Communication Co., Ltd.
(72) YUAN, Jianwei
(74) J.M.H. Duyver lic.
(31) 202010075815
(32) 22.01.2020
(33) China
(47) 02.04.2025

(51) H04W 12/02
H04W 12/08
H04W 60/00
H04W 8/18
H04W 8/20
(11) EP4221289
(21) EP23165865.9
(22) 08.05.2019
(54) A METHOD OF A USER EQUIPMENT AND A USER EQUIPMENT
(73) NEC Corporation
(72) TIWARI, Kundan
TAMURA, Toshiyuki
BASKARAN, Sheeba Backia Mary
(74) ir. J.C. Volmer c.s.
(31) 201811029941
(32) 09.08.2018
(33) India
(47) 23.04.2025

(51) H04W 28/08
H04W 28/02
H04W 76/11
H04W 28/086
H04W 76/15
H04W 76/20
H04W 92/20
H04W 76/34
(11) EP3738339
(21) EP19754678.1
(22) 12.02.2019
(54) METHOD FOR DATA OFFLOADING, METHOD FOR DRB IDENTIFIER ALLOCATING, METHOD FOR RESOURCE RELEASING, AND DEVICE
(73) Samsung Electronics Co., Ltd.
(72) XU, Lixiang
WANG, Hong
WANG, Weiwei
(74) dr. R.C. van Duijvenbode c.s.
(31) 201810892475
201810149995
(32) 07.08.2018
13.02.2018
(33) China
China
(47) 02.04.2025

(51) H04W 36/00
H04W 4/00
(11) EP3860196
(21) EP18934547.3
(22) 27.09.2018
(54) USER EQUIPMENT MEASUREMENT GAP TIMING
(73) NTT DOCOMO, INC.
(72) TAKADA, Takuma
(74) dr. ir. F.M. van Bouwelen
(47) 09.04.2025

(51) H04W 36/00
H04W 36/32
H04W 48/20
H04W 36/06
H04W 24/02
H04W 24/08
H04W 36/36
(11) EP4287704
(21) EP22758819.1
(22) 18.02.2022
(54) CELL DATA TRANSMISSION METHOD AND APPARATUS, AND ELECTRONIC DEVICE
(73) Vivo Mobile Communication Co., Ltd.
(72) KUANG, Yunsheng
(74) J.M.H. Duyver lic.
(31) 202110219300
(32) 26.02.2021
(33) China
(47) 09.04.2025

(51) H04W 36/12
(11) EP4075871
(21) EP22170747.4
(22) 19.06.2018
(54) USER PLANE RELOCATION
(73) InterDigital Patent Holdings, Inc.
(72) SHI, Xiaoyan
AHMAD, Saad
(74) dr. R.C. van Duijvenbode c.s.
(31) 201762521878 P
(32) 19.06.2017
(33) United States of America
(47) 02.04.2025

(51) H04W 48/10
H04B 7/06
H04W 12/06
H04W 40/24
H04W 8/00
H04W 88/10
H04W 88/06
H04W 88/04
H04W 84/18
(11) EP3659352
(21) EP18783567.3
(22) 28.08.2018
(54) MULTI-BAND MILLIMETER WAVE NETWORK DISCOVERY
(73) Sony Group Corporation
(72) ABDALLAH, Ramy Medhat
ABOUELSEOUD, Mohamed
SAKODA, Kazuyuki
(74) ir. W.J.J.M. Kempes
(31) 201715828687
201762557232 P
(32) 01.12.2017
12.09.2017
(33) United States of America
United States of America
(47) 09.04.2025

(51) H04W 48/16
H04L 5/00
H04W 36/00
H04W 52/02
H04W 48/12
H04W 56/00
H04L 27/26
H04W 88/08
H04W 92/12
(11) EP3783970
(21) EP19799600.2
(22) 10.05.2019
(54) COMMUNICATION METHOD AND DEVICE
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) LIANG, Jinyao
GENG, Tingting
YAN, Le
ZENG, Qinghai
(74) ir. W.J.J.M. Kempes
(31) 201810450465
(32) 11.05.2018
(33) China
(47) 26.03.2025

(51) H04W 52/02
(11) EP3809762
(21) EP20213095.1
(22) 08.01.2020
(54) POWER SAVING MECHANISM
(73) Beijing Xiaomi Mobile Software Co., Ltd.

(72) Zhou, Hua
Xu, Kai
Jeon, Hyoungsuk
Dinan, Esmael
Park, Kyungmin
Babaei, Alireza
Cirik, Ali Cagatay
(74) J.M.H. Duyver lic.
(31) 201962789948 P
(32) 08.01.2019
(33) United States of America
(47) 05.03.2025

(51) H04W 72/04
H04W 56/00
H04W 74/08
(11) EP3834533
(21) EP18929092.7
(22) 10.08.2018
(54) METHODS, APPARATUS AND SYSTEMS FOR DISCOVERING WIRELESS COMMUNICATION NODES
(73) ZTE Corporation
(72) LIU, Wenhao
MIAO, Ting
BI, Feng
LU, Youxiong
XING, Weimin
(74) ir. A.R. Aalbers
(47) 09.04.2025

(51) H04W 74/08
H04W 28/06
H04W 28/04
H04W 48/08
H04L 1/08
H04W 48/12
H04W 74/00
H04W 74/0833
(11) EP4391698
(21) EP24173520.8
(22) 13.09.2016
(54) BASE STATION, RADIO TERMINAL, AND METHODS THEREIN
(73) NEC Corporation
(72) FUTAKI, Hisashi
(74) ir. J.C. Volmer c.s.
(31) 2015217963
(32) 05.11.2015
(33) Japan
(47) 09.04.2025

(51) H04W 74/08
H04W 72/04
H04L 5/00
(11) EP4050962
(21) EP20883995.1
(22) 09.11.2020
(54) METHOD FOR TRANSMITTING/RECEIVING CHANNEL BY USING GUARD BAND IN ONE CARRIER IN WIRELESS COMMUNICATION SYSTEM, AND DEVICE THEREFOR
(73) Wilus Institute of Standards and Technology Inc.
(72) NOH, Minseok
CHOI, Kyungjun
KWAK, Jinsam
(74) ir. C.G.C. Veldman-Dijkers
(31) 20190142164
(32) 07.11.2019
(33) Korea (Republic)
(47) 26.02.2025

(51) H04W 76/15
H04W 76/11
H04W 36/22
(11) EP3852481
(21) EP19867532.4
(22) 17.09.2019
(54) MODE SWITCHING METHOD AND DATA STREAM DISTRIBUTION METHOD AND APPARATUS
(73) HUAWEI TECHNOLOGIES CO., LTD.
(72) PENG, Wenjie
ZHANG, Hongping
WANG, Rui
LUO, Haiyan
HU, Xingxing
(74) ir. W.J.J.M. Kempes
(31) 201811145535
(32) 29.09.2018
(33) China
(47) 26.03.2025

(51) H05B 47/165
H05B 45/20
H05B 47/155
H05B 47/125
(11) EP4159006
(21) EP21726132.0
(22) 20.05.2021
(54) DETERMINING AN IMAGE ANALYSIS REGION FOR ENTERTAINMENT LIGHTING BASED ON A DISTANCE METRIC
(73) Signify Holding B.V.
(72) MEERBEEK, Berent, Willem
ALIAKSEYEU, Dzmitry, Viktorovich
(31) 20176239
(32) 25.05.2020
(33) European Patent Office (EPO)
(47) 19.02.2025

(51) H10K 59/124
(11) EP3823033
(21) EP20205576.0
(22) 04.11.2020
(54) DISPLAY APPARATUS AND METHOD OF MANUFACTURING THE SAME
(73) Samsung Display Co., Ltd.
(72) Hong, Pilsoon
Sugitani, Koichi
Cho, Hyungbin
Park, Gwuihyun
Kim, Hyein
Park, Chulwon
(74) J.M.H. Duyver lic.
(31) 20190143933
(32) 12.11.2019
(33) Korea (Republic)
(47) 02.04.2025

(51) H10N 50/01
H10N 50/10
H10N 50/80
(11) EP4404724
(21) EP23218566.0
(22) 20.12.2023
(54) MULTILAYERED SPIN-ORBIT TORQUE DEVICE AND MANUFACTURING METHOD THEREOF
(73) Samsung Electronics Co., Ltd.
(72) CHEPULSKYY, Roman
IKHTIAR, -
APALKOV, Dmytro
JEONG, Jaewoo
(74) ir. B.Ch. Ledeboer c.s
(31) 202318185961
202363440264 P
(32) 17.03.2023
20.01.2023
(33) United States of America
United States of America
(47) 16.04.2025

EP4

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

(51) A24F 40/465
A24F 40/50
H05B 6/10
H05B 6/44
A24F 40/20
(11) EP3695735
(21) EP20162710.6
(22) 09.08.2018
(54) AEROSOL GENERATING SYSTEM WITH MULTIPLE INDUCTOR COILS
(73) Philip Morris Products S.A.
(74) dr. W.A.H.M. Van Borm
(72) MIRONOV, Oleg
COURBAT, Jerome Christian
REEVELL, Tony
STURA, Enrico
(31) 17185588
(32) 09.08.2017
(33) European Patent Office (EPO)
(47) 07.04.2021

(51) A61M 5/20
A61M 5/315
A61M 15/00
(11) EP2364742
(21) EP10184272.2
(22) 22.05.2006
(54) Device for delivering medicament
(73) SHL Medical AG
(72) Brunnberg, Lennart
Karlsson, Anders
Kronestedt, Victor
Olson, Stephan
Deurell, Tomas
(31) 282593
140989
05104734
(32) 21.11.2005
01.06.2005
01.06.2005
(33) United States of America
United States of America
European Patent Office (EPO)
(47) 14.11.2018

(51) C07D 311/58
C11C 3/00
C07D 311/72
C07J 9/00
(11) EP2635592
(21) EP11784965.3
(22) 02.11.2011
(54) METHOD FOR OBTAINING PHYTOSTEROLS AND/OR TOCOPHEROLS FROM RESIDUE OF A DISTILLATION OF THE ESTERS OF VEGETABLE OILS, PREFERABLY FROM DISTILLATION RESIDUE FROM A TRANSESTERIFICATION OF VEGETABLE OILS
(73) Verbio SE
(74) ir. M.F.J.M. Ketelaars c.s.
(72) LEMP, Joachim
BAADE, Nico
PÖHLS, Emanuel
(31) 102010050293
(32) 03.11.2010
(33) Germany
(47) 16.08.2017

(51) C07K 16/00
C07K 16/24
C07K 16/28
A61P 37/04
(11) EP3245226
(21) EP16703351.3
(22) 12.01.2016
(54) METHODS FOR PRODUCING OPTIMISED THERAPEUTIC MOLECULES
(73) Crescendo Biologics Limited
(74) ir. W.J.J.M. Kempes
(72) EDWARDS, Bryan
TENG, Yumin
(31) 201500464
(32) 12.01.2015
(33) United Kingdom
(47) 06.03.2019

(51) C08L 5/00
C08L 5/06
C07H 1/08
C08B 37/00
(11) EP2459596
(21) EP10729889.5
(22) 07.07.2010
(54) DEWATERING BIOMASS MATERIAL COMPRISING POLYSACCHARIDE, METHOD FOR EXTRACTING POLYSACCHARIDE FROM BIOMASS MATERIAL, AND DEWATERED BIOMASS MATERIAL
(73) CP KELCO ApS
(74) ir. J.D. de Zeeuw
(72) OLSEN, Helle Bech
ANDERSEN, Mogens
TRUDSOE, Jens Eskil
(31) 510478
(32) 28.07.2009
(33) United States of America
(47) 11.05.2022

(51) C11B 3/06
C11B 3/12
C11C 1/04
A61K 31/202
(11) EP3294850
(21) EP16793072.6
(22) 12.05.2016
(54) VERY LONG CHAIN POLYUNSATURATED FATTY ACIDS FROM NATURAL OILS
(73) Epax Norway AS
(74) ir. J.C. Volmer c.s.
(72) BREIVIK, Harald
SVENSEN, Harald
(31) 201562160690 P
(32) 13.05.2015
(33) United States of America
(47) 30.09.2020

(51) C12N 15/861
A61K 48/00
C12N 9/26
(11) EP2428229
(21) EP10772050.0
(22) 05.05.2010
(54) ONCOLYTIC ADENOVIRUSES FOR TREATING CANCER
(73) Fundació Privada Institut D'investigació Biomèdica
Institut Català D'Oncologia
(72) GUEDAN CARRIÓ, Sònia
CASCALLO PIQUERAS, Manel Maria
ALEMANY BONASTRE, Ramon
(31) 200901201
(32) 06.05.2009
(33) Spain
(47) 03.08.2016

(51) G06F 8/656
G06F 11/07
G16H 40/40
G06F 9/445
(11) EP2476223
(21) EP10815970.8
(22) 07.09.2010
(54) METHODS AND ARTICLES OF MANUFACTURE FOR HOSTING A SAFETY CRITICAL APPLICATION ON AN UNCONTROLLED DATA PROCESSING DEVICE
(73) Abbott Diabetes Care, Inc.
(74) ir. F.A. Geurts c.s.
(72) BERNSTEIN, Daniel M.
NEKOOMARAM, Saeed
SLOAN, Mark K.
(31) 359265 P
240578 P
(32) 28.06.2010
08.09.2009
(33) United States of America
United States of America
(47) 14.04.2021

(51) G21F 5/06
C09K 21/00
(11) EP3455860
(21) EP17723340.0
(22) 10.05.2017
(54) ARRANGEMENT FOR TRANSPORTING RADIOACTIVE MATERIAL AND METHOD FOR INCREASING THE FIRE PROTECTION OF SUCH AN ARRANGEMENT
(73) Daher Nuclear Technologies GmbH
(74) ir. J.C. Volmer c.s.
(72) HILBERT, Franz
FAVRE, Alexia
HENNEBACH, Maik
CLOPPENBORG, Tim

(31) 102016108947
(32) 13.05.2016
(33) Germany
(47) 18.03.2020

(51) H05B 6/64
H05B 6/76
(11) EP2747515
(21) EP13401124.6
(22) 02.12.2013
(54) Cooking device
(73) Miele & Cie. KG
(72) Metz, Thomas
Pöhler, Eckhard
Wiemann, Heinrich
(31) 102012112805
(32) 20.12.2012
(33) Germany
(47) 03.03.2021

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) A23F 5/40
A23F 5/24
A23F 5/34
B65D 85/804
A47J 31/40
(11) EP2996485
(21) EP14789352.3
(22) 08.05.2014
(54) COFFEE PRODUCT
(73) Koninklijke Douwe Egberts B.V.
(72) SIDAPRA, Kalpita, Dilipkumar
DIXEY, Justin
O'BRIEN, Stephen, William
BENJAMIN, Jack
(74) ir. B.Ch. Ledeboer c.s
(31) 201308661
(32) 14.05.2013
(33) United Kingdom
(47) 02.10.2019

(51) A24F 40/465
A24F 40/50
(11) EP3664640
(21) EP18755429.0
(22) 09.08.2018
(54) AEROSOL GENERATING SYSTEM WITH MULTIPLE SUSCEPTORS
(73) Philip Morris Products S.A.
(72) MIRONOV, Oleg
COURBAT, Jerome Christian
REEVELL, Tony
ROSSOLL, Andreas Michael
STURA, Enrico
(74) dr. W.A.H.M. Van Borm
(31) 17185595
(32) 09.08.2017
(33) European Patent Office (EPO)
(47) 02.06.2021

(51) A61K 9/107
A61K 38/095
A61M 15/08
A61P 5/10
A61P 7/12
A61P 13/00
A61P 13/02
A61P 25/00
(11) EP2442821
(21) EP10790053.2
(22) 15.06.2010
(54) SAFE DESMOPRESSIN ADMINISTRATION
(73) Serenity Pharmaceuticals LLC
(72) FEIN, Seymour
(74) ir. A. Blokland c.s.
(31) 268954 P
(32) 18.06.2009
(33) United States of America
(47) 14.06.2017

(51) B61L 19/06
B61L 21/06
B61L 27/00
B61L 25/06
(11) EP3549842
(21) EP18177217.9
(22) 12.06.2018
(54) TRAIN TRAFFIC CONTROL SYSTEM AND METHOD FOR SAFE DISPLAYING A STATE INDICATION OF A ROUTE AND TRAIN CONTROL SYSTEM
(73) Thales Management & Services Deutschland GmbH
(72) SCHÄFER, Michael
TIPLÉ, Abhay
(74) J.M.H. Duyver lic.
(31) 102018205235
18166202
(32) 06.04.2018
06.04.2018
(33) Germany
European Patent Office (EPO)
(47) 11.05.2022

(51) B63H 8/10
(11) EP3914510
(21) EP20701589.2
(22) 22.01.2020
(54) WING RIG
(73) Boards & More GmbH
(72) WINNER, Ken
(74) ir. B.Ch. Ledeboer c.s
(31) 102019101656
(32) 23.01.2019
(33) Germany
(47) 07.06.2023

(51) C12Q 1/68
(11) EP2992115
(21) EP14795452.3
(22) 30.04.2014
(54) MULTIPLEX LABELING OF MOLECULES BY SEQUENTIAL HYBRIDIZATION BARCODING
(73) California Institute of Technology
(72) CAI, Long
LUBECK, Eric
ZHIYENTAYEV, Timur
COSKUN, Ahmet
HE, Ting-Fang
SOHN, Chang, Ho
SHAH, Sheel
(74) ir. J.D. de Zeeuw
(31) 201461971974 P
201361817651 P
(32) 28.03.2014
30.04.2013
(33) United States of America
United States of America
(47) 04.03.2020

(51) E05F 1/00
E05F 3/22
(11) EP3064689
(21) EP15203032.6
(22) 30.12.2015
(54) HOLD-OPEN DEVICE FOR A DOOR
(73) dormakaba Deutschland GmbH
(72) BRUCKERT, Michael
BÖSE, Felix
WAMSER, Thomas
KAMPMEIER, Stefan
(74) ir. J.D. de Zeeuw
(31) 102015102924
(32) 02.03.2015
(33) Germany
(47) 24.04.2019

(51) G10L 19/038
G10L 19/07
(11) EP3084761
(21) EP13899497.5
(22) 17.12.2013
(54) AUDIO SIGNAL ENCODER
(73) Nokia Technologies Oy
(72) VASILACHE, Adriana
RAMO, Anssi, Sakari
LAAKSONEN, Lasse, Juhani
(74) ir. W.J.J.M. Kempes
(47) 25.03.2020

SPC

Aangevraagde en verleende aanvullende beschermingsertificaten (of de verlengingen van de aanvullende beschermingscertificaten).
Applications and granted Supplementary Protection Certificates (or the extensions of the Supplementary Protection Certificates).

(21) 300743
(22) 16.06.2015
(11) 300743
(73) Boehringer Ingelheim Vetmedica GmbH
(74) ir. F.A. Geurts c.s.
(68) EP1751276
(54) Vaccine comprising an attenuated pestivirus.
(94) 28.12.2029
(95) Levend verzwakt Bovien Viraal Diarree Virus 2 (BVDV-2), niet-cytopathogeen, wild-type stam NY-93, dat een deletie in de coderende sequentie voor glycoproteïne Erns en een deletie in de coderende sequentie voor Npro heeft, waarbij de deletie in de coderende sequentie voor glycoproteïne Erns leidt tot inactivering van de in Erns aanwezige RNase-activiteit en de deletie in de coderende sequentie voor Npro leidt tot inactivering van het Npro
(93) EU/2/14/176 29.12.2014
(47) 26.01.2016

(21) 300744
(22) 16.06.2015
(11) 300744
(73) Boehringer Ingelheim Vetmedica GmbH
(74) ir. F.A. Geurts c.s.
(68) EP1751276
(54) Vaccine comprising an attenuated pestivirus.
(94) 28.12.2029
(95) Levend verzwakt Bovien Viraal Diarree Virus 1 (BVDV-1), niet-cytopathogeen, wild-type stam KE-9, dat een deletie in de coderende sequentie voor glycoproteïne Erns en een deletie in de coderende sequentie voor Npro heeft, waarbij de deletie in de coderende sequentie voor glycoproteïne Erns leidt tot inactivering van de in Erns aanwezige RNase-activiteit en de deletie in de coderende sequentie voor Npro leidt tot inactivering van het Npro
(93) EU/2/14/176 29.12.2014
(47) 26.01.2016

(21) 300745
(22) 16.06.2015
(11) 300745
(73) Boehringer Ingelheim Vetmedica GmbH
(74) ir. F.A. Geurts c.s.
(68) EP1751276
(54) Vaccine comprising an attenuated pestivirus.
(94) 28.12.2029
(95) Combinatie van levend verzwakt Bovien Viraal Diarree Virus 1 (BVDV-1), niet-cytopathogeen, wild-type stam KE-9, dat een deletie in de coderende sequentie voor glycoproteïne Erns en een deletie in de coderende sequentie voor Npro heeft, waarbij de deletie in de coderende sequentie voor glycoproteïne Erns leidt tot inactivering van de in Erns aanwezige RNase-activiteit en de deletie in de coderende sequentie voor Npro leidt tot inactivering van het Npro en levend verzwakt Bovien Viraal Diarree Virus 2 (BVDV-2), niet-cytopathogeen, wild-type stam NY-93, dat een deletie in de coderende sequentie voor glycoproteïne Erns en een deletie in de coderende sequentie voor Npro heeft, waarbij de deletie in de coderende sequentie voor glycoproteïne Erns leidt tot inactivering van de in Erns aanwezige RNase-activiteit en de deletie in de coderende sequentie voor Npro leidt tot inactivering van het Npro
(93) EU/2/14/176 29.12.2014
(47) 26.01.2016

(21) 301229
(22) 26.04.2023
(11) 301229
(73) THE REGENTS OF THE UNIVERSITY OF CALIFORNIA
Lundquist Institute for Biomedical Innovation at Harbor-UCLA Medical Center
(74) ir. A. Blokland c.s.
(68) EP3692995
(54) DEOXYCHOLATE FOR REDUCTION OF FAT
(92) RVG120593 04.08.2017
(94) 18.05.2030
(95) Deoxycholaat
(93) IS/1/16/071/01 29.07.2016
(47) 23.11.2023

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 appelate court ex NL Patent Law 1995. Opposition(s) filed ex European Patent Convention.

(11) EP2812128
(51) B05D 3/02
C09D 151/00
C08F 265/06
C08F 265/02
(00) 29/24
17.07.2024

---

(11) EP3234953
(51) H01B 3/44
C08F 210/02
C08F 2/38
C08J 3/22
C08K 5/42
(00) 31/24
31.07.2024

---

(11) EP3356753
(51) F26B 21/04
F26B 21/06
F26B 23/00
F26B 23/02
(00) 29/24
17.07.2024

---

(11) EP3715410
(51) C08L 23/12
C08F 110/06
C08F 210/06
(00) 29/24
17.07.2024

---

(11) EP3936451
(51) B65D 5/68
B65D 65/38
(00) 29/24
17.07.2024

---

(11) EP4026440
(51) A24F 40/46
A61M 15/06
(00) 26/24
26.06.2024

---

(11) EP4028295
(51) B60T 8/88
B60T 8/92
B60T 8/172
(00) 29/24
17.07.2024

---

(11) EP4146999
(51) F41A 15/22
(00) 19.05.2025
(00) 18/24
01.05.2024
(00) Appeal
(00) NEXTER Systems

---

(11) EP4212324
(51) B29D 99/00
B29C 70/34
F03D 1/06
B29L 31/08
B29C 70/52
(00) 29/24
17.07.2024

---

(11) EP4281503
(51) C08L 67/02
(00) 29/24
17.07.2024

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 appelate court ex NL Patent Law 1995 in respect of which a decision has been taken. Opposition(s) decisions ex European Patent Convention.

(11) 301048
(00) 25/24
19.06.2024
(00) Negative

(11) EP3122172
(51) A01G 9/24
H02S 20/10
H02S 20/30
F24S 30/425

(11) EP3417175
(51) F04D 19/04
F04C 25/02
F04D 25/06

(11) EP3449049
(51) D03D 27/00
D06M 16/00
(00) 27/22
06.07.2022

(11) EP3473337
(51) B01J 23/42
B01J 37/03
B01J 37/04
B01J 37/16
B01J 35/00
B01J 35/02
H01M 4/90

(11) EP3475621
(51) F24C 15/20
(00) 35/23
30.08.2023

(11) EP3536310
(51) A61K 9/00
A61M 5/28
A61M 5/31
A61M 5/315
(00) 09/22
02.03.2022

(11) EP3674222
(51) B65B 9/213
B65B 37/16
B65B 57/14
B65B 51/30
B65B 55/00
B65B 65/00
B65B 37/02
B65B 9/20

(11) EP3674222
(51) B65B 9/213
B65B 37/16
B65B 57/14
B65B 51/30
B65B 55/00
B65B 65/00
B65B 37/02
B65B 9/20

(11) EP3679922
(51) A61K 9/00
A61P 27/02
A61P 43/00
A61M 5/315
A61M 5/31
A61M 5/28
A61M 5/00

(11) EP3685652
(51) A01C 17/00

(11) EP3706538
(51) A01C 7/04
(00) 21/23
24.05.2023

(11) EP3777834
(51) A61K 9/00
A61M 5/28
A61M 5/31
A61M 5/315
A61P 43/00
A61P 27/02

(11) EP3780758
(51) H04W 48/18
H04W 76/15
H04W 88/02
H04W 88/08

(11) EP3875385
(51) B65D 21/06

(11) EP3953541
(51) E04F 21/18
B66F 1/02
E04G 25/08
B25F 1/00
B25H 1/00
B05C 17/005

MED

Overige mededelingen.
Other communications.

(11) 2015320
(00) 15.05.2025
(51) A61N 5/06
(00) Established

(11) 2015475
(00) 15.05.2025
(51) A61N 5/06
(00) Established

(11) 2029907
(00) 14.05.2025
(51) F16L 47/28
B29C 44/58
F16K 15/03
F16K 15/16
(00) Established

(11) 2035815
(00) 15.05.2025
(51) G01J 1/02
G01J 1/04
G01J 1/42
G01J 3/02
(00) Established

(11) 2035857
(00) 15.05.2025
(51) C07F 7/18
(00) Based on clerical error

(11) 2038865
(00) 15.05.2025
(51) C12Q 1/6888

(11) 2039688
(00) 07.05.2025
(51) G06T 17/00
G06N 20/00
(00) Based on request sender
(00) Bij indiening van de octrooiaanvraag is per abuis vergeten de tweede aanvrager te vermelden.

(11) EP2364742
(51) A61M 5/20
A61M 5/315
A61M 15/00

(11) EP2428229
(51) C12N 15/861
A61K 48/00
C12N 9/26

(11) EP2459596
(51) C08L 5/00
C08L 5/06
C07H 1/08
C08B 37/00

(11) EP2476223
(51) G06F 8/656
G06F 11/07
G16H 40/40
G06F 9/445

(11) EP2635592
(51) C07D 311/58
C11C 3/00
C07D 311/72
C07J 9/00

(11) EP2747515
(51) H05B 6/64
H05B 6/76

(11) EP3245226
(51) C07K 16/00
C07K 16/24
C07K 16/28
A61P 37/04

(11) EP3294850
(51) C11B 3/06
C11B 3/12
C11C 1/04
A61K 31/202

(11) EP3455860
(51) G21F 5/06
C09K 21/00

(11) EP3695735
(51) A24F 40/465
A24F 40/50
H05B 6/10
H05B 6/44
A24F 40/20

(11) EP3786383
(00) 14.05.2025
(51) E04B 2/82
E04B 1/00
E04B 1/61
E04B 2/74
(00) Established

(11) EP4048478
(51) B25B 13/08
B25B 21/00
B25B 28/00
B25B 13/50

(11) EP4064471
(51) H01S 5/22
H01L 21/301
H01S 5/10
H01S 5/343

VRV

Verval of nietigverklaring.
Lapse or annulment.

(11) EP1598878
(00) 17.05.2025
(00) Patent Expired

(11) EP1598905
(00) 20.05.2025
(00) Patent Expired

(11) EP1600214
(00) 17.05.2025
(00) Patent Expired

(11) EP1600360
(00) 21.05.2025
(00) Patent Expired

(11) EP1602458
(00) 20.05.2025
(00) Patent Expired

(11) EP1602813
(00) 18.05.2025
(00) Patent Expired

(11) EP1607673
(00) 19.05.2025
(00) Patent Expired

(11) EP1636190
(00) 19.05.2025
(00) Patent Expired

(11) EP1645741
(00) 18.05.2025
(00) Patent Expired

(11) EP1685763
(00) 17.05.2025
(00) Patent Expired

(11) EP1714784
(00) 18.05.2025
(00) Patent Expired

(11) EP1724303
(00) 20.05.2025
(00) Patent Expired

(11) EP1737928
(00) 15.04.2025
(00) Patent Expired

(11) EP1747281
(00) 21.05.2025
(00) Patent Expired

(11) EP1747579
(00) 18.05.2025
(00) Patent Expired

(11) EP1747622
(00) 17.05.2025
(00) Patent Expired

(11) EP1748733
(00) 18.05.2025
(00) Patent Expired

(11) EP1748780
(00) 19.05.2025
(00) Patent Expired

(11) EP1749027
(00) 18.05.2025
(00) Patent Expired

(11) EP1749126
(00) 20.05.2025
(00) Patent Expired

(11) EP1749237
(00) 20.05.2025
(00) Patent Expired

(11) EP1750541
(00) 21.05.2025
(00) Patent Expired

(11) EP1750592
(00) 16.05.2025
(00) Patent Expired

(11) EP1750628
(00) 19.05.2025
(00) Patent Expired

(11) EP1750631
(00) 19.05.2025
(00) Patent Expired

(11) EP1751066
(00) 19.05.2025
(00) Patent Expired

(11) EP1751276
(00) 18.05.2025
(00) Patent Expired

(11) EP1751289
(00) 18.05.2025
(00) Patent Expired

(11) EP1752762
(00) 17.05.2025
(00) Patent Expired

(11) EP1753431
(00) 18.05.2025
(00) Patent Expired

(11) EP1753461
(00) 19.05.2025
(00) Patent Expired

(11) EP1753713
(00) 20.05.2025
(00) Patent Expired

(11) EP1753715
(00) 21.05.2025
(00) Patent Expired

(11) EP1753871
(00) 17.05.2025
(00) Patent Expired

(11) EP1755380
(00) 21.05.2025
(00) Patent Expired

(11) EP1755770
(00) 17.05.2025
(00) Patent Expired

(11) EP1756034
(00) 20.05.2025
(00) Patent Expired

(11) EP1756136
(00) 20.05.2025
(00) Patent Expired

(11) EP1756333
(00) 19.05.2025
(00) Patent Expired

(11) EP1756735
(00) 20.05.2025
(00) Patent Expired

(11) EP1756963
(00) 18.05.2025
(00) Patent Expired

(11) EP1759042
(00) 19.05.2025
(00) Patent Expired

(11) EP1759327
(00) 17.05.2025
(00) Patent Expired

(11) EP1765254
(00) 19.05.2025
(00) Patent Expired

(11) EP1765580
(00) 18.05.2025
(00) Patent Expired

(11) EP1765860
(00) 18.05.2025
(00) Patent Expired

(11) EP1766034
(00) 20.05.2025
(00) Patent Expired

(11) EP1766394
(00) 20.05.2025
(00) Patent Expired

(11) EP1766972
(00) 17.05.2025
(00) Patent Expired

(11) EP1771146
(00) 19.05.2025
(00) Patent Expired

(11) EP1771151
(00) 18.05.2025
(00) Patent Expired

(11) EP1773978
(00) 19.05.2025
(00) Patent Expired

(11) EP1783179
(00) 18.05.2025
(00) Patent Expired

(11) EP1809397
(00) 17.05.2025
(00) Patent Expired

(11) EP1817875
(00) 17.05.2025
(00) Patent Expired

(11) EP1875011
(00) 21.05.2025
(00) Patent Expired

(11) EP2204201
(00) 26.03.2025
(00) European Patent got Revoked

(11) EP2204971
(00) 16.05.2025
(00) Patent Expired

(11) EP2228064
(00) 17.05.2025
(00) Patent Expired

(11) EP2234023
(00) 20.05.2025

(00) Patent Expired

(11) EP2248567
(00) 16.05.2025
(00) Patent Expired

(11) EP2273522
(00) 16.05.2025
(00) Patent Expired

(11) EP2279672
(00) 17.05.2025
(00) Patent Expired

(11) EP2327470
(00) 18.05.2025
(00) Patent Expired

(11) EP2338332
(00) 20.05.2025
(00) Patent Expired

(11) EP2371848
(00) 18.05.2025
(00) Patent Expired

(11) EP2380576
(00) 19.05.2025
(00) Patent Expired

(11) EP2380903
(00) 18.05.2025
(00) Patent Expired

(11) EP2424554
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2434124
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2522719
(00) 20.05.2025
(00) Patent Expired

(11) EP2530147
(00) 20.05.2025
(00) Patent Expired

(11) EP2537942
(00) 20.05.2025
(00) Patent Expired

(11) EP2610533
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2628704
(00) 17.05.2025
(00) Patent Expired

(11) EP2644622
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2645455
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2780789
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2791160
(00) 16.01.2025
(00) European Patent got Revoked

(11) EP2805712
(00) 17.05.2025
(00) Patent Expired

(11) EP2838443
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2849705
(00) 15.01.2025

(00) EPV Ceased Effect

(11) EP2864927
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2905463
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2929339
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2957152
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2964451
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP2998906
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3006470
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3016103
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3024424
(00) 17.01.2025
(00) European Patent got Revoked

(11) EP3024889
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3053535
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3062066
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3081037
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3085677
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3117407
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3143944
(00) 16.05.2025
(00) Patent Expired

(11) EP3147194
(00) 14.01.2025
(00) European Patent got Revoked

(11) EP3153641
(00) 21.05.2025
(00) Patent Expired

(11) EP3166499
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3173499
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3178038
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3179477
(00) 15.01.2025

(00) EPV Ceased Effect

(11) EP3194078
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3195957
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3234563
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3234564
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3240277
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3257690
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3265771
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3281939
(00) 19.05.2025
(00) Patent Expired

(11) EP3285986
(00) 15.01.2025
(00) European Patent got Revoked

(11) EP3287265
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3292873
(00) 11.04.2025
(00) European Patent got Revoked

(11) EP3293804
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3295487
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3297790
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3300666
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3301715
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3311110
(00) 15.01.2025
(00) EPV Ceased Effect

(11) EP3314300
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(11) EP3471075
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(11) EP3649459
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(11) EP3816317
(00) 15.01.2025
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(11) EP3818098
(00) 13.04.2025

(00) European Patent got Revoked

(11) EP3821197
(00) 15.01.2025
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(11) EP3826269
(00) 15.01.2025
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(11) EP3827064
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(11) EP4327031
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(11) EP4327583
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(11) EP4331791
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(00) 15.01.2025
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(11) EP4334510
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(00) 15.01.2025
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VRB

Correcties op eerdere publicaties.
Corrections on earlier publications.

CO

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

(71) Kaz Europe Sàrl
(73) Kaz Europe Sàrl
(11) EP2308771
(00) 13.05.2025
(51) B65D 45/32
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(71) Kaz Europe Sàrl
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(71) F. HOFFMANN-LA ROCHE AG
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C07K 16/32
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(71) Palomo Limited
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C22B 21/00
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G01N 23/223
G01N 21/71
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B07C 5/34
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B07C 5/346
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(71) Danisco US Inc.
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H01R 13/70
F21K 9/272
F21Y 103/10
F21Y 115/10
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F21Y 115/10
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(71) F. HOFFMANN-LA ROCHE AG
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(71) Pierre Fabre Médicament
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(71) Sunled Life Science B.V.
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(71) Boston Scientific Medical Device Limited
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(71) Geolog International B.V.
Bluethink S.p.A.
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(11) EP3582925
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(71) Danisco US Inc.
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(00) 15.05.2025
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(71) Kaz Europe Sàrl
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(11) EP3728058
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TVH

Topografieën van halfgeleiderproducten.
Depots of topographies of semi-conductor products.

UP1

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

(11) EP3569268
(11) EP4177504
(11) EP3712447
(11) EP4196001
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(11) EP4177174
(11) EP4355485
(11) EP4458163
(11) EP4462629
(11) EP4327709
(11) EP4397606
(11) EP4519575

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 Rijksoctrooiwet 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 Rijksoctrooiwet 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 Rijksoctrooiwet 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.