INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01\textsuperscript{st} January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

( Om Prakash Gupta )

CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

21\textsuperscript{ST} FEBRUARY, 2020
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>JURISDICTION</td>
<td>10150 – 10151</td>
</tr>
<tr>
<td>SPECIAL NOTICE</td>
<td>10152 – 10153</td>
</tr>
<tr>
<td>EARLY PUBLICATION (DELHI)</td>
<td>10154 – 10175</td>
</tr>
<tr>
<td>EARLY PUBLICATION (MUMBAI)</td>
<td>10176 – 10200</td>
</tr>
<tr>
<td>EARLY PUBLICATION (CHENNAI)</td>
<td>10201 – 10262</td>
</tr>
<tr>
<td>EARLY PUBLICATION (KOLKATA)</td>
<td>10263 – 10264</td>
</tr>
<tr>
<td>PUBLICATION AFTER 18 MONTHS (DELHI)</td>
<td>10265 – 10562</td>
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<tr>
<td>PUBLICATION AFTER 18 MONTHS (MUMBAI)</td>
<td>10563 – 10728</td>
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<td>PUBLICATION AFTER 18 MONTHS (KOLKATA)</td>
<td>10874 – 10886</td>
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<td>WEEKLY ISSUED FER (DELHI)</td>
<td>10887 – 10933</td>
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<td>WEEKLY ISSUED FER (MUMBAI)</td>
<td>10934 – 10954</td>
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<td>PUBLICATION U/R 84(3) IN RESPECT OF APPLICATION FOR RESTORATION OF PATENTS (MUMBAI)</td>
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<td>PUBLICATION UNDER SECTION 43(2) IN RESPECT OF THE GRANT (DELHI)</td>
<td>11014 – 11029</td>
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<td>11030 – 11037</td>
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<td>PUBLICATION UNDER SECTION 43(2) IN RESPECT OF THE GRANT (KOLKATA)</td>
<td>11055 – 11063</td>
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<td>INTRODUCTION TO DESIGN PUBLICATION</td>
<td>11064</td>
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<tr>
<td>DESIGN CORRIGENDUM</td>
<td>11065</td>
</tr>
<tr>
<td>DESIGNS ACT, 2000 (UNDER SECTION 31) RECTIFICATION OF REGISTER</td>
<td>11066</td>
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<tr>
<td>REGISTRATION OF DESIGNS</td>
<td>11067 - 11138</td>
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### THE PATENT OFFICE
**KOLKATA, 21/02/2020**

**Address of the Patent Offices/Jurisdictions**

The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

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<td>(91)(22) 24123311,</td>
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[www.patentoffice.nic.in](http://www.patentoffice.nic.in)

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

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बेसाइट: http://www.ipindia.nic.in
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पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अनुसार पेटेंट (संशोधन) नियम, 2006 द्वारा बांटित सभी आवेदन, सूचनाएं, बिंदुबारण या अन्य बैनर जारी की जा सकती है। जो उसी स्थान पर किसी अनुपस्थित बैंक ने किए हुए प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है।

The Patent Office Journal No. 08/2020 Dated 21/02/2020 10151
SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

(Om Prakash Gupta)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS
SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules thereunder, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18\textsuperscript{th} months, grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every \textbf{Friday}.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.
**Early Publication:**

The following patent applications have been published under section 11A (2) of The Patents (Amendment) Act 2005 and rule 24A of The Patents (Amendment) Rules, 2006. Any person may file representation by way of opposition to the Controller of Patents at the appropriate office against the grant of the patent in the prescribed manner under section 25(1) of the Patents (Amendment) Act 2005 read with the rule 55 of The Patents (Amendment) Rules, 2006:

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<td>(22) Date of filing of Application :16/01/2019</td>
<td>(43) Publication Date : 21/02/2020</td>
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<td>(54) Title of the invention : PRECIPITATE TAILING FERTILIZER AND ITS PROCESS THEREOF</td>
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| (51) International classification :C05F000500000000, C09D000740000000, C02F000172000000, G02B000630000000, D06M001351300000 | (71) Name of Applicant :
1) MOHAR SINGH
MEENA S/O SHREE CHAINU RAM MEENA |
| (31) Priority Document : NA | Address of Applicant : VILLAGE POST-GURDHE (TUPIYALKA PURA), TEHSIL-MANDRAYAL, DIST-KARAULI, RAJASTHAN Rajasthan India |
| (32) Priority Date : NA | (72) Name of Inventor :
1) MOHAR SINGH
MEENA S/O SHREE CHAINU RAM MEENA |
| (33) Name of priority country : NA | |
| (36) Name of inventor : NA | |
| (86) International Application No : NA | |
| (87) International Publication Date : NA | |
| (61) Patent of Addition to Application : NA | |
| (62) Divisional to Application Number : NA | |
| (63) Filing Date : NA | |
| (64) Filing No : NA | |

**Abstract :**

The present invention provides an organic precipitate tailing fertilizer prepared from carbon precipitates, tailing powder and protein solutions that increases soil fertility and capable of maintaining soil pH at 6.7 to 7.3. Furthermore an organic fertilizer is chemical free and non-toxic and provides a low cost method and easy method to prepare fertilizer from the natural products.

No. of Pages : 15 No. of Claims : 10
SMART TOE-RINGS FOR CAPTURING MOVEMENTS AND GESTURES

A foot mounted wearable device is disclosed. The device includes a toe-ring which includes a plurality of sensors configured to sense motion data associated with a foot of a user. The toe-ring also includes a microcontroller which includes a motion information processing subsystem configured to process the sensed motion data acquired from the plurality of sensors to determine motion information associated with the user. The device also includes a motion information analysis subsystem configured to receive the motion information associated with the user via an established communication network. The motion information analysis subsystem is also configured to analyze received motion information associated with the user to derive knowledge of at least one function associated with the user, wherein the at least one function includes at least one of gesture recognition, steps tracking of the user or a combination thereof. FIG. 1

No. of Pages : 34 No. of Claims : 10
A switch assembly with improved sealing for preventing ingress of contaminants within the switch assembly is disclosed. The switch assembly includes a cover member and a housing member. The housing member is adapted to be disposed within the cover member. The switch assembly includes a switching unit adapted to be coupled to the housing member and the cover member. The switching unit includes a supporting member having a top surface and a bottom surface distal to the top surface. The bottom surface includes a peripheral portion adapted to be interposed between the housing member and the cover member. Further, the switching unit includes a plurality of switches adapted to be coupled to the supporting member. The peripheral portion positioned between the housing member and the cover member is adapted to prevent ingress of contaminants within the switch assembly. FIGURE 1a
(54) Title of the invention: WASTE CERAMIC REINFORCED BIOCOMPOSITE TILES

This invention relates to the use of waste ceramic materials as fillers within thermosetting polymer matrix along with biobased co-matrix to develop biocomposite materials for structural applications wherein the waste ceramic reinforced biocomposite material consists of a hybrid polymer matrix, hydrophobic compound, curing agent and waste ceramic particulates as reinforcement material. The process of preparation of the biocomposite material is also described.

No. of Pages: 20 No. of Claims: 8
There is provided a road cleaning apparatus (100) mounted on a vehicle (160). The road cleaning apparatus (100) comprises a conveyor belt system (120) having a first end (1202) and a second end (1204), inclined at a predetermined angle between the second end (1204) and the ground (170), a plurality of pick-up brushes (130) transversely disposed on a conveyor belt (1210) of the conveyor belt system (120), a collector plate (150) disposed proximal to the second end (1204) of the conveyor belt system (120), a trash collector (140) disposed proximal to the first end (1202) of the conveyor belt system (120) and a power source (150) connected with the conveyor belt system (120).
The invention relates to a forced draft biomass stove which has better efficiency to burn the fuel with minimum controlled exhausts. The biomass stove comprises of an outer casing covering wall as the essential components of the stove. Two air passages are attached to the stove; one of them is situated at periphery of the bottom of the outer casing and directly connected to the combustion chamber; second one is situated at middle of the peripheral structure of the outer chamber. Within the casing is present, a substantially cylindrical combustion chamber, with a grate for keeping the fuel; a spring is situated between of the bottom of the combustion chamber and grate; a combustion chamber which is solely filled with the biomass, technically smaller diameter than the outer chamber's diameter; the grate shall be suppressed due to the weight of biomass which is situated on the grate and by the time of fuel burning the spring shall be spread and the flame will be continuous in the manner of size of flames upwards and this is the USP of this invention.

No. of Pages : 14 No. of Claims : 10
The abstract behind this Invention is that it is a Simple Spice, Can be easily used while Cooking and Can be easily disposed off. The Consumer need not to take any hassle while It is dipped in Cooking. Even this Spice does not leave any residue in the Cooker.i.e the Cooking Vessel. Upon using this Spice the food Smell Tasty and Yummy and give a Spice taste on tongue. The Spice is made up of five ingredients. Ingredients Quantity(Pieces) Cardamon 10 Black Pepper 6 Cinnamon Ismail Piece Bayleaf 2 Cloves 5 The Ingredients may vary Accordingly as per Requirement The Picture of the Ingredients are attached at the Annexures at Page-15.
A joint unit (100) is disclosed. The joint unit includes a drive member (10) and a gear (40) and a pair of connecting flanges (60a and 60b). The gear (40) is used for transformation of torque provided by the drive member (10), the gear (40) is connected to the drive member (10) by a coupling (30). The first connecting flange (60a) connected to the gear (40) including a front side (60al) and one or more undulating surfaces, the one or more undulating surfaces includes at least one notch (60a2). The second connecting flange (60b) is coupled to the first connecting flange (60a). The second connecting flange (60b) includes a front side (60bl) and a curvature. The front side (60bl) includes at least one projection (60b2) in a shape complementary to the at least one notch (60a2) provided on the first connecting flange (60a). The curvature includes a plurality of protrusions (60b3). FIG. 1
Title of the invention: BICYCLE WITH ELECTRIC MOTOR ASSIST

Abstract:
The present disclosure generally relates to an electrically operated power assist unit or a kit for a manually operated vehicle, such as a bicycle, and, more particularly, to a new and novel construction of a power assist apparatus for a bicycle, and more particularly provides driving system and the electric motor by manual provided in parallel, and controls the force by the electric motor in response to a change in driving force by manpower (hereinafter referred to as pedaling force).

No. of Pages: 30 No. of Claims: 8
(51) International classification: C07C0069760000, C08F0010000000, C07C0045460000, C07C0045670000, A61K0031443900

(71) Name of Applicant:
1) Neha Krishnarth  
   Address of Applicant: H.No.1, Panchsheel Colony, Civil Lines, Moradabad-244001, India. Uttar Pradesh India
2) Dr. Anurag
3) Dr. Santosh Kumar Verma

(57) Abstract:
The present invention is related to novel antimicrobial and antitubercular compounds showing good activity against different strains of bacteria and fungi. The compounds of present invention also show good antitubercular activity against mycobacterium H37Rv strains. The compounds of present invention are represented by formula -1; Formula-1 Wherein; Ri is a radical optionally selected from hydrogen, halide or hydroxy group; R2is a radical optionally selected from hydrogen or nitro group; and R3 is a radical optionally selected from hydrogen, halide or nitro group. The present invention also discloses process of preparation of these compound.

No. of Pages: 39  No. of Claims: 16
The Patent Office Journal No. 08/2020 Dated 21/02/2020 10164

Title of the invention : HYBRID ENERGY MANAGEMENT SYSTEM USING SOLAR, WIND, FUEL CELL SOURCES FOR REMOTE REGION

Abstract : Present invention is related to a hybrid energy management system using solar, wind, fuel cell sources for remote region. The objective of the present invention to solve problems and adequacies in the prior art related to hybrid energy management system. The system comprises a solar system, a wind system, a fuel cell system, an electrolyze system, an electrolyze system an ultra-capacitor system, an energy demand classifier module and a controller unit.

No. of Pages : 19  No. of Claims : 6
(54) Title of the invention: SYSTEM FOR SMART HOME FUSION BILLING SYSTEM USING FOG COMPUTING

(57) Abstract:
Disclosed is a system that uses the fog computing for better bandwidth and latency. It includes a home area network communicably coupled with an EDGE/MIST network layer and a FOG layer. It provide real time smart bill for single home as on entity. The bill generated is accompanied with all the bills (Electrical Energy, Water, Cooking Gas pipeline, etc.). The proposed system will be used for generating the revenue every time that may be used for further purpose. The end user may submit the all bills at a moment, whenever they want to submit. The system provides ease and user-friendliness. Figure 1.

No. of Pages: 24 No. of Claims: 12
(54) Title of the invention : SYSTEM OF REAL-TIME ANIMAL HEALTH MONITORING USING INTERNET OF THINGS SENSORS

(51)
International :H01L0027120000,A01K0029000000,A61B0005110000,A61K0039000000,G01D0021020000
classification

(31) Priority Document :NA
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(57) Abstract :
The present invention is related to a system of real-time animal health monitoring using internet of things sensors. The objective of present invention is to solve the anomalies presented in the prior art techniques related to real-time animal health monitoring.

No. of Pages : 20 No. of Claims : 7
Title of the invention: PARTHENIUM SHRUBS AND AYURVEDA HERBS UPROOTING INSTRUMENT

Abstract:
This machine is useful in uprooting herbs and shrubs like Parthenium hysterophorus, Withania somnifera, Lawsonia inermis, maize etc. This machine works on the principle of first kind of lever. The manual force applied in downward direction and it generates 8 times greater uplift force is created to uproot the plant. It is very low cost instrument. It is very useful to formers and Ayurveda doctors.
Title of the invention: NOVEL METHOD FOR PREVENTION OF SECURITY ATTACK ON CLOUD MEDICAL DATA USING ARTIFICIAL INTELLIGENCE AND IOT

Abstract:
The usage of cloud computing for storage and retrieval of electronic health records (EHRs) have seen a steep rise in the past few years. This invention proposes an efficient attack prevention mechanism from an authorized user to the electronic health record stored in cloud. Also, an effective secured electronic health record retrieval mechanism is also proposed. Health record signals are been stored and processed for the predetermined health function or parameters to define value in the cloud.

No. of Pages: 18  No. of Claims: 4
The present invention relates to a process for recovering high purity copper from a wide variety of printed circuit boards in an energy efficient manner. Using Induction as well Plasma furnaces, PCB pieces were heat treated in the temperature range 700-1000 °C for times up to 60 minutes, without prior mechanical handling including sorting, hammering, crushing, removing of components, powdering of PCBs. High purity (81-97%) copper foils were recovered from waste PCBs in a very small number of process steps; residual copper was also recovered in the form of alloys. Producing minimal local area pollution, contamination and secondary waste products, this invention presents an energy efficient method to extract high purity copper from waste PCBs using a small number of process steps.
Present invention is related to a system and method for extraction of sweet compounds from natural stevia. The objective of the present invention to solve problems and adequacies in the prior art related to extraction of sweet compounds from natural stevia.

No. of Pages : 22 No. of Claims : 3
The invention is related to a system and method for detection and control of cyber-attacks in large network using data mining. The objective of the invention is to solve the anomalies presented in the prior art techniques related to detection and control of cyber-attacks in large network.
The present invention discloses a novel composition and process for fabrication of solid lipid nanoparticles which are capable of carrying an active pharmaceutical ingredient. The composition for fabrication of solid lipid nanoparticles of present invention comprised of an internal oil phase formed by solid lipid particle forming compound, an active pharmaceutical ingredient; and an external aqueous phase comprising of aqueous extract of fruits of *Sapindus mukorossi*. The process for fabrication of solid lipid nanoparticles disclosed in present invention comprised of steps; preparing aqueous extract of fruits of *Sapindus mukorossi*, dissolving solid lipid particle forming compound in 2 ml mixture of methanol and chloroform, dispersing active pharmaceutical ingredient, and pouring this solution into a homogenizer tube containing aqueous extract solution of fruits of *Sapindus mukorossi* and homogenizing it for 30 minutes at 3000 rpm. After homogenization, organic solvents were removed by evaporating on a rotary evaporator at 400mbar, 45°C, 30min. The above emulsion was then poured into ice-cold water up to a volume of 50 ml and stirred for 3 hrs, and then centrifuged at 12000 rpm for 15 minutes to separate the solid lipid material containing the drug. This was then redispersed in 1.5% w/v of aqueous extract solution of fruits of *Sapindus mukorossi* and sonicated for 6 minutes, to obtain the SLNs.
Dental plaque is a bacterial biofilm which consists of complex communities harboring several bacterial species. The products of biofilm bacteria are known to initiate a chain of reaction leading to tissue destruction. Hence in order to maintain optimum oral health, regular personal plaque removal measures must be taken. Tooth brushing is currently the most commonly used measure in oral hygiene practice. Design of the toothbrush is a crucial factor which plays an important role in removing the plaque and maintaining oral hygiene. In this modern and fast era people require toothbrushes which provide maximum cleaning without any behavioral modification and brushing instruction with reduced human effort. This multi-tufted toothbrush having a total length of 20 cms with a small brushing surface all around the head in 360 degrees, enables an individual to reach inaccessible areas. Slightly longer handle with two bends in it, simulates human finger. Multi-tufted bristles all around the head, will also stimulate the gingiva with fine penetration which will result in better interdental cleaning and prevention of dental caries.
Title of the invention: METHOD FOR AUDITING IN REAL-TIME AND IN-LINE THE QUALITY OF A DIGITAL OPHTHALMIC LENS MANUFACTURING PROCESS

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3) ZANGERLE, Thomas

Abstract:
The present invention relates to a method for modelling and quantitatively evaluating an overall quality level of an ophthalmic lens, said lens having specific lens and environment parameters, and being produced by a digital ophthalmic lens manufacturing process. A method for performing a real-time in-line quality audit of a freeform production line is also provided, using a quality score of the manufacturing process, based on a standardisation of the overall quality level calculated digitally on each lens produced, relative to the expected value of said quality level in the context of normal production, possibly affected by systematic differences evaluated independently. Figure: 1

No. of Pages: 20 No. of Claims: 15
The invention relates to a device (30) for preparing a liquid sample for a gas chromatograph, comprising a liquid compartment (12) and a gas compartment (16) which are separated by a semipermeable separating layer (32), the liquid compartment (12) comprising a supply line (14) for the liquid sample, and the gas compartment (16) comprising an outlet (18) that can be connected to the gas chromatograph. A heating element (34) is associated with the liquid compartment (12). As a result of the interaction of the semipermeable separating layer (32) and the heating element (34), small quantities of the liquid sample can also be prepared.
The present invention relates to toothbrush having replaceable head wherein bristles can be easily detach with tongue cleaner characterized in that locking system is provided at the head of the toothbrush and bristles part, when user press the bristles part at the head of the toothbrush then the head and handle will be connected together and become a normal toothbrush. Following invention described in detail with help of figure 1 of sheet 1 which shows illustrative diagram of proposed toothbrush.

No. of Pages : 11 No. of Claims : 2
A system for preparation of fluid and a method to operate the same is disclosed. The apparatus an input receiving subsystem configured to receive an input from a user, a container selection subsystem configured to select at least one container from a plurality of containers based on a received input and a predefined set of instructions to initiate a process of preparing the fluid, an amount measurement subsystem configured to measure an amount of ingredients from the at least one selected container based on the predefined set of instructions by using a measuring device upon titling at least one selected container at a predefined angle, a dispensing subsystem configured to dispense desired amount of ingredient from a dispenser cap of the at least one selected container into a vessel for preparing the corresponding fluid. FIG. 1
System and method for connecting a plurality of devices through a wireless medium via an interface is provided. The system includes a device paring subsystem configured to enable paring between a plurality of input devices and a corresponding plurality of output devices via at least one wireless communication medium, a device identification subsystem configured to identify one or more input parameters and one or more output parameters, a configuration subsystem configured to transmit an initialisation signal, receive an operating signal and compute a time delay, a device synchronisation subsystem configured to synchronise the plurality of input devices with the corresponding plurality of output devices, a data transmission subsystem configured to enable transmission of data. The system enables the user to transmit data from an input device to multiple output devices with varying versions and corresponding varying operating frequency. Thus, making the system feasible and efficient in terms of time. FIG. 1

No. of Pages : 30 No. of Claims : 8
Title of the invention: DEVICE FOR MEASURING VOLUME OF MATERIAL AND METHOD THEREOF

Abstract:
A device for measuring volume of material and a method thereof are disclosed. The device includes a body. The body includes a first valve located at a top of the body, wherein actuation of the first valve is configured to dispense material. The body also includes a measurement unit located configured to measure the volume of material using one or more sensors upon receiving the material from the first valve. The body also includes a dispensing unit, wherein actuation of the dispensing unit is configured to dispense measured volume of material. FIG. 1
The present invention relates to a method for detection of heart abnormality in ultrasound video. The object of the proposed invention is to detect heart abnormality using image processing techniques in combination with machine learning or cognitive technologies to predict the possible abnormality post analysis in the backend by the process designed to detect the abnormality. In this process the ultrasound videos are fed into the system, it will run the procedure to analyze the videos and give the results in the form of abnormality identification. Following invention is described in detail with the help of Figure 1 and 2 of sheet 1 showing the block diagram of the present invention.

No. of Pages : 12 No. of Claims : 2
This invention discloses a novel process for the creation and tuning of defects in nanosilica to produce defected nanosilica using magnetiothermia, wherein 250 mg nanosilica is treated with varying concentrations of Mg ranging from 10 weight% to 50 weight% at 675°C for 12 hours in a sealed tube in an oxygen free environment; the tube is then cooled to room temperature and broken to recover defected nanosilica and magnesium oxide (MgO); MgO is then removed by repeated washing with dilute hydrochloric acid in water-ethanol mixture. The defected nanosilica so produced can be used to convert carbon dioxide into methane.
This invention discloses a process of development of solution phase synthesis protocol for Dendritic Plasmonic Colloidosomes (DPCs) by controlled nucleation growth of plasmonic material such as Gold Nanoparticles (Au NPs) onto a high surface area Dendritic Fibrous Nanosilica with varying inter-particle distances and particle size distributions. DPCs absorb light over the entire visible region as well as in the near-infrared region of solar light, transforming golden coloured gold into black gold, under the process of Localized Surface Plasmon Resonance. The distribution of particle sizes and the plasmonic coupling between Au NPs lead to an enhancement of the electric field extending beyond the surface region of a single NP and covering the space between several nanoparticles, producing hotspots of locally enhanced electric field. A greater number of hotspots also produced localized heat, creating a nanoheater, which is useful for steam generation and as an energy source for catalysis.
**Title of the invention**: DECISION RULES BASED SUPERVISED MACHINE LEARNING FOR POWER QUALITY APPLICATION

| (51) International classification | :H01L21/00 |
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| (32) Priority Date | :NA |
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**Abstract**:

6. ABSTRACT: The power grid has to suffer from several power quality issues with the increased penetration of renewable energy resources. As all the power quality related problems lead to impact both distributor and consumer applications. There is limited prediction model to identify power quality issues in advance. Furthermore, the traditional methods are practically costly, which makes it challenging to use for prediction and classification of power quality events. The supervised machine learning techniques, the subfield of artificial intelligences, explore binary classification and prediction approach, superior learning capabilities and high-speed response. This is an efficient alternative solution in the field of power quality. This paper introduces the linear mathematical decision-based rule to predict/ classify the sag, swell and interruption related power quality problems more precisely. Data collected from Maharashtra State Electricity Distribution Company Ltd. is used as training samples to train the classifier by means of supervisory approach. Applicability of the supervisory learning method to the classification of power quality problems demonstrated in this paper can be considered as a stepping-stone in upcoming AI technologies for power system.

No. of Pages: 6  No. of Claims: 5
The Patent Office Journal No. 08/2020 Dated 21/02/2020

(54) Title of the invention: SYSTEM AND METHOD REMOTELY MONITOR AND ANALYZE THE PROGRESS OF A CONSTRUCTION PROJECT

(57) Abstract:
A system and method for remotely monitoring and analyzing the progress of a construction project. The method includes a step of capturing geo-tagged images with a timestamp data from a target site of the construction project through an autonomous drone. The method includes a step of receiving the geo-tagged images with the timestamp data captured by the autonomous drone through a database. The method includes a step of a user interface coupled with a computing device for facilitating an administrator for entering data pertaining to the progress of the construction project provided by a contractor. The method includes a step of processing the geo-tagged images through an image processing module. The method includes a step of comparing the entered data with the geo-tagged images processed by the image processing module and generating a comparison report through a comparison module. The method includes a step of identifying the correctness of the data provided by the contractor through a monitoring module. The most illustrative drawing: FIG. 2.

No. of Pages: 22  No. of Claims: 7
**Title of the invention:** AHR-VEHICLE: ADJUSTING THE HEIGHT OF A VEHICLE ACCORDING TO INDIAN ROAD STATUS

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**Abstract:**

The invention AHR-Vehicle is a system for adjusting the height of vehicles. The vehicle is supported by a hollow cylinder and a piston having an undersized piston skirt is mounted on the suspension system's coil spring, and sealingly slidable within the cylinder bore. When a fluid is introduced into the expandable pressure space between the piston and the cylinder top, the piston and cylinder are forced apart, raising the vehicle. The undersized piston skirt can extend beyond the end of the cylinder, allowing the piston a greater travel length within the cylinder bore. The invention may be operated manually by a vehicle driver through push buttons, which can be the vehicle's existing cruise control buttons. Alternatively, the system can be automated using a control unit to automatically adjust ground clearance to avoid collision with obstacles in the vehicle's path. In another embodiment, the lift system, or any lift system, is prevented from activating, and deactivates (if previously activated) if the vehicle is travelling at excessive speed.

No. of Pages : 28
No. of Claims : 9
Title of the invention: DIGITAL RETINAL SCREENING SYSTEM EMBEDDED SMARTWATCH ARCHITECTURE

Abstract:
The present invention discloses a digital retinal screening system embedded smart watch architecture, wherein, the system comprises smart watch, retinal camera, and digital processing system. The system of the present invention is to scan the retina of the diabetic patients for detecting the future vision loss in earlier stage through retinal camera, which is embedded within the smart watch. The digital processing system of the present invention includes the several stages such as Pre-processing, blood vessel segmentation, optic disc segmentation, MA detection, feature extraction, and Classification for processing the retina. Finally, the risk level of the patient's retina is determined. [To be published with Figure.1]
Title of the invention: CATTLE SECURITY AND HEALTH MONITORING DRONE

Abstract

The use of unmanned aerial systems (UASs) or drones for monitoring livestock is slowly gaining motivation in the field of agriculture. In farms, drones can keep an eye on the livestock, will be in less need of manpower; instead, they can easily keep track on cattle. With the cattle monitoring drones farmers can continuously monitor their livestock remotely using the thermal sensing technology, they can find any of the animals using their body temperature. UAV can act as a herder and keep an eye on the cattle. The drone can take a quick round of cattle field at any time and anyone can easily review the video made by drones to check the number of cattle or the drone will give alert of cattle count to farmer on his mobile. This system will also help farmers to keep thieves away from the cattle field as they can be easily detected by thermal drones. Cattle surveillance drones will make the life of farmers easy by keeping constant watch on their livestock, which is not always possible. The system will monitor cattle behavior, it identifies animal with higher or lower temperature needing closer inspection and send the captured frames to the server for further analysis. With the help of Infra-red thermography the cattle images will be analyzed by the system for identification of diseases, infection and injury. The system will provide reliable, convenient, effortless system which helps to manage cattle activities.
The Patent Office Journal No. 08/2020 Dated 21/02/2020

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application : 13/02/2020
(43) Publication Date : 21/02/2020

(54) Title of the invention : IADA- IOT- BASED TECHNOLOGY: INTELLIGENT AUTOMOTIVE DEVICE, SYSTEM AND PROCESS USING IOT- BASED TECHNOLOGY

(57) Abstract :
IADA- IOT- BASED TECHNOLOGY: INTELLIGENT AUTOMOTIVE DEVICE, SYSTEM AND PROCESS USING IOT- BASED TECHNOLOGY. ABSTRACT My Invention IADA- IOT- BASED TECHNOLOGY* An apparatus and method are described for an automotive internet of things (IoT) system, apparatus, and method. For example, one embodiment of an automotive Internet of Things (IoT) device configured within a car comprises: a wireless communication interface to take signal strength measurements to a mobile device, the signal strength measurements comprising signal strength values; and a signal strength analysis and notification module to analyze the signal strength values from the mobile device to determine when the user has left his or her mobile device at home or at another location and to responsively generate a notification to the user.

No. of Pages : 7  No. of Claims : 8
A stent system (10) is disclosed. The stent system (10) includes a stent (100) having a proximal end (100a) and distal end (100b). The stent (100) has a defined length. Moreover, the stent (100) includes a closed cell design with flared ends at the proximal end (100a) and distal end (100b). The said closed cell design has plurality of rows of circumferential cells placed adjacent to each other. Each of the plurality of rows has varying dimensions. Each circumferential cell being formed by interconnecting multiple struts (102). One or more of the plurality of cells provided at the proximal end (100a) and the distal end (100b) include one or more extensions (102c). Further, a plurality of coiled markers (106) is placed on the extensions (102c) of the cells. Additionally, a delivery device (400) for delivering the stent is disclosed. The delivery device (400) includes a delivery wire (401) and a re-sheathing unit (407) mounted over the delivery wire (401) to which the stent (100) is coupled.
Disclosed is a fertilizing and pest-controlling composition comprises of Azadirachta indica leaves powder in an amount of 687.5g; Ipomoea carnea leaves powder in an amount of 257.5g; Daturastramonium leaves powder in an amount of 156.2g; Ricinus communis leaves powder in an amount of 318.7g; Annonareticulata leaves powder in an amount of 26.2g; Carica papaya leaves powder in an amount of 375.0g; Miletiapinnata leaves powder in an amount of 325.0g; Calotropis gigantean leaves powder in an amount of 312.5g; Aeglemarmelos leaves powder in an amount of 137.5g; Nicotianatabacum leaves powder in an amount of 312.5g; Lantana camara leaves powder in an amount of 15.6g. vegetables, other species, cow excreta, oils and water. Also provided is method of manufacturing the composition.

No. of Pages : 19 No. of Claims : 2
Title of the invention: DESIGN FOR EMERGENCY CONTROL MODULE FOR VEHICLE

Abstract:
ABSTRACT In some emergency situations, passengers find difficulty to get out of the vehicles which are mostly electronically operated passenger vehicles. When the vehicle's electronic control unit (ECU) gets damaged due to crash, passengers get stuck inside the vehicle and cannot operate doors and windows. It is difficult for passengers to break the window without any tools; the injured passenger cannot break the window. This system is developed to overcome this harm to the life. The supplementary system is designed to sense that the vehicle is crashed or the water level around the car is increased to threatening level in case of flood. The system will take control when the main ECU is damaged. By implementing this system in passenger vehicle, we can able to decrease the number of causalities.
Title of the invention : NAVIGATION SYSTEM FOR TWO WHEELER USING SMART HANDLES

Abstract:
The proposed invention provides navigation system for two-wheeler by using vibrational motors to convey navigational directions to the user using computational mobile application that provides directions to be followed along the travel path giving priority to the rider™s safety. Smart handles will indicate appropriate directions through vibration motors placed on the handles of the two-wheeler. The navigational information is conveyed through sense of touch while the rider can remain focused on the road along the journey.

No. of Pages : 14 No. of Claims : 5
Title of the invention: WEFT INSERTION BY MAGNETIC SHUTTLE

Abstract:

Present invention Weft Insertion by Magnetic Shuttle provides mainly Shuttle (34) and Shuttle driver (30). Magnets are placed into Shuttle (34) and Shuttle driver (30). By the attractive force of magnets (the poles of magnets are placed opposite to each other), which are present in the Shuttle (34) and Shuttle drivers (30), Shuttle (34) and Shuttle driver (30) travels on the endless Guide path (1, 2, 3 and 4). By means of using Magnetic Shuttle (34) and Shuttle drivers (30) which provides more continuous and faster weaving process with less energy consumption as compared to other techniques for weaving process. Shuttle driver (30) is connected with Telescopic shaft (18) along with Springs provided on outer periphery of Telescopic shafts (21) which is fitted on a Driving shaft (10) and this arrangement is placed in the centre of the Guide path (1, 2, 3 and 4). As Driving shaft (10) rotates on its axis, it rotates Telescopic shaft (18) and hence magnetic Shuttle driver (30) and Magnetic Shuttle (34) for weft insertion.

No. of Pages: 26 No. of Claims: 9
Title of the invention: MODIFIED REACTIVE DYES FOR COMMERCIAL ASPECTS AND THEIR PRODUCTION METHOD

Abstract:
Modified reactive dyes for commercial aspects and their production method which involves the modification of commercially available reactive dyes by a simple process, thereby increasing their stability to alkali, solubility in water as well as their yield. The modified dyes thus produced are energy saving and cost effective. The production method of these modified dyes involves the treatment of 1 mole of cyanuric chloride based commercial RO dye solution with 1 mole equivalent of nicotinic acid at optimum pH and temperature followed by clarification, buffering and spray drying to produce the modified reactive dyes. Fig. 1

No. of Pages: 39  No. of Claims: 12
An Automatic Panipuri Making Machine

The invention relates to an automatic pani-puri making machine. The present invention comprises the process of making pani-puri from start to end i.e. from making hole inside the puri and then filling the stuff into puri are automatically handled by the machine. The present invention comprises a variable axis robotic arm (1), a panipuri tray holder (2), a panipuri tray (3), a needle unit (4), a flavored potato dispenser unit (5), a flavored water dispenser unit (6) and an operator interfacing unit (7). Fig. 2

No. of Pages: 37  No. of Claims: 9
Our invention titled "System and apparatus for dynamic allocation of packets to provide high quality VoIP audio calls" relates to placing VoIP calls with high audio quality with the help of codec. The main aspect of our invention is to use dynamic allocation of packets to provide high audio call quality for VoIP calls. Our invention will utilize maximum available bandwidth to the call to achieve high call quality. Our invention performs functions to remove obstacles like audio lagging, low audio quality, and latency. Our invention will monitor the internet connection speed, it should be between 85-100 kbps to make call at an entered destination number. Our invention will monitor the internet connection speed and store the data (jitter, internet connection speed, MOS) in local system to measure call quality. Our invention provides three platforms web browser, android application and iOS application.
Title of the invention: EGG SPOILAGE DETERMINING TEST STRIP AND METHOD THEREOF

Abstract:
ABSTRACT EGG SPOILAGE DETERMINING TEST STRIP AND METHOD THEREOF

The present disclosure discloses a test strip(100) that determines freshness of an egg (40) which includes a cellulose strip (10), a mixture (20) made of hydrophilic binder and a water soluble dye coated on the cellulose strip (10) and calcium chloride (30) which is cured on the coated cellulose strip. The cured cellulose strip disposed on the egg (40) and changes to change color in event of egg spoilage. The method includes providing the test strip (100) and engaging with an egg (40). Observing the test strip (100) for selective change of color and in event when the egg is spoiled, the test strip (100) is observed to change color. The test strip (100) is compact than conventional light source required in the candling process. (To be published with Figure 1)

No. of Pages: 22  No. of Claims: 9
**Title of the invention:** IOT BASED POWER THEFT DETECTION AND MONITORING SYSTEM

**Abstract:**

There is absolute need of precise energy mapping system. The system proposed is an electronic meter comprised of sensors, controllers and wireless transmitting modules that are used to detect an unauthorized tapping on distribution lines. This helps to understand tampering of meter cover and tilting of meter. Existing systems are unable to identify the exact location of tapping. Also unable to communicate the tampering to controlling authority as well as customers promptly. The proposed system actually finds out on which electrical line there is a tapping. Real time data is provided to both receiving and transmitting end. Wireless data transmission and receiving techniques are used which can form different network topologies as per the need of the region. This will provide an additional facility of wireless meter reading with the same technique and with no extra cost. This will protect the distribution network from power theft to be done by tapping, meter tampering etc. It will help to understand power consumption at actual and the real time demand can be judged to design government power sector related policies and to define annual energy budget as well.

**No. of Pages:** 11  **No. of Claims:** 7
Title of the invention: IRS- BIKE: INTELLIGENT BIKE ROAD AND SAFETY

Abstract:

IRS- Bike: INTELLIGENT BIKE ROAD AND SAFETY

My invention IRS- Bike accelerates if both hands of rider is in contact of bike. When rider take away his left hand on the bike then bike will going in neutral stage. On the left hand of bike we fit a sensors, when left hand bike rider is not on bike this sensors working and giving command and clutch will be operate and bike will going to neutral stage. All this start after 10 second when bike rider take away his hand on bike. Handed the bike in middle of 10 seconds then the bike will continue accelerate, and not going in neutral stage. This all depend on pressure and human sense.
A two fold authentication and diagnostic system for two wheelers is provided by the present invention. The system which uses the gadget like the personal mobile comprises a communicable android device (1) with biometric scanning and recording facility capable of communicating via a bluetooth (2) with a module integrated with the vehicle (6). The integrated module consists of a PCB (3) with microcontroller capable of duplex communication with the power source (5) of the vehicle (6) and the switching circuit (4). The user needs to provide both correct biometric data and the personal password to start the vehicle. The correct input of these parameters initiates the microcontroller in the PCB (3) to start the switching circuit (4) to switch on the vehicle (6). The switching circuit cannot be bypassed by hotwiring the vehicle. All the data can be collected and stored in a server, making vehicle diagnosis very easy. NO FIGURE

No. of Pages : 13 No. of Claims : 6
The present invention discloses augmented foundations using Structural Grips used for improving pile/anchor properties. The structural grips is comprising of Sleeve, Piercing Fins / Soil anchors, and Connecting system. The sleeve or the top ring (1) is strengthened with support rods (3) which forms the soil anchors or the piercing fins. Connecting rods (4a) are attached to top ring (1) while connecting rods (4b) are attached to bottom ring (2) and are hinged (5) to one another and will allow them to spread horizontally when the sleeve (1) is pushed down by the jacking system. The connecting system enables the connecting rods to connect top ring and bottom ring by means of swivel joints (6). It can be expanded horizontally by applying downward force by the jacking system, followed by concreting after lowering the reinforcement cage in the bore. Structural grips increase the load bearing capacity of the foundation and act as a reinforcement at reduced cost.

No. of Pages : 37 No. of Claims : 12
The invention is related to an underwater transportation system for people and material. The idea uses the simple principles of buoyancy and gravitational forces and careful balancing of forces to provide a rigid and stable underwater hollow Tunnel structure. The hollow tunnel connects the two land masses separated by water body through which Trains or vehicles can move across the water body. The invention tries to provide a reliable tunnel system submerged underwater to a depth ranging from 5 to 30 meters. The concept is practical and can be built with available construction technologies above ground and under water. The system can be maintained easily. The cost of building such a system is expected to be very competitive compared to the currently available design concepts.
Title of the invention: ELECTRONIC DEVICE AND UNIFORM RESOURCE LOCATOR BASED MULTI-LOCKING METHOD THEREOF

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<td>1) SENTHIL MURUGAN G</td>
</tr>
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<td>Address of Applicant: NO: 43, WEST STREET, VARATHARAJANPET, KURUVAPPAN PETTAI POST, KURINJIPADI, CUDDALORE-607 302, TAMILNADU, INDIA.</td>
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<td>3) K. PAZHANIVEL</td>
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<td>Filing Date</td>
<td>4) K. SRINIVAS</td>
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<tr>
<td>International Publication No</td>
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Abstract: Not Submitted

No. of Pages: 21 No. of Claims: 8
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201941009472 A

(19) INDIA

(22) Date of filing of Application :12/03/2019
(43) Publication Date : 21/02/2020

(54) Title of the invention : ELECTRONIC DEVICE AND MULTIPLE PARAMETERS BASED MUTLI-LOCKING METHOD THEREOF

| (51) International classification | :G01R 22/06 |
| (31) Priority Document No | :NA |
| (32) Priority Date | :NA |
| (33) Name of priority country | :NA |
| (86) International Application No | :NA |
| (87) International Publication No | :NA |
| (61) Patent of Addition to Application Number Filing Date | :NA |
| (62) Divisional to Application Number Filing Date | :NA |

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(57) Abstract :
NA

No. of Pages : 40 No. of Claims : 20
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application: 12/03/2019
(21) Application No. 201941009476 A
(43) Publication Date: 21/02/2020

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| (57) Abstract: N/A                  |

No. of Pages: 35  No. of Claims: 19

(54) Title of the invention: ELECTRONIC DEVICE AND SPEED BASED MULTI-LOCKING METHOD THEREOF

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<tr>
<td>2) Dr. R. LATHA</td>
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<td>4) G. PALANIYAMMAL</td>
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<td>6) J. Murugan</td>
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<td>5) K. PAZHANIVEL</td>
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<td>6) J. Murugan</td>
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### (54) Title of the invention : A SYSTEM AND METHOD FOR SURVEILLANCE

(51) International :G06F0003048400,G06F0003048200,G06F0003010000,G06F0003048800,H04L0012180000

### (57) Abstract :
Described herein is a system (102) and method of surveillance wherein signals from one or more motion sensors are received and stored and are processed upon to detect a movement of an object. In case motion is detected in an area, a trigger signal is generated, which is received by a camera (210), which captures a videography of the area and generates a media file. The media file is attached with a message construct and is sent to an email ID of a user over a network and the user is also directly contacted on a mobile communication device over the same network. The system is reset following completion of the process.

No. of Pages : 23 No. of Claims : 7
The present invention provides a system (100) and method (400) for trading shares of media content online. The method (400) for trading shares of media content online comprises the steps accessing (401) the media trading platform for trading one or more shares of media content on an interface device by a media content owner, registering (402) the media content owner on the media trading platform, submitting (403) details related to the number of shares owned by the media owner and number of shares available for sale and validating (404) the media content to determine its authenticity and the details shared by the media owner by a legal team of the media trading platform. The method includes valuating (405) the media content for an IPO valuation and listing (406) the media content on the media trading platform with its value for bidding by the public.

No. of Pages : 29 No. of Claims : 14
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application : 04/09/2019

(43) Publication Date : 21/02/2020

(54) Title of the invention : MOUTHWASH FOR MANAGING RADIATION INDUCED ORAL MUCOSITIS IN PATIENTS WITH HEAD AND NECK CANCER

(51) International : A61Q0011000000, A61N0005100000, A61K0036185000, A61K0009000000, A61K0041000000 Classification

(31) Priority Document : NA

No

(32) Priority Date : NA

(33) Name of priority country : NA

(86) International Application: NA

No: NA

Filing Date: NA

(87) International Publication: NA

No: NA

(61) Patent of Addition to Application: NA

No: NA

Filing Date: NA

(62) Divisional to Application: NA

Number: NA

Filing Date: NA

(57) Abstract:

Radiation-induced oral mucositis (OM) is common among patients with head and neck carcinoma (HNC), and is the single most debilitating side effect of radiation treatment accompanied with painful inflammation and ulceration of the mucous. The present invention comprises of novel herbal mouthwash, that has anti-inflammatory and antioxidant activity and reduces the risk of oral mucositis in head and neck cancer patients undergoing radiotherapy. The mouthwash contains extracts from pomegranate whole fruit extract in a proportion that is required for reducing mucositis and has other physiologically acceptable constituents that stabilize the extract and make the mouthwash acceptable to patients.

No. of Pages : 8 No. of Claims : 5

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3) Dr. Amulya T.M.
4) Dr. Razna Abdulrahim
5) Dr. Suchetha Kumari
6) Dr. Vadeesh Bhat
(54) Title of the invention: AUTOMATIC STENOSIS GRADING SYSTEM FOR DIAGNOSING CORONARY ARTERY DISEASE BASED ON CORONARY ANGIOGRAM

(57) Abstract:
This invention relates to the diagnosing method of Coronary Artery Disease (CAD). This invention contains method and system that helps to describe the level of stenosis in coronary angiogram image by using mathematical morphology and thresholding technique. A novel method is introduced to determine the percentage of stenosis and its grading. Based on the diagnostic results, myocardial infarction (MI) is treated well-in-advance. A real time clinical dataset consisting of 25 conventional coronary angiographies with 865 frames is used to evaluate the performance of the proposed system. The execution of the proposed system is inspected by a cardiologist and confirmed the system has produced excellent segmentation and stenosis grading automatically. Sensitivity, specificity, accuracy and precision of the system are 94.74%, 83.33%, 92% and 94.74% respectively with an average computational time of 0.84 sec. Kappa value also shows perfect system agreement for stenosis grading.

No. of Pages: 26  No. of Claims: 4
A SYSTEM AND METHOD FOR DETERMINING HAPPINESS QUOTIENT ABSTRACT A system for determining happiness quotient of user is provided. The system includes an input module configured to receive an input from a user via an input receiving device, wherein the input represents an audio response from a user, via an audio receiving unit, and a sensed data from one or more biosensors. A processing module is configured to process and synthesize received input using one or more processing techniques. An analysis module configured to identify one or more trigger points in processed data; compare one or more identified trigger points with a historical data associated to the user; and determine a happiness quotient of the user based on compared data. A communication module operatively coupled to the processing module, wherein the communication module is configured to communicate determined happiness quotient of the user to one or more individuals. FIG. 2

No. of Pages : 21 No. of Claims : 10
Abstract:
Introduction: Dental casts are one of the essential diagnostic Aids used in Orthodontics in particular and in Dentistry in general. These study casts as part of the pre-treatment records need to be preserved for long period of time. The basing process of the study casts has to be precise and standardised for to be used as a diagnostic tool. The base of the study cast also prevents/ minimises any damages to the dental and alveolar portions. Though the rubber base formers are available in the market, there is no tool/ device where these base formers can be used in standardized method so that the errors in study cast analysis and other diagnostic procedures could be reduced to a great extent. The present NU Base former helps the clinicians and Dental laboratory technologists to prepare the base for the study casts in a very simplified, accurate and standardized method. The present device will reduce the time, cost and efforts for the operators. The NU Base would be extensively used by Dental students, Practitioners as well as laboratory technicians. The accurately prepared study casts are easier and convenient to use not only for diagnostic purpose but also for the treatment prediction and outcome analysis. Description of the Device: The device is able to accurately position the dental casts within the base formers and it is easy and convenient for the user to prepare the study casts in scientifically accepted design with appropriate dimension. The material consideration is with respect to total no interaction of moisture and rust formation. Non corrosive stainless steel material is used for rigidity, stability and to avoid any bending loads. The design has been further optimized to give digital instrumentation for better readability and ease of working. The device has two detachable platforms for holding the upper and lower casts The platform for the upper cast is movable vertically and a calibrated scale measures the height and is recorded digitally. The two platforms are parallel to each other and to the floor, making it easy for the proper orientation of the upper and lower dental casts. The base formers can also be moved in sagittal plane for the accurate positioning of the casts. Conclusion: Being one of its kinds in design and utility, the present device will be used routinely by dental clinicians, students and laboratory technicians, and has a huge potential to be commercially marketed.
**Title of the invention:** AN AUTHENTICATION SCHEME USING PUBLIC KEY CRYPTOGRAPHY

**International classification:** H04L0009320000, H04L0009080000, H04L0009300000, G06F0021440000, H04L0029060000

**Abstract:**

An authentication system is disclosed. The system comprises a storage module for storing at least two random numbers, a sender's identification (ID) and a hashed password. The authentication system comprises a computation module for computing at least two random numbers and the hashed password to obtain a unique value by using a Chinese Remainder technique along with a sender's private key. The authentication system further comprises a digital signature generation module for generating a digital signature for a sender's certificate based on the unique value. The authentication system further comprises a verification module for verifying a sender's public key, the digital signature, an encrypted data and global parameters. The authentication system further comprises a registration module for registering the sender based on the verification and an authentication module for authenticating a receiver's public key and a receiver's certificate using a discrete logarithm computation. Claims: 10, Figure: 4

**Name of Applicant:**

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**Name of Inventor:**

1) P Kumaraswamy
2) Dr. C V Guru Rao

No. of Pages: 21 No. of Claims: 10
# Title of the invention

**COIN SORTING SYSTEM & METHOD**

---

## Description

**Abstract**

A coin sorting device (100) comprising: sensors (234a-234n) configured to sense information associated with each coin from a batch of coins (212); cameras (236a-236n) configured to capture images of each coin; a processor (226) configured to: receive the sensed information associated with each coin and the captured images of each coin; determine a first set of parameters and a second set of parameters associated with each coin; determine features associated with each coin using the first set of parameters and the second set of parameters; sort each coin based on the determined features; generate ranking the batch of coins (212); display, data associated with the batch of coins (212) on a user interface (110).

**Claims:** 10, Figure: 5 Figure 1 is selected.

---

**Priority Data**

- **Application No.:** 202041000902 A
- **Priority Date:** 08/01/2020
- **Publication Date:** 21/02/2020

**Inventors:**

1. A Rajeshwar Rao
2. S Sanjay Kumar
3. V Gowtham
4. R Sai Shivani
5. M Ramana Varma
6. S Sai Prasanth

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**Address:**

1. S R Engineering College, Ananthasagar, Warangal, Telangana, India Telangana India

---

**Patent Office Journal No. 08/2020 Dated 21/02/2020**
**Title of the invention:** ELECTRONIC DEVICE BATTERY INDICATOR

**Abstract:**

A system comprising a water purifier, a communication network, a monitoring device; wherein the monitoring device determines a current status of the battery of the water purifier. The monitoring device comprising an input module for receiving data associated with the water purifier. The monitoring device further comprises a status determination module for comparing the current status of the battery of the water purifier with a threshold battery value. The monitoring device further comprises a notification module for transmitting an alert to a user and to a service provider when the current status of the battery of the water purifier is lower than the threshold battery value. The monitoring device further comprises a user interface module for displaying a real time battery status to the user and to the service provider. Claims: 10, Figure: 3 Figure 1 is selected.
Title: AN AUTOMATIC POOR QUALITY REJECTER

Abstract:

An object rejection system (100) is disclosed. The system (100) comprising: sensors (302a-302n) arranged near a conveyor (102), wherein each of the sensor (302a-302n) is an ultrasonic sensor configured to dynamically direct ultrasonic pulses towards an object (132) moving on the conveyor (102). The system (100) comprising a rejecter (116); and a control unit (108) configured to receive a data representing a distance of the object (132) from the sensors (302a-302n); generate an image of the object (132) using the received data; calculate dimensions of the object (132); compare the dimensions of the object (132) with dimensions of an image of a standard object; calculate a Degree of Similarity (DOS) based on the comparison; identify that the DOS is less than a predefined threshold; and generate a trigger signal that causes an actuation of the rejecter (116) for diverting the object (132) towards a rejecter bin (120). Claims: 10, Figure: 6 FIGURE 1 is selected.
Title of the invention: PRESSURE BASED SELF-POWER GENERATING SYSTEM

Abstract:

Disclosed is a power generation system (100). The system (100) comprises a base (102); a mat (106) attached on the base (102); piezoelectric sensors (112a-112n) for sensing a pressure on the mat (106), wherein an electric current is produced when the pressure is applied on the mat (106); and a power production device (116) for producing power by using the electric current produced when the pressure is applied on the mat (106), wherein the power production device (116) comprising a power source (118) for storing the produced electric current; and a converter module (120) for converting the stored electric current from an alternating current (ac) form into a direct current (dc) form for providing power to a load. Claims: 10, Figure: 3 Figure 1 is selected.

No. of Pages: 15  No. of Claims: 10
Title: RETRACTABLE PROTECTIVE SYSTEM

Abstract: Disclosed is a protective system 100 comprises a fixed hollow tube (102); a solid tube (110); two telescopic tubes (106a-106b); a cover (104) attached with the fixed hollow tube (102), wherein the cover (104) is retractable between the fixed hollow tube (102) and the solid tube (110); and a protective device (108) for controlling an operation of the fixed hollow tube (102), the solid tube (110); the telescopic tubes (106a-106b), and the cover (104). The protective device (108) comprising: a microcontroller (120) for controlling the movement of the cover (104); sensors (114a-114n), attached to the microcontroller (120), for sensing environmental factors; an actuator motor (116) for expanding and/or retracting the cover (104) based on the environmental data; and a power source (118) for supplying an electric current for the operation of the actuator motor (116). Claims: 10, Figure: 4 Figure 1 is selected.

No. of Pages: 16 No. of Claims: 10
Title: PlateQ

ABSTRACT

A traffic violation monitoring system comprising: sensors configured to detect a vehicle on a roadway; a scanner configured to scan a Quick Response (QR) code of the vehicle; and a controller connected to the scanner, the sensors and a user device, wherein the controller is configured to activate the sensor when a status of a traffic signal is red; receive a scan trigger signal and activate the scanner to scan the QR code; extract a registration number of the vehicle and match the extracted registration number with a data stored in a database; and display the data associated with the vehicle on the user device, generate and transmit an electronic challan comprising a Unique Resource Locator (URL) to a violator. Claims: 10, Figure: 5

The Patent Office Journal No. 08/2020 Dated 21/02/2020
(54) Title of the invention: TRAFFIC ALERT SYSTEM

(51)
International: A61B0005000000, G08G0001160000, G08G0001096700, G08G0001096200, B60Q0001500000
classification
(31) Priority
Document: NA
No.
(32) Priority
Date: NA
(33) Name of priority country: NA
International
Application: NA
No.
Filing
Date
(86)
International Application: NA
No.
(61) Patent of Addition to Application: NA
Number: NA
Filing
Date
(62)
Divisional to Application: NA
Number: NA
Filing
Date

(57) Abstract:
Title: TRAFFIC ALERT SYSTEM ABSTRACT A U-turn protection system (100), the U-turn protection system (100) comprising: sensors (104) configured to detect an entry and an exit of a first vehicle (208) and a second vehicle (210) into an underground U-turn passage (202); traffic indicators (106a-106b) configured to display one of a stop sign, a caution sign, or a pass sign based on the detection; and a vehicle detector (102) configured to: receive signals indicating the entry of the first vehicle (208) at a first entry (202a) and the entry of the second vehicle (210) at a second entry (202b); determine parameters associated with the first vehicle (208) and the second vehicle (210); compare the determined parameters with predefined thresholds; generate a first stop trigger pulse when the determined parameters of the first vehicle (208) is greater than the predefined thresholds; and display, a stop sign at the second entry (202b) on the traffic indicator (106b). Claims: 10, Figure: 4 Figure 1 is selected.

No. of Pages: 26 No. of Claims: 10
Title: HEATING SYSTEM

Abstract:
Disclosed is a liquid heating system (100) for heating a liquid, the system (100) comprises: a protective cap (102); a heating element (104); a heating device (106) for controlling an operation of heating the liquid. The heating device (106) comprising a microcontroller (110) for controlling the heating of the liquid; sensors (112a-112n), wherein one of the sensors (112a-112n) is an ultrasonic sensor (112a) for detecting presence of a user; a relay (114) associated with the ultrasonic sensor (112a) for ceasing an electric current when the person is detected; and a toggle switch (116) for closing a main electric supply supplied to the relay (116). Claims: 10, Figure: 3 Figure 1 is selected.

No. of Pages : 16  No. of Claims : 10
Title of the invention: A SYSTEM & METHOD FOR DETECTING LEAKAGE

Abstract:
A SYSTEM AND METHOD FOR DETECTING LEAKAGE ABSTRACT A method (300) for detecting a leakage of a fluid within pipelines (102a-102n), the method (300) comprising steps of: draining-off the fluid from the pipelines (102a-102n) by using vents (104a-104n); closing the vents (104a-104n) of the pipelines (102a-102n); opening one of the vents (104a-104n) of the pipelines (102a-102n); attaching a carbon dioxide cylinder (106) to the one of the vents (104a-104n) of the pipelines (102a-102n); filling a carbon dioxide gas into the pipelines (102a-102n) through the one of the vents (104a-104n) by using a carbon dioxide cylinder (106), wherein the carbon dioxide gas in the pipelines (102a-102n) is pressurized and filled under a pressure range between 40mm-60mm of water column; and moving a gas detector (110) along a length of the pipelines (102a-102n) for detecting the leakage of the carbon dioxide gas in the pipelines (102a-102n). Claims: 10, Figure 3 FIGURE 1 is selected.

No. of Pages: 20 No. of Claims: 10
The present invention reports a system to read arterial pulses from artery of a human subject in non-invasive manner and digitally count them to display in any preferred digital platform such as digital display unit. The system comprises pressure reading probe to dispose on skin above an artery so that it vibrate according to arterial palpable pressure wave corresponding to the arterial pulse, a pressure activated counter and a connecting element for operative connection between the reading probe and the counter enabling the reading probe to actuates the counter on each pulse pressure activated vibration and thereby counting the pulse.

No. of Pages: 22 No. of Claims: 10
(57) Abstract:
ABSTRACT TITLE OF INVENTION: A COST EFFECTIVE SYSTEM FOR DRIVER DROWSINESS DETECTION

A system for drowsiness detection of a person driving the car or train by estimating the duration of eye closing time for a specific duration of time. If the closing time exceeds that certain duration, drowsiness is detected and an alarm is sounded for awareness. The said system comprises face detectable imaging means providing for frames of images of face in every desired period of drowsiness detection time; means to ascertain the open and closed state of the eyes in said face detecting image frames; means to monitor the number of frames for which the eyes are detected to be in closed state; comparator means for comparing the thus monitored number of frames for which the eyes are in closed state and means to generate warning signals when the number of frames for which the eyes are in closed state exceeds threshold value for the individual under test.

No. of Pages : 32 No. of Claims : 9
Title of the invention: CYPERUS TRASH REMOVING MACHINE

Abstract: Cyperus grass mainly used for Mat weaving. Before start doing the mat weaving process the trash from the cyperus grass should be removed completely, while removing the trash sometimes it wound human hand. It requires more man power and also it requires long time to complete the trash removing process. It needs to spend more labor charges. The accuracy of the work is less. In order to overcome all this problem, a semi-automatic Cyperus Trash Removing Machine is designed. This makes the operator to be more comfortable without any wounds and it needs less time to complete the process. This machine occupies less space. Due to demand in Mat viewing industries, it is an essential need to move for Cyperus trash remover.
Abstract:

Animatronics is the use of mechatronics to create machines which seem animate rather than robotic. Motion actuators are often used to imitate muscle movements, such as limbs to create realistic motions. The main aim of this project is to develop Animatronics hand which can be used in many fields like medical, defence and chemical industries.
**Title of the invention : VITAWARE-CULS 2020 VITAMIN AWARENESS KIT**

<table>
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<tr>
<th>Name of Applicant :</th>
<th>ERUMALLA VENKATANAGARAJU</th>
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<tbody>
<tr>
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<td>Name of Inventor :</td>
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</tr>
</tbody>
</table>

**Abstract :**

Vitamins are essential for maintaining the integrity in between various biochemical reactions that take place in all living organisms. Vitamins are available in abundant quantities in all natural resources. Inadequate intake of vitamins lead to severe abnormalities. Because of the rapid civilization, limited land resources, busy lifestyle and limited awareness, attention on the natural vitamin resources wafted towards Nutraceuticals that are supplemented with synthetic vitamin sources and preservatives. In order to bring awareness about the availability of bioactive vitamins in natural food sources, the current design, VITAWARE-CULS 2020 Kit was developed. The present model will provide pictorial and audio information generated as the output of an electric circuit designed based on the availability of Vitamin A (Retinol), Vitamin D (Cholecalciferol-D3, Ergocalciferol-D2), Vitamin E (Tocopherols), Vitamin K (Phylloquinone), Vitamin B1 (Thiamine), Vitamin B2 (Riboflavin), Vitamin B3 (Niacin), Vitamin B5 (Pantothenic acid), Vitamin B6 (Pyridoxine), Vitamin B7 (Biotin), Vitamin B9 (Folic acid), Vitamin B12 (Cyanocobalamin) and Vitamin C (Ascorbic acid) in natural, cost effective and eco-friendly food sources like Amaranthus, Amla, Banana, Butter, Caraway, Carrot, Cabbage, Cauliflower, Coriander, Coconut, Cotton seed oil, Drumstick, Eggs, Fish, Guava, Ground nut, Grapes, Lemon, Ladys finder, Legumes, Mint leaves, Mushroom, Mango, Mustard oil, Milk, Meat, Pumpkin, Papaya, Rice, Spinach, Sweet potato, Shark liver oil, Sun flower seeds, Soyabean, Tomato, Wheat, Yeast. VITAWARE-CULS 2020 Kit would help in exploring the natural food resources for value added bioactive vitamins.

No. of Pages : 10 No. of Claims : 3
A method of verifying the authenticity of goods or services, in which breaking the life cycle of goods or services into stages, at the first stage of the life cycle, a unique tracking code is generated, which is applied to the goods or the document corresponding to the service is marked, each such unique tracking code is assigned information in a single database of all goods and services containing information about the parameters of the goods or services at the first stage of the life cycle, at each next stage of the life cycle, a new unique tracking code is generated, which is applied to the product or marked with a document corresponding to the service, each such new unique tracking code is generated in a single database of all goods and services, containing information about the parameters of the goods or services both at each next stage of the life cycle, and at all previous ones; providing access to the buyer of the goods or the consumer of the service to a single database of all goods and services, in which, when the buyer of the goods or the consumer sends the scanned unique tracking code using their personal client device to the remote server, they are sent back to the personal client device of the buyer of the goods or consumer of the service a signal corresponding to reliable information about a product or service, characterized in that form a list of user access parameters corresponding to different access rights of users of a single database of all goods and services; breaking down a single database of all goods and services into regions corresponding to different user access parameters, to each of which users with specific access rights have access for each user, a single database of all goods and services generates his user identification code corresponding to his user access parameter, which is also entered into a single database of all goods and services, when transferring data to a single database of all goods and services or when requesting data from it, the user identification code is checked, if the verified user identification code matches the one that is in the unified database of all goods and services; providing the user with access according to their right of access to the corresponding area of the unified database area of all goods and services, if they do not comply, they do not provide access.
Exemplary embodiments of the present disclosure is directed towards a complex of intellectual property (IP) management. Complex comprises a crypto currency exchange, computers with software based on a block blockchain platform with an electronic bank IP, associated with recording objects IP world databases, providing automatic international search of IP objects through electronic bank IP, obtaining information on analogues of the IP object, design of an IP object in an electronic IP bank, registration of an IP object at an international level, is configured to dispose of smart contracts by IP objects and comprises a smart contract storage unit with conditions for managing an IP entity for the counterparty, a unit for storage of questionnaires on the owner of an IP object, a unit for storing IP objects with IP identification codes assigned to each IP object, connected to a web page for displaying information on each IP object.
Health is wealth is one of the universal legitimacy that conveys well-being covers all forms of prosperity. Health care monitoring is more important in all walks of life. Individual need not depend on hospitals for patient monitoring. Biometric System is an integrated part in any organization for monitoring the attendance of the employees. The same Biometric system can be used to measure the temperature and blood pressure of the employees daily. The same can be integrated to alert the person on concern of wellness if required. With limited hardware components, the existing system can be upgraded with features like compatibility, accurate and can be tracked. In Biometric sensing when the finger is sensed for the finger prints, blood pressure and temperature of a person can be measured. The integrated system compares standard database and predicts the abnormality. Through integration wellbeing of the person can be continuously tracked and alert can be sent to the employees regarding the abnormality if any.
Abstract: SMART HORN system is designed to reduce noise as it can damage the physiological health, and in turn cause a large amount of accidents. These accidents result into environmental pollution. Thus, there is a crucial need to find a mechanism to eradicate this unwanted sound as well as slash the presence of environmental pollution. The rapid growth in vehicle population in the recent years has resulted in considerable increase in traffic on roads, causing alarming noise pollution and also making the task of eradicating this noise cumbersome for the civil force. Smart Horn system proposes an idea to design an onboard equipment which implements horn from the host vehicle to leading vehicle remotely uninterrupted to the external environment, a mechanism for vehicles to reduce the traffic noise in urban areas rather than rural. The proposed idea integrates the technologies of geofencing and wireless communication. The design is targeted for all types of vehicles.

No. of Pages : 11 No. of Claims : 10
The monitoring system of the patient's health status is a demanding job in the home. In particular, old age patients ought to be checked regularly, and their dear ones need to be stated during a work period about their health status periodically. An individual's blood group is composed of Red Blood Cell antigens, whose composition is determined by gene sequence, protein presence, and antigen structure. The proposed invention is a non-invasive approach to classify the blood cells group without perforating the tissue. Light serves as a channel for optical signals that can pass through the palm and measures the changing voltage. In this system, a smart patient health monitoring program is proposed, using sensors and microcontrollers to monitor patient health and send alert notifications to the mobile phone for the patient.

Cholesterol levels, as well as blood glucose levels, are used in the application system, helps to keep continuous monitoring of patient health. The IoT-based patient health tracking system efficiently utilizes the Internet for monitoring to save patient's lives and their health to prevent emergencies. The approach provides a method for automatically determining the type of human blood by applying image processing algorithms to the optically obtained images of the skin surface underlying superficial capillaries. The technique embeds the Multi-Wavelength Light scattering system as light passes through capillaries to dynamically distinguish blood cells on the Red Blood Cell surface, based on specific antigens. The primary detector structure is created by the portable optical system (camera) along with the photo-detectors: Used to detect the distribution/pattern of scattered light produced by the blood cells to determine the type of blood without taking blood samples from the body. The proposed model intended to create an embedded system to execute blood tests based on Rh and ABO blood typing systems using Image Processing methods.

No. of Pages : 18 No. of Claims : 7
**Title of the invention**: METHOD FOR CLASSIFYING CAROTID ARTERY DISEASES

**Abstract**:
The present invention relates to the field of medical decision support systems in diagnosing common carotid artery diseases through medical imaging. The classification of carotid artery diseases comprises the method of image acquisition (22), pre-processing (23), extraction process (24), optimization process (25) and classification process (24).

No. of Pages : 17 No. of Claims : 5
The present invention relates to the field of providing search results of videos based on the event. The method for event based video retrieval system (11) comprises of query parsing and extraction process (12), video feature extraction process (13), event pre-processing (14), classification process (15), video mining and retrieval process (16) and feedback acquisition process (17). FIG-1

No. of Pages : 17 No. of Claims : 4
IBAS-VEHICLE: INTELLIGENT-BALANCING ADVANCED VEHICLE STRUCTURE

The Invention IBAS-VEHICLE — An intelligent-balancing vehicle structure includes two side structure units and a bearing unit interconnecting the side structure units such that each of the side structure units can tilt independently against the other of the side structure units. Each of side structure is mounted with a wheel, a driver, and an intelligent-balancing electric system integrated with a pedal and handle. Through operation of hands and feet, each of the side structure units is operable to tilt the corresponding components forwardly and rearward. As such, a user can operate the vehicle using hands and/or feet to control travelling and turning of the vehicle.

No. of Pages: 23 No. of Claims: 9
(54) Title of the invention: SYSTEMATIC MODEL FOR CONSTANT WATER QUALITY MONITORING USING IOT

(57) Abstract:
IOT causes us to improve efficiency in all that we do. Right now, cause us track water utilization and contamination. This component will be exceptionally regular in the future. Water is one of the basics of life. Water contamination is one of the huge threats to the world. So as to guarantee the continuous invention of the drinking and clean water for different purposes like farming, Industry the water must be monitored. The model structure having minimum effort for measuring the water quality and amount of water in IOT field comprises of WSN with various sensor hubs with systematic control capacity for checking Water quality parameters considered which are temperature, turbidity and pH. Estimated continuously by the sensors that send the information to the base station or control/checking room. The structure having of several sensors and wireless nodes is used to estimate quality of water. The sensors ensure values can be prepared by the controller. The Adriano model can be utilized as a controller. Finally, the sensor information can be appeared on the web utilizing ZigBee. A cloud server which was designed as information observation and analysis.

No. of Pages: 6 No. of Claims: 3
**Title of the invention:** MATERIAL AND METHOD OF COATING CONDUCTIVE OXIDES FOR SOLID OXIDE CELLS

**Abstract:**
The present invention relates to a coating material and a deposition technique applied to interconnects of solid oxide cells. The invention relates to deposition of a high temperature conductive oxide coating layer, this coating also facilitates corrosion resistance of the metal based interconnects. Copper doped Manganese Cobalt oxide is used for development of high temperature conductive coating layer onto interconnects. The Suspension precursor plasma spray coating is the method of deposition used for the above stated coat material composition.

No. of Pages : 15 No. of Claims : 9
My Invention- "IDS-Blockchain Technology" is a method and system to use a blockchain infrastructure and smart contracts to monetize data transactions involving changes to data included into a data supply chain and management. The invention IDS-Blockchain Technology describes a system and method to use intelligent/smart contracts to monetize changes to data using a blockchain infrastructure. The system and method matches a data producer's data with a data buyer's specifications, and enables micropayments for changed data responsive to observation of changes to data included into a data supply chain on a granular level. The implementation of blockchain infrastructure for data transfer enables advanced class of business Technology™s that enables the maintenance of privacy of personal information while giving access to actionable data and implementing a fair and transparent market for data producers and data buyers to use redundant distributed ledgers of transactions on peer to peer networks.
The method of computing parasitic advanced capacitances between multiple, dual electrical conductors within an electric circuit computes a division of the circuit's physical layout into a plurality of windows. The parasitic capacitances associated with the conductors of each window are computed, and the results for the various windows combined into a matrix (2-D, 3-D) of parasitic capacitances for the overall circuit. The windows are preferably overlapped, with the capacitance values for conductor pairs located in more than one window averaged. Complex polygons are fractured into simpler shapes by extending a ray from a vertex of the polygon to intersect an opposed segment, and defining the peripheries of the simpler elements as comprising the ray and respective different portions of the original polygon's periphery. Rays may be extended in a x,y pattern from multiple vertices of the polygon until a ray is located that extends through the polygon's interior, with the fracturing performed along that ray. Fracturing preferably continues until all of the elements are reduced to Manhattan-oriented rectangles or triangles. Where one element overlaps another element in another plane, fracturing is performed along a projection of the overlapping edge on the second element to reduce inaccuracies in the approximated charge density on the overlapped element.
**Title of the invention:** AN EFFICIENT ENCRYPTION SYSTEM FOR DATA DYNAMICS ON ENCRYPTED DATA SECURED IN CLOUD AND METHOD THEREOF

**Abstract:**
The present invention relates to an efficient encryption system and method (300) for data dynamics on encrypted data secured in cloud (314). The developed framework (300) handles secure data storage in cloud (314) and allows operations directly on encrypted data without being decrypted. The system uses a real cloud platform (406 & 408) with two kinds of environments, one for structured data (306) and one for unstructured (308) and semi-structured data (310). A GUI application (500) that facilitates intuitive interface to have flexible encrypted storage in public cloud (314) and data dynamics directly on encrypted cloud data (314) with the help of Cryptographic technique (312) that uses Enhanced Fully Homomorphic Encryption (EFHE).

No. of Pages: 26 No. of Claims: 9
Title of the invention: CLEVER STICK

Abstract:
The objective of the Clever Stick is to help the Blind People to use the street freely without any assistance. In current technology there are some peoples working in the devices that help Visually impaired persons but that solution is not that much effective and the sensors in the solution can’t be turned OFF when needed. In order to overcome that I had created the Clever Stick.

No. of Pages : 13 No. of Claims : 7
The aim of this invention is to sort yarn carriers which is needed in auto coner machine in spinning mills. Yarn carriers are used to wind yarns, threads, fibers, and fabrics. Sorting of yarn carriers is a very difficult process in auto cone machine used in textile industry. By this invention, the yarn carriers will be sorted and placed automatically into collecting trays. A high contrast photo electric color sensor is used to find the color of incoming yarn carrier in the conveyor. Based on the input taken from the sensor the yarn carrier will be placed into the collection trays with the help of solenoid operated pneumatic cylinder. This system also has a feature to count the number of yarn carriers passed through the conveyor which can be used for further checking purposes.

No. of Pages : 8 No. of Claims : 6
Title of the invention: METHOD FOR SCHEDULING OF HEALTH-CARE FACILITY & HEALTH CARE RESOURCES USING IOT TECHNOLOGY

Abstract:
The present invention is related to a method for scheduling of health-care facility & health care resources using Internet of things (IoT) technology. The objective of present invention is to solve the anomalies presented in the prior art techniques related to scheduling of health-care facility & health care resources.
Abstract:
A cloud attenuation method for providing cloud attenuation statistics and atmospheric absorption coefficient. The cloud attenuation method includes a step of storing and processing a plurality of instructions pertaining to a prediction of a plurality of atmospheric parameters corresponding to a tropical climatic area through an instruction module. The method includes a step of receiving the processed instructions from the instruction module for estimating cloud attenuation and atmospheric absorption coefficient through a computation module. The computation module provides a plurality of equations to estimate cloud attenuation and atmospheric absorption coefficient by performing a plurality of steps includes computing total liquid water content (L), computing reciprocal temperature (rt), computing water vapor density (v), obtaining an equation for cloud attenuation, computing water vapor attenuation, computing oxygen attenuation, computing atmospheric absorption coefficient, and computing total atmospheric noise temperature. The most illustrative drawing: FIG. 4.
The system comprises of iron rod pipe (3) to collect the CO2 gas (2) and water (4) to stimulate the chemical reaction thereby obtaining carbonic acid (7) at the outlet to reach the water turbine (9) which alters the kinetic energy of carbonic acid into mechanical energy at the turbine shaft. The generator (6) is coupled with the water turbine (9) to convert mechanical energy to electrical energy and further the carbonic acid (7) from said water turbine (9) is collected in the collecting area (10) and passed to a medium sized open valve (11) into the hexagonal shape magneto hydrodynamic (MHD) System (12) which provides high flow of velocity to cut the magnetic field from north pole to south pole, and allow interaction of ionic molecule H and HCO3 thereby attracting negative ionic charges to anode and positive ionic charges to cathode to generate electric power.
An invention of IoT based autonomous vehicle comprising hardware components and the software components. A raspberry pi is a credit card sized computer that plugs into computer monitor or TV. A pi camera is used to take the images as well as the videos. Using ultrasonic sensors, the collisions with obstacles is avoided. The algorithm mentioned in this invention has been successfully implemented on a small autonomous car with several scenarios like traffic light detection, obstacle detection, and lane detection. The different hardware components and their assembly are clearly described. A novel method to determine the uneven, marked or unmarked road edges is explained in details relying upon Open Source Computer Vision. Using ultrasonic sensors, the collisions with obstacles is avoided. The algorithm mentioned in the paper has been successfully implemented on a autonomous vehicle.

No. of Pages : 23 No. of Claims : 6
MOC- BLOCKCHAIN METHOD : MEDICAL OBSERVATION CARE USING BLOCKCHAIN METHOD.

You know healthcare transaction validation systems and methods are presented in many other way But healthcare transactions integrated with a all type of stakeholder are compiled into a chain of healthcare transaction blocks. The chain can be considered a chronicle of person's healthcare path through life Spain. When a transaction is conducted, the corresponding healthcare parameters (e.g., storage date, first input Data,outputs, clinical evidence, outcomes, etc.) are sent to one or more integrated validation devices. The devices establish a validity of the transaction and generate a advanced blockchain through a proof of all work method. Once the advanced block has been calculated it can be appended to the stakeholder's health care blockchain and also the case study validate the various country( India-> Japan, India->USA, India->Singapore, India->Canada, India-> Etc.)through blockchain method.

No. of Pages : 25
No. of Claims : 7
The present invention discloses an elastoplastic deformation processing tool and method thereof. The invention provides an elastoplastic deformation processing tool comprising a side probe (102) integrated guide rod (101), in which the side probe is fixed radially protruding from the surface of the guide rod. It further discloses a method for elastoplastic deformation processing on a work piece comprising the step of microstructure modification or surface composite manufacture in the work piece base material. Figure 1.
(54) Title of the invention : COMPUTER IMPLEMENTED METHOD FOR ESTIMATING GLOBAL HOST DISTANCE

(57) Abstract :
The present invention is related to a computer implemented method for estimating global host distance. The objective of present invention is to solve the anomalies presented in the prior art techniques related to distance determination of the host server in a peer to peer network.

No. of Pages : 18 No. of Claims : 5
A gas stove (100), comprises: a control unit (101) that controls and monitors the operations of the gas stove (100), and a reset button that resets the operation of the gas stove (100) and causes it to revert to an initial position. Said control unit (101) is communicatively associated with: at least one sensor (102) that detects the leakage of gas, with the control unit (101) automatically shutting down the gas stove (100) and sending an alert through a user interface (104), in addition to causing an alarm sound, if any gas leakage is detected; a display unit (103) that displays the inputs of a user, in addition to the current status of the gas stove (100); the user interface (104) that facilitates the user to interact with the gas stove (100), including setting a flame level and burning time; a relay switch (105) that is communicatively associated with: an actuating unit (106), and an auto ignition system (109) that fires the gas; a motor with driver (107) that is associated with a knob of the gas stove (100); and at least one power source (108) that powers the gas stove (100). Figure to be included in Figure 1
A device for screening hearing impairments (100) is disclosed. Said device (100) comprises: a control unit (110); a pure tone generator (112); a display unit (111); an attenuation control unit (113); a headphone (114); a first plurality of buttons; a second plurality of buttons; a communication module (116); and a power supply unit (115). The device (100) is affordable and portable; hence it is easy to carry from one location to another. Figure to be included is Figure 1.
A smart carry-on luggage (100) is disclosed. Said smart carry-on luggage (100) comprises: a controller unit (101); a fingerprint sensor (102); a Light Dependent Resistor (LDR) sensor (103); a GPS sensor (104); an alert module (105); a System on Chip (106); a locking mechanism (107); a camera (108); a communication interface (109); a power supply unit (110); and an application (111) installable on a handheld device. The smart carry-on luggage (100) is secure, and easy to track and monitor remotely. Figure to be included is Figure 1.
An automatic waste segregating bin (100) is disclosed. Said automatic waste segregating bin (100) comprises: a container (101); a control module (102); a proximity sensor (103); an infrared sensor (104); an inductive sensor (105); a communication module (106); a display module (107); an input module (108); a speaker (109); a first motor driver (110); a buffer storage motor (111); a second motor driver (112); a main storage motor (113); and a power supply module (114). The bin (100) is hassle-free, automatically segregates different types of waste, is easy to monitor remotely, and encourages the users to use the bins to dispose the waste, thereby enabling to maintain a pollution-free and healthy environment. Figure to be included is Figure 1

No. of Pages : 18 No. of Claims : 10
An apparatus (100) for detecting the wetness of an absorbent article, comprises: a plurality of antennas (101) that is strategically disposed in an environment in which wearer(s) of the absorbent article is/are present; at least one reader (102), with each antenna in the plurality of antennas (101) being communicatively associated with the at least one reader (102); at least one passive and wireless moisture sensor tag with an adhesive strip (104) that is associated with the absorbent article, with the at least one reader (102) continuously sending signals to the at least one passive and wireless moisture sensor tag (104), which energize the at least one passive and wireless moisture sensor tag (104); at least one processing unit (103), with said at least one reader (102) being communicatively associated with the at least one processing unit (103), said at least one processing unit (103) processing the data in real-time; and an application that is installable on a computing device that generates notifications in real-time, if the absorbent article is detected as being wet. Figure to be included in Figure 1
TRIANGULAR PAIR OF SOLAR PHOTO-VOLTAIC PANELS WITH ROTATING GEAR MECHANISM

Exemplary aspects of the present disclosure are directed towards solar photo-voltaic panels with rotating gear mechanism with a photo-voltaic panels as a triangular pair which comprise of automatic solar tracking facility comprising of a rotating convex lens and concave mirror, and the solar tracking involves the use of a light dependent resistor; a voltage divider circuit formed to detect a sun intensity and a Modified MPPT/neuro fuzzy based controller to detect the difference of voltage signals which are sent by the light dependent resistors (LDRs) and based on the outcomes of LDRs, signals will be transferred to the opto-coupler for the activation of DC motor; and the modified MPPT controller/NEURO FUZZY based controller and the LDRs are made in a plane parallel with convex lens, and a required torque is obtained by two DC motors with gears. FIG 1
An extendable ladder along with a remote control system to be used at construction sites is an efficient ladder in terms of both money and time. The proposed invention is a robotic based ladder that can elongate or shortened according to the need of the user. The ladder is essential to do the tasks such as painting or designing the lengthier walls. It is the responsibility of the civil engineer to provide safer equipments to the labor for carrying out their work efficiently. The proposed ladder is compact and can be easily carried to various sites. The remote control mechanism will help to setup the ladder to the required position whereas in the existing system of clamps the setup itself consumes a day. Also the proposed invention will reduce the number of labors required to complete the task thus saving money and time.

No. of Pages : 16
No. of Claims : 7
Title of the invention: METHOD FOR ESTIMATION OF OCCURRENCE OF A CYBERSECURITY INCIDENT USING A PROBABILITY MODEL

Abstract:
The present invention is related to a computer implemented method for estimation of occurrence of a cyber-security incident using a probability model. The objective of present invention is to solve the anomalies presented in the prior art techniques related to estimation of occurrence of a cyber-security incidents.

No. of Pages: 22 No. of Claims: 7
This invention relates to the automatic detection of cervical cancer by Pap smear images. In the conventional routine clinical procedure, the sample cells from the infected are taken and kept under the microscope. This microscopic view is converted into a viewable image and sends to the doctor for further diagnosis. In the proposed method a sophisticated camera connected to the system having the algorithm for automated detection can be used instead of the microscope. By doing so the time can be saved a lot since the proposed system as the whole (including the camera) give the classification result within a little amount of time. For segmentation Fuzzy C means is used and for classification Fuzzy based Radial Neural Network is used. This method and system achieves higher average sensitivity average specificity, positive predictive value, negative predictive value and average accuracy.
The present invention provides an anti-galvanic corrosion composition comprising:
- a polysiloxane binder represented by formula I and present in an amount of 40-70% by weight of the total composition wherein R is selected from the group consisting of alkyl, hydroxyl and aminoalkyl, alkoxy where, n is 50-500;
- a filler mixture present in an amount of 20-60% by weight of the total composition;
- a metallic stearate present in an amount of 1-10% by weight of the total composition. The above-mentioned composition is non-curable and hydrophobic. The present invention also provides a method for preparing the anti-galvanic corrosion composition via a solvent-less process.

No. of Pages : 14 No. of Claims : 11
A sensitive liquid chromatography-tandem mass spectrometry (LC-ESI-MS/MS) method was developed for the simultaneous determination of dapagliflozin and saxagliptin in human plasma using their deuterated internal standards. Sample pre-treatment involved liquid-liquid extraction on Waters Oasis HLB cartridges using 100µL of plasma, followed by liquid chromatography on hypersil Gold C18 (50mmx3.0mm, 5µm) column. The drugs were eluted within 1.62 minutes dapagliflozin (DG), 0.56 minutes deuterated dapagliflozin (DGd2) and 1.94 minutes saxagliptin (SG), 1.93 minutes deuterated saxagliptin (SGd5). using the developed mobile phase 10mM ammonium acetate: methanol (20:80 v/v) at a flow-rate of 0.5 mL/minutes and injection volume of 20 µL. The chemical constituent and internal standards undergoing analysis in the positive ionization mode and measured applying multiple reaction monitoring. The method showed excellent linearity over the concentration range of 50.00-10000.00 pg/mL for both the analytes. The intra-batch and inter batch precision (%CV) was =4.5% and their extraction resumptions were in the range of 95.13% - 99.67%. Matrix effect was checked out in terms of internal standard normalized matrix factors (%CV) was 1.27%, 1.20% for both the analytes. The validated process was successively applied to resolve the plasma concentration of the drugs using 5mg saxagliptin and 10mg dapagliflozin.
The Invention PASTP-Electric Motor: A technology such as an electric motor, or a regenerative electric motor includes a rotor arrangement and a stator arrangement. The stator arrangement has a dielectric electromagnet housing and at least one energizable electromagnet assembly including an overall amorphous metal magnetic core. The amorphous metal magnetic core is made up of a plurality of individually formed amorphous metal core pieces. The dielectric electromagnet housing has core piece openings formed into the electromagnet housing for holding the individually formed amorphous metal core pieces in positions adjacent to one another so as to form the overall amorphous metal magnetic core. The technology further includes a control arrangement that is able to variably control the activation and deactivation of the electromagnet using any combination of a plurality of activation and deactivation parameters in order to control the vibrations, speed, torque, and power of the PASTP-Electric Motor.

No. of Pages: 18 No. of Claims: 8
Title of the invention: SYSTEM AND METHOD FOR BLOCKCHAIN BASED SECURE MEDICAL RECORDS

Abstract:
The need to maintain our health records be it Diagnosis report, Lab Analysis, Scan, etc. is a crucial and much needed obligation. Even in our current Digital era, this task has not been made simple. To carry all documents for medical diagnostic or checkup has become a must. A key factor of why this data has not been made completely digital based is due to its nature of importance and fear of tampering of the data in the file. One small change to the data intended or unintended can mean a wrong diagnostic followed by wrong treatment. By the use of blockchain, immutability and security of the patients’ health record can be ensured. In this invention, a blockchain based framework is proposed to overcome the current challenges faced by the medical sector.
[Problem] To provide a management device and a virtual currency system capable of smoothly managing an entire system by detecting fraud relating to a virtual currency without spending an enormous calculation amount. [Solution] Provided is a management device connected to a plurality of user devices via a network, the management device having: an issuance information storage area in which a virtual currency ID of an issued virtual currency is stored; an account information storage area in which account information is associated with one or a plurality of virtual currency IDs and stored; and a history information storage area in which history information of the virtual currency is associated with the virtual currency ID and stored.

No. of Pages: 37  No. of Claims: 12
**Title of the invention:** DE-PRIMERING OF ELECTRIC PRIMER FROM CARTRIDGE 105 MM IFG NC(FILLED)

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**Abstract:**

Cartridge 105mm IFG NC manufactured at Ordnance Factory Badmal is used to propel Shell 105 mm IFG HE 1B to the range of 17.6 km (Approx.) and supplied to Indian Army. Blackening of Cartridge Cases has been observed during storage at various Ammunition Depots which are under the Control of DGOS, Ministry of Defence, India. Ordnance Factory Badmal took the challenging task of rectification of Cartridge 105 mm IFG NC (Filled) by de-primering for re-utilization and to achieve Cost efficiency. For this purpose, a new procedure was devised and approved by Ordnance Factory Badmal. Blackened filled Cartridge Cases brought back to Ordnance Factory Badmal from various Ammunition Depots, dis-assembled and de-primered following General Safety Directives at Danger Building which is explosion proof to ensure safety of personnel engaged in the task. Further, these Cartridge Cases are rectified and sent back to respective depots. By following this process, Ordnance Factory Badmal is able to rectify Approx. 29000 Nos. of Cartridge Cases successfully and supplied to the Indian Army.

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6) SHRI JHASKETAN RANA
Title of the invention: A SYSTEM TO REMOVE EAR BLOCKING CREATED DUE TO PRESSURE DIFFERENCE USING NEGATIVE PRESSURE-BASED MECHANISM

Abstract:
This invention consists of a design and working of an ear blockage removal instrument using negative pressure caused due to elevated heights while travelling in planes or at higher altitudes along with blockage caused due to water entering the ears. The system has a bulb-like structure which retains air and at the front end it has an ear piece which needs to be inserted into the ear. When the bulb is applied with pressure the air gets rushed out from the small thin film structure at the rear end and it restricts the air from filling in providing a facility of a non-return value thus creating negative pressure. This negative pressure is used to open the blockage without any discomfort. The mechanism is user-friendly and can be operated without any assistance along with economical as it requires no power to function.

No. of Pages: 15 No. of Claims: 4
Publication After 18 Months:

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(19) INDIA
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(54) Title of the invention : IRIDIUM CATALYST, METHOD OF PREPARATION AND ITS USE FOR THE PREPARATION OF FORMATE/FORMIC ACID

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(57) Abstract :
Carbon dioxide is the chief pollutant in the earth's atmosphere, with concentration more than 400 ppm and gradually increases as per the literature data, causes innumerable environmental issues like global warming, climate change etc. One viable solution to reduce the CO2 level is, to complete the carbon management by capturing CO2, preserved and utilize for the diverse of industrially valuable carbon-based products. Thus, herein iridium supported on sulfonated carbon catalyst is developed for the synthesis of industrially important formate/formic acid. Additionally, the present process gives an alternative method that eliminates the use of environmentally hazardous chemicals, solvents and conditions.

No. of Pages : 30 No. of Claims : 6
Title of the invention : ELBOW IMPLANT

Abstract:
The present subject matter relates to an elbow implant (100). The elbow implant (100) comprises a humerus part (102) having a humerus stem (104) penetrable into a humerus medial canal of a humerus, and an ulna part (108) having an ulna stem (110) penetrable into an ulnar medial canal of an ulna. The humerus part (102) and the ulna part (108) are linkable with each other via a connecting pin (114) to form an elbow joint. The elbow implant (100) is of reduced size and includes a minimum number of parts to ensure minimal bone loss with ease of assembly during a total elbow arthroplasty (TEA).
The present invention relates to a security system for bank locker, comprising a biometric authentication for comparing data of a user’s characteristics a control unit for controlling at least two security features of said locker, a communication module for transmitting data to the user interface, and a memory for storing registered authentication data. In the present invention, the first and second users verify their credentials by putting their fingerprint and entering password on a central unit. If the fingerprint and password of the first and second users matches with registered fingerprint and password, then the locker gets unlocked, otherwise the locker remains locked.
Title of the invention: STREET LIGHTENING SYSTEM

Abstract:
A street lightning system comprising of an anemometer 4 and a solar panel 7 mounted at the top of the microcontroller 2, a servomotor 5 connected to the pole, a PIR (Passive Infrared) sensor 3 are connected near to the light bulb 1, and a LDR 6 attached with microcontroller 2. The present system reduces the height of the pole up to 1/3 of its original height, in case of high speed wind and saves up to 60-70% of power.
The present invention relates to a system controlled remotely by an operator on the ground using a radio transmitter, comprising a fuselage including wings, engine and a tail, a DC powered brushless motor 1, plurality of servomotors 4 installed on flaps 5, ailerons 6, elevator 7 and rudder 8, to move levers back and forth and to control steering or adjust wing surfaces, a transmitter for transmitting radio waves, a receiver for receiving radio waves by using a joystick, a battery 3 housed in fuselage, and an electronic speed controller (ESC) 2 housed in fuselage and connected to battery.
Abstract:
The present invention relates to an image searching system comprising of an OCR (Optical Character Reader) module to convert data (paper documents, PDF files or images captured by a digital camera) into editable and searchable data, a cache file module containing metadata of an image is used to search the converted data, an ASCII (American Standard Code for Information Interchange) module to search remaining data which is not found in the cache file module and a memory to store the data. The system first scans the images in the OCR module. The data is then searched in the cache file module. If the data is not found in the cache file module, it is searched in the ASCII module by converting the text file into ASCII image through ASCII code.
The present invention relates to a method for providing solutions to the user-defined queries, wherein the method comprises of initially, pre-processing the query by breaking down the query entered in the query string field into sub queries and further executing the sub queries. After executing the sub queries individually, different results are obtained. And finally, the results are analyzed and a combined result of query is displayed to the user.

No. of Pages : 17 No. of Claims : 6
The present invention relates to a heat rejection device 7 for removal of heat from a refrigerant and in particular the device 7 comprises of at least one media pad container 1 covered by plurality of fins, plurality of condenser coils mounted on the media pad container 1, at least one sprinkler 2 for spraying of water on the media pad container 1, at least one tank 3 for storing the fluid for further use, at least one pump 4 for supplying or increasing the pressure of fluid to the sprinkler 2, at least two temperature sensors associated at entry/exit of the device 7, at least two pressure meter for measuring the pressure of refrigerant.
The present invention relates to a system comprising of a real time clock module for determining the location of a cellular device. The tracking system comprises of: at least one SIM port 1 associated with an IMEI number; at least one Inbuilt SIM 1 integrated in a cellular device, wherein said SIM is planted on said SIM port; a Real Time Clock Module 2 coupled to said SIM, wherein said RTC module provide the real time to said SIM; and a network antenna 3 coupled to said SIM port, wherein said antenna helps in tracking the phone said IMEI number. The system further comprises a waterproof coating which helps in tracking a cellular device even after it is exposed to water.
The present invention is directed to a device to clean bottom surface of water bodies. The device in the present invention comprises plurality of motors 1 and pumps 2. The motors 1 remove algae by using scrubbers 6. The centrifugal pump 2 sucks the water mixed with these impurities and sends it to rubber casing 8. The water collected in the casing 8 is now sucked by a pump 2 and sent to the filter 3, wherein the filter 3 filters the water contaminated with impurities.
The present invention relates to the system and method for detection of tampered images, their localization and restoration. More particularly, the present invention relates to techniques for image restoration problems of noise types and blurring functions and utilizing the same for multimodal biometric systems for personal identification. The invention discloses a faster image processing process and its implementation in a multimodal biometric system. The multimodal biometric system combines multiple biometrics including face and speech features for personal identification.
The present invention relates to a method and system for embedding and associating unique identity of living objects with the metadata of recorded multimedia content. In one embodiment, this is accomplished by extracting (210) at least one Unique Biometric Identity (UBI) of at least one person associated with the multimedia content from a user device while capturing the multimedia content, storing (220) the extracted UBI of at least one person associated with the multimedia content in an association table at the user device, identifying (230) a Unique Personal ID (UPID) using the association table corresponding to the UBI, embedding (240) the UPID in a metadata of the multimedia content and storing (250) the multimedia content with the UPID.
METHOD OF FUND RAISING FOR PROJECTS AND MARKETING TEMPLATES FOR SAME

The present invention relates to a method for raising funds for projects. Users can upload their project on a platform and the customers can fund the projects of the user in which the customer is interested. Complaints can be filed about any issue and get assigned to the particular person handling that product. Templates are provided for campaign design features like Direct Mail layouts, Email templates, Landing Pages, Point-Of-Sale displays, and Banner Ads that have common colors, designs, and pictures and these are editable.
The present invention relates to a system and method for automated customer assistance based on Intent and Named Entity Classification via Semantic Annotation. The system comprises at least one processor for pre-processing the input data; a vectorizer to convert the text from said input data into vectors; training and testing module for data validation; classifier to classify the data based on intent and entity; evaluation metrics module to check for data precision, and natural language generation module to generate a response by an Android System. The method discloses a speech input based on user request on an android system. A text string is obtained based on the speech input. Different features from the text string are sent to the classifiers to classify Entity and Intents. A response is generated by the natural language generator, which is shown on android system by natural language processing.
(51) Title of the invention : FAULT DETECTION SYSTEM FOR RAILWAY TRACKS

The present invention relates to a fault detection system for rails comprising; plurality of sensors attached on various locations of said system for determining the defect of railway track, an engine control unit coupled with an engine 5 for receiving output signal from said sensors, a control unit for receiving output signal from said engine control unit and plurality of ultrasonic sensors, atleast two hydraulic pole 3 mounted on railway platform to track railway joints. The engine control unit collects data provided by speed sensor, brake pressure sensor and temperature sensor and sends it to control unit. The control unit further collects the data of all sensors and sends it into a data storing device.

No. of Pages : 13 No. of Claims : 8
The present invention is directed to a method for clustering data and text classification. Uploading a data set on a platform; initializing clusters, wherein said clusters perform the function of clustering data sets using a weighted k-mean algorithm; applying a genetic algorithm for optimizing said clusters, wherein said clusters are made by said weighted k-mean; and applying a feed forward back propagation neural network. The parameters that include entropy, accuracy, precision and recall are calculated using said method.
The present invention relates to a method and a system for purifying and collecting rainwater under natural slopes. Accordingly, a novel system for purifying and collecting rainwater in natural slopes, comprising an alkali activated concrete cloth spread on a natural depression, wherein said cloth supplied with activator solution attains the shape of the terrain. Further the system comprising of plurality of pervious concrete blocks for purifying, positioned and interlockingly arranged along the boundary of said concrete cloth such that the top layer of the block is in level with the ground surface allowing rain water flow into the system, wherein the concrete cloth together with the plurality of concrete blocks forms a storage unit for purified water.
The present invention consists of a plug bolt and a bolt seat. The plug bolt comprises a conductor and a circuit board; the conductor has a first stuck-buckle, an accommodation-hole, and a top-cover; the circuit board is set with an RFID chip, an upper contact point, and a lower contact point. The RFID chip forms a first far-field antenna loop through the first pin, the upper contact point, the top-cover, and the conductor. The bolt seat is equipped with an elastic device, an internal antenna, an inserting-hole, and a second stuck-buckle, thereby controlling the elastic device to provide a pre-pressure to the internal antenna to electrically connect with the lower contact point. When the RFID chip is activated, the internal antenna forms a second far-field antenna loop and synchronously activate the first one; which the first and second far-field antenna loops can be cut-off when the top-cover is worn.
Title of the invention: GAS ETCHING DEVICE

Abstract:
A gas etching device includes an upper cover having a first gas exhausting channel that surrounds a first accommodation space. A lower cover has a second accommodation space where a wafer is located. The lower cover can connect with the upper cover. A gas jetting element is arranged in the first accommodation space to communicate with the upper cover. The gas jetting element receives etching gas from outside the upper cover and transmits the high-pressure gas to the second gas entering channel, so as to avoid leaking the etching gas.
Title of the invention: A METHOD FOR CULTIVATION OF WILD IRPEX LACTEUS FUNGI

Abstract:
This invention is related to a method for cultivation of wild irpex lacteus fungi collected from Himachal Pradesh. Cultivation of mushroom is a low cost method which is full of nutrients and medicinal properties. Almost 300 genera of mushrooms and fleshy basidiomycetes are known today, but only few species of these mushrooms are cultivated commercially. This low cultivation could be due to the fact that in natural habitat mushrooms show mycorrhizal association with the host and in the absence of host mushroom may not sporulate. But many saprophytic species have been amenable to cultivation. Irpex lacteus have many medicinal properties. Due to its anticancer and other medicinal value it is very important to cultivate wild Irpex lacteus fungi collected from Kausali forest Himachal Pradesh. Mycelia of the wild Irpex lacteus were cultivated using sawdust and wheaty bran as substrate. Spawn run of mycelia was done using wheat grains. Mature fruiting body of mushroom was harvested after 25 days of incubation at 25°C on sawdust substrate.
The present invention provides a system and method for a low cost, easy to install system and method for seismic response control. The system consists of sliding mass blocks attached to the roof slab with springs of desired stiffness to achieve the desired tuning of the sliding mass with respect to the primary structural system. The sliding mass blocks are covered by light weight thin polymer sheets to provide the uniform continuous base for laying the floor tiles on top.

No. of Pages : 23 No. of Claims : 7
The present invention provides a compact peristaltic pump and the 3d printing parameters optimised to automate the fabrication of pumps gear assembly. The gear assembly is made up of thermoplastic material which enables easy control/manipulation of gear tolerance for low friction pumping. The invention provides the fabrication of very low volume dispensing pumps and the design of an adaptive gear-assembly holder.
The present invention relates to performing an action between electronic devices. In one embodiment, a method comprises receiving a user-input indicative of performing an action using a first electronic device; in response to the user-input, determining a first illumination pattern indicative of the action; generating a first visual indicator in form of a predefined geometrical shape on the first electronic device based on the first illumination pattern; capturing a second visual indicator corresponding to a second illumination pattern determined by a second electronic device, wherein the second illumination pattern is indicative of information to be used for performing the action; extracting the information from the captured second visual indicator; and performing the action using the extracted information when the extracted information matches with a pre-stored information associated with a user of the second electronic device.

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No. of Pages : 32 No. of Claims : 10
Title of the invention: PLANT FIBER-BASED BIODEGRADABLE COMPOSITE MATERIAL

Abstract:
Plant Fiber-Based Biodegradable Composite Material The present disclosure relates to a biodegradable composite material and a method of producing the biodegradable composite material. The biodegradable composite material includes plant fiber coated with Graphene Oxide (GO). The biodegradable composite material is convertible at least into sheets. A ratio of the plant fiber to the GO is in a range of about 1: 0.0125 to 1: 0.875.
A system for reducing soiling of a side window of a vehicle by rainwater is disclosed. The system comprises a plurality of vortex generators 102 fixed upstream in an airflow that flows over an outer surface of the side window 104. Vortex generators 102 are fixed parallel to each other and perpendicular to an outer surface 106 of the vehicle. Vortex generators 102 generate rotating vortices with axes aligned to the direction of the airflow, and having a direction of spin such that air in the vortices touching the outer surface of the side window has a generally downward velocity vector. Downward flow of air touching the outer surface of the window makes water and soil flow generally downward and prevents soiling of the side window. Vortex generators are fixed on outer surface 106 such that the leading side of the vortex generators 102 is higher than its trailing side.
Title of the invention: DATA TRANSMISSION METHOD, NETWORK DEVICE AND TERMINAL DEVICE

Abstract:
An embodiment of the present invention provides a data transmission method, network device and terminal, the data transmission method comprising: receiving, by a network device, a first reference signal transmitted by a first terminal device and a first physical channel, wherein the first reference signal is located at an ith symbol in one time slot, i is a positive integer less than 7, the first physical channel occupies n symbols in the time slot, and n is 1, 2, or 3; and performing, by the network device, according to the first reference signal, demodulation on the first physical channel. The present invention reduces latency of the data transmission.
**Title of the invention**: TECHNIQUE FOR SIDELINK FEEDBACK TRANSMISSIONS

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**Abstract**:  
A technique for transmitting and receiving data (602) using a sidelink, SL, radio communication (604) between a first radio device (100) and a second radio device (200) is described. As to one method aspect of the technique, a scheduling assignment, SA (601), announcing a transmission of the data (602) for the second radio device (200) is broadcasted. The data is transmitted according to the SA (601) from the first radio device (100) in a unicast mode to the second radio device (200). Responsive to the data transmission, a control feedback (608) is received from the second radio device (200) in a unicast mode at the first radio device (100), wherein the control feedback (608) is received on a feedback radio resource (708) determined by at least one of the first radio device (100) and the second radio device (200).

No. of Pages: 74  No. of Claims: 43
Title of the invention : CIGS SOLAR CELL AND PREPARATION METHOD THEREOF

Abstract :
The present disclosure relates to the field of energy technology, and discloses a CIGS solar cell and a preparation method thereof. In some embodiments of the present disclosure, the method for preparing the CIGS solar cell comprises: forming a back electrode layer and a CIGS layer sequentially on a surface of a substrate; etching a surface of the CIGS layer, and performing cleaning, drying and annealing treatments after the etching is completed; and forming a buffer layer, a window layer and a transparent electrode layer sequentially on a surface of the annealed CIGS layer after the annealing treatment. The CIGS solar cell and the preparation method thereof as provided by some embodiments of the present can improve photoelectric conversion performance of the CIGS solar cell and increase conversion efficiency of the CIGS solar cell.

No. of Pages : 18 No. of Claims : 10
The object of the present invention is to provide an electric wire scrap recovery machine which can recover metal wire with higher quality. One aspect of the present invention is an electric wire scrap recovery machine has a tilted separation table, a vibration generator which vibrates the separation table, and a water supplier which supplies water to the separation table. The separation table has side wall components and a dam component for damming the water which is supplied by the water supplier, and a partition plate which separates the space into a main separation lane and a miss-cut lane. Further, many bumps are formed on the main separation lane.
A method to receive telemetry messages over an RF channel, the method implemented by a system on a chip, in which a signal is received from the output of an input RF module, the received signal is offset in time and frequency wherein the signal, at first, is offset in time so that the offset magnitudes uniformly fill the length of one data bit, then, the signal is offset in frequency so that the offset magnitudes uniformly fill the space between the Fourier transform subcarriers, with the frequency offsets being independent of the time offsets; each signal processed at the preceding step is subjected to sequential Fourier transforms, with the first time element of each next transform immediately following the last element of the preceding transform; all messages are demodulated independently. The technical result consists in that messages can be received over multiple channels at multiple rates.
A photographing optical lens assembly includes six lens elements, which are, in order from an object side to an image side, a first lens element, a second lens element, a third lens element, a fifth lens element and a sixth lens element. The first lens element with negative refractive power has an object-side surface being concave in a paraxial region thereof. The sixth lens element has an image-side surface being concave in a paraxial region thereof and includes at least one convex shape in an off-axis region thereof.
Title of the invention: WATERPROOF AND ELECTRICITY-INSULATING SUPPORT STRUCTURE FOR SOLAR PANELS

Abstract:
A waterproof and electricity-insulating support structure for solar panels includes a base frame (1) having a top portion (11) with two side portions (12) disposed at two sides of the top portion (11). Each of the side portions (12) connects with a bottom portion (13) to be fixed on a steel frame (4) forming a roof. A fastening member (2) is fixed to the top portion (11) of the base frame (1) to form an assembling space (5) for solar panels (6) there between. A plurality of rubber strips (3) for waterproofing and insulating from electricity are disposed between the side portions (12) and the solar panels (6) and between the fastening member (2) and the solar panels (6).

No. of Pages: 10 No. of Claims: 3
The Patent Office Journal No. 08/2020 Dated 21/02/2020

(54) Title of the invention : ARTIFICIAL INTELLIGENCE (AI) BASED AUTOMATIC RULE GENERATION

(57) Abstract :
An AI-based rule generation system generates an ontology from user-provided information and further enables generating rules that govern processes via drag-and-drop operations by automatically generating code in the backend. The rule generation system after generating the ontology, provides access to the entities of the ontology via a drag-and-drop GUI which also includes operators required to generate the rules. The user can drag-and-drop the entity elements and the operator elements as needed onto a whitespace in addition to providing the requisite values in order to generate a rule flow. The rule flow is validated and published to an execution server for use by downstream processes. The rule generation system further includes custom functions in addition to enabling distributed knowledge base processes for generating the rules.

No. of Pages : 47 No. of Claims : 20
Examples of systems and methods for automatic population of electronic documents are described. In an example, a digital base document having the information to be populated in a data field of the electronic document may be obtained. From the digital base document a data item to provide the information may be extracted. Further, for the digital base document, a similarity score may be computed with respect to each document type defined in predefined mapping data, the predefined mapping data including, for each document type, a weight associated with data items occurring in the document type, the weight being associated based on the importance of the data item to the document. Based on the similarity score, a document type of the digital base document may be identified. Further, based on a position of the data item in the digital base document and the identified document type, the data field may be populated.
(51) Title of the invention : SADDLED VEHICLE

Abstract:
A saddled vehicle in which a connection unit for arranging a connection port of an external device is disposed at a position with higher user-convenience is provided. The saddled vehicle (1) comprises a storage unit (35) that is arranged in a vehicle body; a lid (6) of an opening/closing type blocking an opening (36) of the storage unit (35); and a connection unit (70) where a connection port (60) is arranged, a plug (100) being inserted to and removed from the connection port (60), the plug (100) being for connecting an external device, wherein it is configured, in a state where the lid (6) is closed, that a front surface side of the lid (6) is exposed to the vehicle body outside and that a back surface side of the lid (6) contacts the opening (36), and the connection unit (70) is disposed on the back surface side of the lid (6). The connection unit (70) is 15 covered by a unit cover (50) where a through hole (54) facing to the connection port (60) is formed.
(12) PATENT APPLICATION PUBLICATION

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No.20194029929 A

(19) INDIA

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(54) Title of the invention : ROBOTIC PROCESS AUTOMATION

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(57) Abstract :

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for creating user interface control images for robotic automation. One of the methods includes detecting, during a training process, a control selection event; retrieving a first image and a second image; determining a difference image that represents a difference between the first image and the second image; determining, using the difference image, a plurality of colors for pixels included in the difference image that are likely located outside of a control location for the control; determining one or more shapes depicted in the difference image that each have a color other than all of the colors in the plurality of colors; selecting, from the one or more shapes and using an event location, a particular shape as likely representing the control; and storing a cropped image of the control extracted from one of the two or more images.

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No. of Pages : 40 No. of Claims : 23
A light emitting display apparatus (100; 400; 500) includes: a light emitting element (130) on a substrate (110); an encapsulation unit (140) on the light emitting element (130); and a scattering film (150; 450; 550) between the encapsulation unit (140) and the light emitting element (130), or in the encapsulation unit (140). Ref Fig. 1
An accessory includes: a detection terminal; a first power supply terminal through which a first power supply voltage is supplied; a first ground terminal used as a ground potential; a second power supply terminal through which a second power supply voltage is supplied; a second ground terminal used as a ground potential; a ready terminal used to indicate whether or not communication is allowed; a first data terminal that receives a first data signal; a second data terminal that outputs a second data signal; a clock terminal that outputs a clock signal; and a third data terminal that outputs a third data signal, wherein: the first ground terminal, the second power supply terminal, and the second ground terminal are positioned between the first power supply terminal and the ready terminal; and the first data terminal and the second data terminal are positioned between the ready terminal and the clock terminal.
An elevator control system is provided and includes a sensor system configured to sense elevator car conditions, a safety system signaling element to generate a safety signal indicative of an incident and a control system configured to react to the safety system signal. When the control system receives the safety signal indicating that an incident has occurred that requires engagement of at least one of primary and secondary brakes, the control system controls a deceleration rate during the incident by operating the primary brake, determining whether the deceleration rate is within a target range and adjusting the deceleration rate based on signals from the sensor system.
Abstract:
The present disclosure provides a method and a device for replacing an expression. The method includes: acquiring a current expression represented by a currently-reconstructed 3D face model; acquiring a target expression from a user; acquiring, based on the current expression and the target expression, values for adjusting coordinates of a first set of key points on the currently-reconstructed 3D face model; and adjusting the coordinates of the first set of key points on the currently-reconstructed 3D face model based on the values, to generate a 3D face model representing the target expression.
The present invention relates to a beverage dispenser, comprising:
- an inlet connected to a water source;
- an outlet for dispensing the water to a user vessel;
- at least one filter element having an input and an output for filtered water;
- a mineralization device coupled between the output for filtered water of the filter element and the outlet of the beverage dispenser;
- a controller; and
- at least one ion concentration sensor connected to the controller and arranged downstream of the output of the mineralization device, wherein the ion concentration sensor is adapted to determine the concentration of predetermined type of ion in the water; wherein the controller is adapted to determine the actual ion concentration of at least one predetermined ion type by the at least one ion concentration sensor.
(54) Title of the invention: RADIATION THERAPY APPARATUS

(51) International: A61N00051000000,F01L00012600000,B25J00190000000,F16D00137500000,B01L00090600000

classification

(31) Priority
Document: GB1813314.0
No

(32) Priority Date: 15/08/2018

(33) Name of priority country: U.K.

(86) International Application: NA
No

(87) International Publication: NA

(61) Patent of Addition to Application: NA

(62) Divisional to Application: NA

(57) Abstract:
A moveable support frame (7) for a radiotherapy device, wherein the moveable support frame (7) comprises at least one mass compensation mechanism (25a, 25b), wherein the mass compensation mechanism (25a, 25b) comprises at least one resilient element.

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(72) Name of Inventor:
1) Danny TAMINIAU
A functional assembly is provided. The functional assembly includes a functional module and a lifting assembly. The lifting assembly is fixed in the housing and configured to drive the functional module to move. In addition, the functional assembly further includes a rotating assembly. The rotating assembly is connected to the functional module.
(54) Title of the invention: METHODS AND DEVICES FOR ACQUIRING 3D FACE, AND COMPUTER READABLE STORAGE MEDIA

(57) Abstract:
The present disclosure provides a method and a device for acquiring a 3D face. The method includes: detecting a 2D face image captured from a front side to acquire 2D facial feature points; matching the 2D facial feature points with facial feature points of a pre-stored 3D face model; and in response to that the 2D facial feature points match the facial feature points of the pre-stored 3D face model, acquiring a skin texture map, and rendering the pre-stored 3D face model with the skin texture map to acquire the 3D face.
The method and device for carrying out the method, comprising the steps of opening an exhaust gas recirculation valve (108) of an internal combustion engine (100), closing a throttle valve (104) of the internal combustion engine (100), detecting a value for an intake manifold pressure of the internal combustion engine (100) with the open exhaust gas recirculation valve (108) and the closed throttle valve (104), comparing value with a first threshold value (A) and a second threshold value (B) greater than the first threshold value (A), detecting an operating condition of the internal combustion engine (100) depending on whether the value is in a range of values between the first threshold value (A) and the second threshold value (B) or outside this range.
METHOD AND APPARATUS FOR IMAGE PROCESSING, AND MOBILE TERMINAL

The embodiment of the disclosure discloses a method and an apparatus for image processing, and a mobile terminal. The method may include: acquiring image parameters of a real-time preview image displayed in a preview interface; evaluating, based on the image parameters and a pre-established image evaluation model, the real-time preview image to obtain an evaluation result; and displaying the evaluation result. The method enables the user of the mobile terminal to obtain the evaluation result of the real-time preview image displayed in the preview interface in real time, so that the user can get the quality of the current real-time preview image in real time, and the user can adjust the real-time preview image as needed, in order to obtain images with better evaluation results, thereby improving the overall quality of the images captured by the mobile terminal.
A three-dimensional sensing apparatus (100, 100A) including a light-projecting device (110), at least two image-capture devices (120), and a processor (130) is provided. The processor (130) is electrically connected to the light-projecting device (110) and the at least two image-capture devices (120) and adapted to provide a control signal to the light-projecting device (110) to adjust the intensity of the illumination beam. The processor (130) adjusts the contrast of the captured image to form a contrast-enhanced image according to a first processing signal and extracts a feature region of the contrast-enhanced image to form a feature-extraction image according to a second processing signal. The processor (130) normalizes the intensity of the feature-extraction image to form an optimized image according to a third processing signal and forms the optimized image into a depth image according to a sensing signal.
**Title of the invention:** DISPLAY DEVICE

**International classification:**
- G02F0001133300
- G09F0009300000
- G06F0001160000
- B60W0050140000
- H05K0005030000

**Priority Document:**
- No: 10-2018-0096976
- Date: 20/08/2018
- Country: Republic of Korea

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4) Jeongho KIM
5) JIN HWAN CHOI

**Abstract:**
A display device includes a first guide member extending in a first direction, a second guide member extending in the first direction and facing the first guide member in a second direction crossing the first direction, a display panel disposed between the first guide member and the second guide member, a support member which supports a portion of the display panel, a first driving unit which moves the support member, and a second driving unit connected to one end of the display panel to roll or unroll the display panel. Both sides of the support member are inserted into guide grooves defined in an inner side surface of the first guide member and an inner side surface of the second guide member, which faces the inner side surface of the first guide member, and the support member moves along the guide grooves.
Title of the invention: DISPLAY DEVICE AND METHOD OF MANUFACTURING THE SAME

Abstract:
A method of manufacturing a display device includes disposing a polarizing layer on one surface of a display panel including a thin film transistor and a pixel electrode; cutting the polarizing layer using a cutting laser beam such that a side of the polarizing layer and a side of the display panel correspond to each other; applying a conductive paste on the side of the display panel; and patterning the conductive paste using a patterning laser beam.
**Title of the invention:** ENHANCED GRAPHITE BASED ELECTRODE AND METHODS USING THE SAME

**Abstract:**
Systems, methods and devices relating to measuring free chlorine in liquid samples. An enhanced graphite electrode and sensors comprising the same are provided. The enhanced graphite electrode in conjunction with a reference electrode and a counter electrode can be used in a chronoamperometry mode to detect concentrations of free chlorine in liquid samples, especially static liquid samples. The enhanced graphite electrode can also be used in conjunction with a counter/reference electrode in a pulsed amperometric detection mode to detect concentrations of free chlorine in liquid samples, especially static liquid samples.
A method for image processing and an electronic device are disclosed. The method includes obtaining (101) an image in a chrominance-luminance separated color mode; traversing (102) luminance components of all pixels in the image to determine a number of pixels corresponding to the respective luminance component; generating (103) an original luminance distribution of the image based on the luminance components and the number of the pixels corresponding to the respective luminance component; generating (104) a luminance mapping relationship between a preset standard luminance distribution and the original luminance distribution; and adjusting (105) the luminance components of the pixels in the image based on the luminance mapping relationship to obtain a processed image.
An image processing method may include: acquiring an image in a chrominance-luminance separation color mode; performing scene recognition of the image to determine a scene of the image (102b); traversing luminance components of respective pixel points in the image, and generating a luminance distribution of the image according to a traversing result of the luminance components (103b); generating a luminance mapping relation based on a standard luminance distribution corresponding to the scene of the image and the luminance distribution of the image (104b); and adjusting the luminance components of the respective pixel points in the image according to the luminance mapping relation to generate a first processed image (105b).
**Title of the invention:** METHOD FOR IMAGE PROCESSING AND ELECTRONIC DEVICE

**Abstract:**
A method for image processing and an electronic device are disclosed. The method includes performing (101, 201, 301, 401) edge identification on the image; determining (102, 202, 302, 402) a filtering kernel for a filtering processing on the image according to a result of the edge identification; performing (103, 203, 303, 403) the filtering processing on the image based on the filtering kernel to obtain a low-frequency image and a high-frequency image corresponding to the image; and performing (104) an enhancement processing for the high-frequency image and performing image fusion for the low-frequency image and the enhanced high-frequency image to obtain a processed image.
Title of the invention: WIRELESS CHARGING SYSTEMS FOR ELECTRONIC DEVICES

Abstract:
Embodiments describe a portable electronic device that includes a housing having an interface surface and an inductor coil disposed within the housing and comprising a conductive wire wound in a plurality of turns about a center point and in increasing radii such that the inductor coil is substantially planar. The portable electronic device further includes charging circuitry coupled to the inductor coil and configured to operate the inductor coil to wirelessly receive power and wirelessly transmit power, control circuitry coupled to the charging circuitry and configured to instruct the charging circuitry to operate the inductor coil to wirelessly receive power and to wirelessly transmit power, and a device detection coil coupled to the control circuitry and configured to detect the presence of an external device on the charging surface, the device detection coil is configured to operate at a different frequency from the inductor coil.
The present invention relates to a secondary battery electrode manufacturing method therefor and an electrode assembly and more specifically to a secondary battery electrode for improving the stability of a secondary battery manufacturing method therefor and an electrode assembly. The secondary battery electrode according to an embodiment of the present invention comprises: a current collector formed extending in one direction; a first active material layer formed on one surface of the current collector and including a first inclination part and a first protrusion part; and a second active material layer formed on the other surface of the current collector and including a second inclination part and a second protrusion part wherein the position of the second protrusion part on the second active material layer is controlled so that the second protrusion part is formed at a position that is not opposite the first inclination part with the current collector therebetween.
Title of the invention: WIRE HARNESS ARRANGEMENT STRUCTURE

Abstract:
The purpose of the present invention is to provide a technique for allowing convenient countermeasures to be taken against the stepping-on of a wire harness by an occupant when arranging the wire harness at an arbitrary position with respect to a silencer. This wire harness arrangement structure (10) is provided with a silencer (20), a wire harness (30), and a cover (50). The silencer (20) includes a silencer body section (22), and it has a groove (26) carved in the thickness direction into a main surface (24) of the body section of the silencer. At least a portion of the wire harness (30) is accommodated in the groove. The cover (50) includes: a pair of leg sections (52) that cover both lateral sides of the wire harness accommodated in the groove; and a lid section (54) that covers the upper side of the wire harness accommodated in the groove and connects the pair of leg sections. The bottom section side of the groove is open.
Title of the invention: METHOD OF PURIFYING GLYCOSYLATED PROTEIN FROM HOST CELL GALECTINS AND OTHER CONTAMINANTS

Abstract:
A method for purifying a glycosylated recombinant protein of interest from a contaminant is disclosed that is suitable for industrial production purposes to remove gelactins and other host cell contaminants, such as metallic cations, from recombinant therapeutic proteins.
The present disclosure is directed to alpha-synuclein (αSyn) peptide immunogen constructs, compositions containing the constructs, antibodies elicited by the constructs, and methods for making and using the constructs and compositions thereof. The disclosed αSyn peptide immunogen constructs contain a B cell epitope from αSyn linked to a heterologous T helper cell (Th) epitope directly or through an optional heterologous spacer. The B cell epitope portion of the peptide immunogen constructs contain about (10) to about (25) amino acid residues of αSyn, corresponding to the sequence from about the Glycine at position 111 (G111) to about the Asparagine at position (135) (D135) of full-length αSyn. The α-Syn peptide immunogen constructs stimulate the generation of highly specific antibodies that are cross-reactive with the beta-sheet of αSyn as monomers, oligomers, and fibrils, but not the natural alpha-helix of αSyn, offering therapeutic immune responses to hosts at risk for synucleinopathies.
A device to be inserted into a conduit includes at least one tube intended to receive optic fibers or micro fiber optic cables therein. A jacket surrounds the tube. In an embodiment where there are a plurality of tubes, they are loosely aligned within the jacket. In another embodiment, opposed surfaces of the jacket are attached to each other to form compartments for each tube. In still another embodiment, the jacket holds the tubes generally in a bundle. The jacket of a tube may also be attached to one or more innerducts, each of which can receive a fiber optic cable. Alternatively, an innerduct may be attached to two jackets each of which carry a tube therein.
Provided is an outdoor unit of a refrigeration device in which deterioration of reliability in relation to cooling of a heat-generating component using a heat pipe is suppressed. An outdoor unit (10) includes an outdoor fan (18) for generating an outdoor airflow (AF), an outdoor unit casing (40), a high-heat-generating electrical component (65), a compressor control board (76) on which the high-heat-generating electrical component (65) is mounted, an electrical component box (50) for housing the compressor control board (76), and a first cooling unit (80) for cooling the high-heat-generating electrical component (65). The first cooling unit (80) has a heat pipe (83), a plurality of first cooling unit fins (81) disposed on a flow path of the outdoor airflow (AF), and a first cooling unit main body part (82) interposed between the heat pipe (83) and the first cooling unit fins (81) and thermally connecting the heat pipe (83) and the first cooling unit fins (81). The heat pipe (83) is located in the electrical component box (50) and positioned adjacent to the high-heat-generating electrical component (65).
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<td>:WO/2019/031450</td>
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<td>:NA</td>
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<td>Filing Date</td>
<td>:NA</td>
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<td>(62) Divisional to Application Number</td>
<td>:NA</td>
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| 57) Abstract: Provided is an outdoor unit for a refrigeration device in which reductions in reliability and increases in cost are suppressed. This outdoor unit (10) comprises an outdoor unit casing (40), electrical components (E1) including a strong electrical component (95) and a weak electrical component (90), an electrical wiring box (50) disposed within the outdoor unit casing (40), a strong electrical wiring (96) by which a voltage or a current is supplied between the strong electrical component (95) and a corresponding device, a weak electrical wiring (91) by which a voltage or a current having a lower value than that in the strong electrical wiring is supplied between the weak electrical component (90) and a corresponding device, and a cover unit (56) that suppresses the infiltration of fluids into the electrical component box (50). A strong electrical wiring through-hole (H1) for leading in the strong electrical wiring (96) and a weak electrical wiring through-hole (H2) for leading in the weak electrical wiring (91) are formed in a side section of the electrical component box (50). The cover unit (56) (first side-surface cover (54)) is disposed in the vicinity of the strong electrical wiring through-hole (H1) and the weak electrical wiring through-hole (H2) in the outer surface of the electrical component box (50) and covers both an upper section and the side section. |

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<th>(54) Title of the invention</th>
<th>OUTDOOR UNIT FOR REFRIGERATION DEVICE</th>
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<tr>
<th>71) Name of Applicant</th>
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<tr>
<td>72) Name of Inventor</td>
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<td>KAMITANI, Shigeki</td>
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<td>KOSHIJI, Taichi</td>
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<td>:PCT/US2018/035508 Filing Date :31/05/2018</td>
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5. BALINSKI, Kathe

(57) **Abstract:**
The invention relates generally to activatable antibodies that specifically bind to PDL1 and methods of making and using these anti-PDL1 activatable antibodies in a variety of therapeutic, diagnostic and prophylactic indications.

No. of Pages : 83  No. of Claims : 66
The present invention relates to methods of fertilization and gender determination and identification in avian subjects. More specifically, the invention provides non-invasive methods using transgenic avian animals that comprise at least one reporter gene, specifically, RFP, integrated into at least one gender chromosome Z or W. The transgenic avian animals of the invention are used for gender determination and selection of embryos in unhatched avian eggs.

No. of Pages : 99 No. of Claims : 48
Title of the invention: OUTDOOR UNIT FOR REFRIGERATION DEVICE

Abstract:
The present invention addresses the problem of providing an outdoor unit for a refrigeration device in which an operation for removing a panel during, inter alia, accessing of an electrical equipment part of an electrical component box, etc., is facilitated. In this outdoor unit (1), a front board (24) is divided into a first panel (24a) and a second panel (24b), and therefore it is possible, when a service person performing initial installation or maintenance is accessing an electrical component box (6), to remove only the first panel (24a) from a casing (2) while the second panel (24b) remains attached to an initial position in the casing (2). As a result, it is possible to access the electrical component box (6) while only the first panel (24a) is removed. The prior art featured a configuration for removing a plurality of panels, and therefore, although the weight of each panel was reduced, the total weight was increased; in addition, because the number of individual panel components was greater, service persons inevitably had to perform complex removal methods. However, in this outdoor unit (1), such complex removal methods are unnecessary, thus shortening operation time and improving operation efficiency.
Title of the invention: PROCESS AND APPARATUS FOR USING A WASTE HEAT STREAM IN AN AROMATICS COMPLEX

Abstract:
The present invention relates to a process and apparatus for using a waste heat stream in an aromatics complex. More specifically, the present invention relates to a process and apparatus for using waste heat to drive multiple compressor services within an aromatics complex to achieve energy savings and provide low grade heat that is otherwise wasted.

No. of Pages: 11 No. of Claims: 10
Embodiments of the present application provide a method for configuring resources, a terminal device and a network device, capable of supporting a terminal device to aggregately transmitting data on a hybrid carrier (a PC5 carrier resource + a Uu carrier resource) and a PC5 carrier, so as to improve the efficiency of data transmission in 5G NR and achieve more flexible data transmission in 5G NR. The method comprises: sending first information to a network device, the first information comprising capability information, the capability information being used for indicating the capability for simultaneous transceiving on multiple carriers, the multiple carriers comprising first type carriers and second type carriers, the first type carriers being used for transmitting data on a sidelink, and the second type carriers being used for transmitting data on at least one of an uplink, a downlink, and a sidelink; and receiving second information sent by the network device, the second information being used for indicating a first transmission resource for the first type carriers and second type carriers and a valid period of the first transmission resource.
CONTROL METHOD, NODE, AND COMPUTER STORAGE MEDIUM

Disclosed in the present invention are a control method, a node, and a computer storage medium. The method comprises: sending instruction information to a second node when a data bearer for a User Equipment (UE) is established, wherein the instruction information is used for turning on or off the control on a data replication function of the UE by the second node.

No. of Pages : 23 No. of Claims : 15
The invention relates to a brake actuation mechanism for a disc brake, comprising an adjusting device (B) that can be rotated on a rod (1) and is axially displaceably guided at least in parts. The invention also relates to a disk brake comprising said type of brake actuation mechanism.
The invention relates to novel inhibitors of MAP4K1 (HPK1) useful for the treatment of diseases or disorders characterised by dysregulation of the signal transduction pathways associated with MAPK activation, including hyperproliferative diseases, diseases of immune system dysfunction, inflammatory disorders, neurological diseases, and cardiovascular diseases. The invention further relates to pharmaceutical compositions comprising the same and methods of treatment of said diseases and disorders. The inhibitors are of formula (I) wherein the definitions for A, D, E, F, R5, R6, R7, Z, ring Q, n, x and y are as given in the application.
Provided in an embodiment of the present invention are a session management method, a method for interworking between heterogeneous systems, and a network device. The session management method comprises: upon establishing, for a terminal apparatus, a guaranteed bitrate (GBR) flow in a first communication system, a session management network element in the first communication system determining that the GBR flow is a GBR flow required by the terminal apparatus to switch from the first communication system to a second communication system; and the session management network element establishing, for the GBR flow, a session context corresponding to the second communication system. The invention solves a technical problem of inefficient resource use in existing switching methods.

No. of Pages : 53 No. of Claims : 22
Title of the invention: TIME DELAY ESTIMATION METHOD AND DEVICE

Abstract:
Disclosed are a time delay estimation method and device, wherein same belong to the field of audio processing. The method comprises: determining cross-correlation coefficients of a multi-channel signal of a current frame; determining a time delay trajectory estimation value of the current frame according to inter-channel time difference information about the buffered at least one past frame; determining an adaptive window function of the current frame; weighing the cross-correlation coefficients according to the time delay trajectory estimation value of the current frame and the adaptive window function of the current frame, so as to obtain a weighted cross-correlation coefficient; and determining an inter-channel time difference of the current frame according to the weighted cross-correlation coefficient. The present invention solves the problem that a cross-correlation coefficient is excessively smoothed or insufficiently smoothed, thereby improving the accuracy of estimating an inter-channel time difference.
**Title of the invention**: TEMPERATURE CONTROL DEVICE FOR ENDLESS ROLLING LINE

<table>
<thead>
<tr>
<th>International classification</th>
<th>Date of filing of Application :24/12/2019</th>
<th>Name of Applicant : 1)TOSHIBA MITSUBISHI-ELECTRIC INDUSTRIAL SYSTEMS CORPORATION</th>
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<td>:B21B 37/74,B21B 1/46,B21B 38/00,B22D 11/12</td>
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<td>Address of Applicant : 3-1-1, Kyobashi, Chuo-ku, Tokyo 1040031 Japan</td>
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<td>Priority Document No</td>
<td>:NA</td>
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**Abstract**:

In an endless rolling line, the speed of a rolled material is changed accompanying a flying sheet thickness change. This temperature control device predicts and calculates a speed change amount of the rolled material accompanying a flying sheet thickness change, and updates a speed pattern. The temperature control device performs a feed forward control for a cooling water amount for cooling the rolled material on the basis of the most recent speed pattern and a temperature measurement value of the rolled material at the entrance side of a heat exchanger. The temperature control device performs, concurrently with the forward control, a feedback control of the cooling water amount based on the tolerance between a target value and the temperature measurement value of the rolled material at the outlet side of the heat exchanger.
Title of the invention: ANTIMICROBIAL MIXTURE CONTAINING 4-(3-ETHOXY-4-HYDROXYPHENYL)BUTAN-2-ONE AND AN ORGANIC ACID COMPOUND, AND COSMETIC COMPOSITION CONTAINING SAME

| (51) International classification | :A01N 35/02,A01P 1/00,A01P 3/00 |
| (31) Priority Document No | :1756168 |
| (32) Priority Date | :30/06/2017 |
| (33) Name of priority country | :France |
| (86) International Application No | :PCT/EP2018/067297 |
| Filing Date | :27/06/2018 |
| (87) International Publication No | :WO/2019/002391 |
| (61) Patent of Addition to Application Number | :NA |
| (62) Divisional to Application Number | :NA |

Abstract:
The invention relates to an antimicrobial mixture containing 4-(3-ethoxy-4-hydroxy-phenyl)butan-2-one and an organic acid compound chosen from a benzoic acid salt, sorbic acid or a salt thereof, methyl 4-hydroxybenzoate, propyl 4-hydroxybenzoate, 5-n-octanoylsalicylic acid, a hydroxamic acid and dehydroacetic acid or a salt thereof, and also to a cosmetic composition containing such a mixture. Use in caring for, making up and cleansing keratin materials.

No. of Pages : 27 No. of Claims : 47
**Title of the invention:** ANTIMICROBIAL MIXTURE CONTAINING 4-(3-ETHOXY-4-HYDROXYPHENYL)BUTAN-2-ONE AND A DIOL, AND COSMETIC COMPOSITION CONTAINING SAME

| (51) International classification          | A01N 35/02,A01P 3/00 |
| (31) Priority Document No                 | 1756159               |
| (32) Priority Date                        | 30/06/2017            |
| (33) Name of priority country             | France                |
| (86) International Application No Filing Date | PCT/EP2018/067298    |
| (87) International Publication No Filing Date | WO/2019/002392     |
| (61) Patent of Addition to Application Number Filing Date | NA                        |
| (62) Divisional to Application Number Filing Date | NA                    |

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4) CHEVALIER, Véronique

**Abstract:**
The invention relates to an antimicrobial mixture containing 4-(3-ethoxy-4-hydroxy-phenyl)butan-2-one and a diol compound chosen from 1,3-propanediol, 1,2-octane-diol and 1,2-decanediol, and also to a cosmetic composition containing such a mixture. Use in caring for, making up and cleansing keratin materials.

No. of Pages: 14  No. of Claims: 13
The invention relates to an antimicrobial mixture containing 4-(3-ethoxy-4-hydroxyphenyl)butan-2-one and an aromatic alcohol chosen from a phenoxyalcohol of formula (I) C₆H₆-O-R-OH, R denoting a divalent hydrocarbon-based radical having 2 or 3 carbon atoms; phenylethyl alcohol; benzyl alcohol; and a cresol compound of formula (I) in which R₁ denotes H or an isopropyl radical; and also to a cosmetic composition containing such a mixture. Use in caring for, making up and cleansing keratin materials.
Title of the invention: A FOOD PRODUCT AND METHOD OF MANUFACTURE

Abstract:
A low sugar content sweet food spread is provided said food spread comprising at least one of a cocoa product and a nut product, at least one vegetable oil and at least one sweetener. The at least one vegetable oil is substantially free or free of palm oil and the sugar content of the spread is less than about 20% by weight of the total spread. The food spread possesses excellent properties and is advantageously spreadable at low temperature.

No. of Pages: 21 No. of Claims: 86
Title of the invention: METHOD FOR THE PRODUCTION OF A LIGHT-TO-ELECTRICITY CONVERTER MADE ENTIRELY FROM SILICON FOR A GIANT PHOTOCONVERSION

Abstract:
The production method according to the invention consists of the nanoscale transformation of crystalline silicon in a hybrid arrangement embedded in the crystal lattice of a silicon wafer, in order to improve light-to-electricity conversion efficiency, using hot electrons. All of the parameters, procedures and steps involved in the production of giant photoconversion cells were tested and approved separately, with the production of series of test devices. One example of the technology consists in producing a standard photovoltaic cell of crystalline silicon with a single ohmic contact and completing the resulting device with an amorphising ion implantation process, followed by a post-implantation heat treatment. The modulation of the crystal, specific to the giant photoconversion, is then produced in a controlled manner on the nanoscale in order to obtain SEGTONs and the SEG-MATTER, which are active both optically and electronically, together with the primary conversion of the host converter.

No. of Pages : 29  No. of Claims : 20
The present invention relates to antibodies that are heterodimeric and bind human PD-L1 and human PD-1, and may be useful for treating cancer alone and in combination with chemotherapy and other cancer therapeutics.
The present invention provides an ophthalmic composition and a use thereof. In one embodiment of the present invention, an ophthalmic composition containing a clathrated antioxidant substance is provided. In some of embodiments of the present invention, a composition for treating or preventing an ophthalmic disease, an ophthalmic disorder or an ophthalmic symptom is provided, wherein the ophthalmic disease, the ophthalmic disorder or the ophthalmic symptom includes, but is not limited to, dry eye or a dry eye-like ophthalmic disease, conjunctivitis, corneal ulcer, age-related macular degeneration, cataract, pseudoexfoliation syndrome, and symptoms in these diseases which can be ameliorated by increasing the quantity of tears and/or goblet cells and/or mucin.
Disclosed is a three-dimensional (3D) cell cluster comprising transdifferentiated adult mammalian non-pancreatic beta cells having a mature pancreatic beta cell phenotype and function and a scaffold, wherein said transdifferentiated cells have an enhanced mature pancreatic beta cell phenotype compared to a 3D cell cluster without a scaffold and to similarly transdifferentiated cells cultured as a two-dimensional (2D) monolayer.
A method for detecting a food spoilage microbe in a food sample comprising contacting a food sample with a peptide substrate, comprising a fluorescent agent having an emission wavelength of 650-900 nm, a non-fluorescent agent having an absorption wavelength of 650-900 nm, for quenching said emission of said first fluorescent agent, and a cleavage site located between said fluorescent agent and said non-fluorescent agent, b) monitoring the fluorescence of the sample containing the peptide substrate in step a), wherein an increase in fluorescence is indicative for the presence of food spoilage microbes.
An arc wire spraying method comprising the following steps: conveying at least two wires out of respective lance nozzles (4) of a wire conveying device (2) by means of the wire conveying device (2), applying current to the at least two wires to form an arc for melting the ends of the at least two wires, and applying airflow (9) to the arc in the direction approximately transverse to the longitudinal direction (z) of the wire conveying device (2) by means of an airflow applying device (3) so as to spray the melted wire material toward a surface (5) to be sprayed, wherein the airflow applying device (3) rotationally applies the airflow (9) around the longitudinal direction (z) of the wire conveying device (2), wherein parameters for spraying are variably adjusted along the rotating direction of the airflow applying device (3). An arc wire spraying equipment and an arc wire sprayed product are also disclosed.
A needled blanket is provided comprising melt-formed inorganic fibres having an overall composition in weight percent SiO₂: 47 to 65%; Al₂O₃: 35 to 53%; the blanket having a shot content, of shot >45μm, of less than 51wt%, a specific surface area (BET) > 0.25m².g⁻¹. Also disclosed are fibres for producing such blankets, and self-supporting products made from such fibres.
The invention relates to brake actuation mechanism for a disc brake, comprising an adjusting device (B) that can be rotated on a rod (1) and is axially displaceably guided at least in parts. The invention also relates to a disk brake comprising said type of brake actuation mechanism.
(12) PATENT APPLICATION PUBLICATION
(21) Application No.201917053881 A

(19) INDIA
(22) Date of filing of Application: 26/12/2019
(43) Publication Date: 21/02/2020

(54) Title of the invention: SYSTEM AND METHODS FOR INTRODUCING REMOVABLE PARTS CLOSELY UPON PART-RECEPTIVE OBJECT AFTER FABRICATION

| (51) International classification | A45C 13/00 |
| (31) Priority Document No | 62/511980 |
| (32) Priority Date | 27/05/2017 |
| (33) Name of priority country | U.S.A. |
| (36) International Application No | PCT/IB2018/053730 |
| International Filing Date | 25/05/2018 |
| (37) International Publication No | WO/2018/220493 |
| (61) Patent of Addition to Application Number | NA |
| Patent of Addition to Application Filing Date | NA |
| (62) Divisional to Application Number | NA |
| Divisional to Application Filing Date | NA |

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(72) Name of Inventor: 1) WILCOCK, Christopher, Bernard

(57) Abstract:
A system for introducing removable parts closely upon a part-receptive object without having had to accommodate the removable parts at the time of fabrication of said object and without having to materially affect the original integrity of said object in order to accommodate the removable parts: especially, while without limitation, so that selectable part(s) after fabrication of the part(s)-receptive object are, closely, fittable to the object in another exemplary embodiment or, closely, refittable to the object in another exemplary embodiment or, closely, retrofittable to the object in another exemplary embodiment.

No. of Pages: 38 No. of Claims: 12
**Title of the invention**: A METHOD FOR BIOMASS ASSISTED SEPARATION OF PARTICULATE MATTER FROM A LIQUID STREAM AND UPGRADING OF THE COMBINED SOLIDS

**Abstract**: The present invention relates to a method of wastewater treatment in which a filter aid prepared by extrusion of freshly harvested wet lignocellulosic feedstocks or by extrusion of wet lignocellulosic feedstocks having dry matter content 30-75% (w/w) is used to collect sewage sludge and the combined spent filter aid with collected sewage sludge is used for hydrothermal conversion.

**Diagram**

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No. of Pages: 31  No. of Claims: 15
The invention relates to a method for correcting deviations of power produced by a power plant which includes at least one wind turbine generator and possibly other types of power generating units. The power deviations, i.e. deviations from a power reference for the power plant, are determined as energy errors. The invention addresses solutions for determining and compensating the energy errors.
(54) Title of the invention: METHOD FOR DEVICE-TO-DEVICE COMMUNICATION, TERMINAL DEVICE, AND NETWORK DEVICE

(57) Abstract:
Disclosed are a method for device-to-device (D2D) communication, a terminal device, and a network device. The method comprises: a terminal device determining a resource pool for data transmission among multiple resource pools according to a transmission mode used by the terminal device and whether the terminal device has monitoring capability, different resource pools of the multiple resource pools being used for data transmission by different types of terminal devices, and the different types of terminal devices differing in respect of at least one of the following: an adopted transmission mode, a supported communication protocol version, and existence of monitoring capability; and the terminal device using a time-frequency resource in the resource pool to perform data transmission. The invention enables different types of terminal devices to jointly perform data transmission in a communication system while mitigating mutual interference therebetween.
Title of the invention: FLIGHT VEHICLE AIR BREATHING ENGINE WITH ISOLATOR HAVING BULGED SECTION

Abstract:
A flight vehicle has an engine that includes air inlet, an isolator (or diffuser) downstream of the air inlet, and a combustor downstream of the isolator. The isolator includes a bulged region that has at least one dimension, perpendicular to the direction of the air flow from the inlet to the combustor, that is at a local maximum, larger than comparable isolator dimensions both upstream and downstream of the bulged region. The bulged region stabilizes shocks within the isolator, and facilitates flow mixing. The flow diversion of high energy flow around the outermost walls of the bulged section into the center of the flow at the aft end of the isolator, increases mixing of the flow, and results in a more consistent flow profile entering the combustor over a wide range of flight conditions (Mach, altitude, angle-of-attack, yaw) and throttle settings.

Diagram:

FIG. 1

No. of Pages : 14 No. of Claims : 19
A hollow light-weight, low-cost, and high-performance 3D Luneburg lens structure using partially-metalized thin film, string, threads, fiber or wire base metamaterial to implement the continuously varying relative permittivity profile, characteristic of Luneburg lens structures, is disclosed. The hollow light-weight lens structure is based on the effective medium approach and may be implemented by a number of means. Further, most of the volume of the lens structure is free-space, thus the weight of the lens is significantly less than conventional 3D Luneburg lens structures of the same dimensions.

No. of Pages : 8 No. of Claims : 13
The present invention relates to a polymeric electrolyte for a secondary battery and a lithium secondary battery comprising the same. More specifically, the present invention relates to a polymeric electrolyte for a secondary battery, which comprises a polymer and an electron acceptor having at least one double bond as a dopant, such that mechanical properties, ionic conductivity, and electrical conductivity are improved; and a lithium secondary battery comprising the same, which has enhanced electrochemical stability under high temperature and high voltage.
Title of the invention: COMPACT FIBER OPTIC CONNECTORS, CABLE ASSEMBLIES AND METHODS OF MAKING THE SAME

Abstract:
Fiber optic connectors, cable assemblies and methods for making the same are disclosed. In one embodiment, the optical connector comprises a housing and a ferrule. The housing comprises a longitudinal passageway between a rear end and a front end, and, a part of the rear portion of the housing comprises a round cross-section and a part of the front portion of the housing comprises a non-round cross-section with a transition region disposed between the rear portion and the front portion.
**Title of the invention**: FIBER OPTIC CONNECTORS HAVING A KEYING STRUCTURE AND METHODS OF MAKING THE SAME

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<tr>
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<td>Name of priority country</td>
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<td>International Application No</td>
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<td>Divisional to Application Number</td>
<td>NA</td>
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**Abstract**:
Fiber optic connectors, cable assemblies and methods for making the same are disclosed. In one embodiment, the optical connector comprises a housing and a multifiber ferrule. The housing comprises a longitudinal passageway between a rear end and a front end, and a rear portion of the housing comprises a keying portion and at least one locking feature integrally formed in the rear portion of the housing.

![Diagram](image)

No. of Pages: 47 No. of Claims: 72
**Abstract:**
A cleaning formulation has from 10 to 99 wt% water, from 0.8 to 40 wt% surfactant, optionally other additives, and from 0.2 to 20 wt% of a solvent additive of formula (I): where R1 is C3 to C12 alkyl, AO is an alkylene oxide group selected from an ethylene oxide group, a propylene oxide group and a butylene oxide group, and R2 is C6 to C13 alkyl or alkenyl. At least one AO group in the solvent additive is an ethylene oxide group. The solvent additive has a water solubility of less than 1 wt% in deionised water at 20°C and the surfactant enables the solvent additive to dissolve and/or disperse in the cleaning formulation. In a method of cleaning an oily or waxy soil from a hard surface, the solvent additive is applied to the hard surface and optionally rinsed with water. The solvent additive is used in a cleaning formulation to improve the percentage soil removal.

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**Name of Inventor:**
1) JAYNES, Bingham, Scott
2) CHEN, Xin
3) CHEN, Li
4) CHUA, Mei-Ly
5) SCHEBLEIN, Joseph, William
6) SMITH, Gregory, Howard
Abstract:
A flight vehicle has a propulsion system that includes an air inlet, an isolator (or diffuser) downstream of the air inlet, and a combustor downstream of the isolator. The isolator includes an obstruction that protrudes inwardly from an inner wall of the isolator, into the flow channel in which air flows through the isolator. The obstruction diverts the flow to either side of it. Downstream of the obstruction the flow on either side of the obstruction comes together again, leading to mixing of the flow, for example including mixing of low energy and boundary layer flow with high energy flow. This mixing of flow may make for a more uniform flow at the exit of the isolator. In addition the obstruction may help fix the location of shocks within the isolator, providing longer flow mixing length in the isolator.
Devices such as multiports comprising connection ports with associated securing features and methods for making the same are disclosed. In one embodiment, the device comprises a shell, at least one connection port, and at least one securing feature. The at least one connection port is disposed on the multiport with the at least one connection port comprising an optical connector opening extending from an outer surface of the multiport to a cavity of the multiport and defining a connection port passageway. The at least one securing feature is associated with the connection port passageway, and is biased by a resilient member.
Title of the invention: STEEL SHEET FOR HOT PRESS FORMED MEMBER HAVING EXCELLENT PAINTING ADHESION AND POST-PAINTING CORROSION RESISTANCE, AND METHOD FOR MANUFACTURING SAME

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<td>Priority Document No</td>
<td>:10-2017-0068651</td>
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Abstract:
The present invention relates to a steel sheet for a hot press formed member having excellent painting adhesion and post-painting corrosion resistance, and a method for manufacturing the same. A steel sheet for hot press forming according to one aspect of the present invention comprises a base steel sheet and a plated layer formed on a surface of the base steel sheet, wherein the ratio of an area occupied by pores to the entire area of a surface layer portion may be 10% or more in a cross section of the surface layer portion observed when the plated layer is cut in a thickness direction thereof.
(12) PATENT APPLICATION PUBLICATION  
(19) INDIA  
(22) Date of filing of Application : 26/12/2019  
(43) Publication Date : 21/02/2020

(54) Title of the invention : NEW SALT OF N-(2,6-DIETHYLPHENYL)-8-((4-[4-(DIMETHYLAMINO)Piperidin-1-yl]-2-METHOXYPHENYL)AMINO)-1-METHYL-4,5-DIHYDRO-1H-PYRAZOLO[4,3-H]QUINAZOLINE-3-CARBOXAMIDE, ITS PREPARATION AND FORMULATIONS CONTAINING IT

| (51) International classification | :C07D 487/04,A61K31/517,A61P 35/00 |
| (31) Priority Document No | :17305826.4 |
| (32) Priority Date | :29/06/2017 |
| (33) Name of priority country | :EPO |
| (86) International Application No | :PCT/EP2018/067394 |
| Filing Date | :28/06/2018 |
| (87) International Publication No | :WO/2019/002454 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

(57) Abstract :  
New N-(2,6-diethylphenyl)-8-((4-[4-(dimethylamino)piperidin-1-yl]-2-methoxyphenyl) amino)-1-methyl-4,5-dihydro-1H-pyrazolo[4,3-h]quinazoline-3-carboxamide phosphate of formula (II): (II) Medicaments

No. of Pages : 17 No. of Claims : 23
Disclosed in the embodiments of the present application are a method for transmitting a signal, a network device, and a terminal device, said method comprising: a network device sending, to a terminal device, a mapping relationship between at least one sounding reference signal (SRS) resource and/or at least one SRS resource group and a downlink reference signal. The method, the network device, and the terminal device of the embodiments of the present application are beneficial to improving the transmission performance of the system.
<table>
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<th>(57) Abstract:</th>
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<td>Provided by the embodiments of the present invention are a method for downlink signal transmission, a terminal device and a network device, the method comprising: a terminal device detecting at least one downlink signal that is sent by a network device; the terminal device sending first indication information to the network device, the first indication information being used to indicate a target downlink signal in the at least one downlink signal, and the target downlink signal being one or more downlink signals in the at least one downlink signal for which the measurement quality is less than the measurement quality of any downlink signal other than the target downlink signal in the at least one downlink signal. In the embodiments of the present invention, by means of sending the first indication information of the target downlink signal to the network device, the terminal device may cause the network device to determine a beam or transmission resource that has small interference with the terminal device, thus reducing interference between terminal devices and improving the throughput of downlink transmission.</td>
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The embodiments of the invention disclose a scheduling method, a device and a system for transmitting resources. The method comprises: receiving candidate uplink data sending resources, or receiving candidate downlink data receiving resources; determining, from the candidate uplink data sending resources, and according to downlink transmission resources, a transmission resource for sending uplink data, or determining, from the candidate downlink data receiving resources, and according to uplink transmission resources, a transmission resource for receiving downlink data. Thus, there is no need for the base station to perform scheduling, which reduces the processing load of the base station.

No. of Pages: 40  No. of Claims: 12
Disclosed in the present application are a method for enabling a network to fall back, a terminal device, and an access network device. The method comprises: a terminal device receives indication information sent by an access network, the indication information being used for indicating whether a first network supports a specific service to be executed by the terminal device; and if the indication information indicates that the first network does not support the specific service, the terminal device initiates the specific service in a second network. When a terminal device cannot initiates a specific service in a current network, the specific service can be initiated in another network based on an instruction of an access network, so that a complex signaling interaction between the terminal device and a core network is avoided, and the delay of a network fallback process is reduced.
Disclosed are compounds of Formula (I): or a salt thereof, Formula (II) wherein R1 is: or; each W is independently NR1b or O; Z is a bond or CHR1d; and R1, R2, Rd, R3a, R3b, L1, B, V, Y, and n are defined herein. Also disclosed are methods of using such compounds as inhibitors of ROMK, and pharmaceutical compositions comprising such compounds. These compounds are useful in treating cardiovascular diseases.
The invention relates generally to pharmaceutical compositions and preparations of curons and uses thereof.

Figure 1A

Figure 1B

No. of Pages : 337 No. of Claims : 45
**Title of the invention:** WIDE ANGLE LENS AND CAMERA SYSTEM FOR PERIPHERAL FIELD OF VIEW IMAGING

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<td>OWL LABS, INC.</td>
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<tr>
<td>Name of Inventor:</td>
<td>Address of Applicant: 33 1/2 Union Square Somerville, MA 02143 U.S.A.</td>
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<tr>
<td>1) MAKEEV, Maksim</td>
<td>2) SCHNITTMAN, Mark S.</td>
</tr>
<tr>
<td>3) MIAO, Xiaoyu</td>
<td>4) LAI, Cheng-Yi</td>
</tr>
<tr>
<td>5) CHOU, Chien-Hung</td>
<td>6) LEE, Ming-Lin</td>
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**Abstract:**
Wide angle lens for imaging objects disposed away from the optical axis towards the periphery of the field of view.

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**Diagram:**
![Diagram of a wide angle lens and camera system](image)
(57) Abstract:
A traffic control method and system that interfaces to all available traffic control systems (401), which include all manner of existing traffic control systems and new traffic control systems, extends the scope and capabilities the real-time monitoring of traffic characteristics (402) and utilizes artificial intelligence techniques to predict and/or detect traffic congestion (403), as well as to determine corrective actions (404) to be performed by relevant available mechanisms. These corrective actions are then caused to occur by providing appropriate data and instructions to the selected mechanisms and systems using compatible interfaces provided for this purpose.

No. of Pages : 14 No. of Claims : 23
**Title of the invention:** ELEVATOR DEVICE

**International classification:** B66B 1/18

**Priority Document No:** PCT/JP2017/026449

**Priority Date:** 21/07/2017

**Name of priority country:** PCT

**International Application No:** PCT/JP2017/026449

**Filing Date:** 21/07/2017

**International Publication No:** WO/2019/016937

**Patent of Addition to Application Number:** NA

**Divisional to Application Number:** NA

**Filing Date:** NA

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**Abstract:**

This elevator device having a plurality of elevator cars (7a, 7b) sets, within a plurality of floors, a zone in which a particular one of the elevator cars provides service, and is provided with: an individual departure-floor/individual destination-floor user detection unit (9ab) that detects user information for each departure floor and each destination floor on the basis of destination-floor registration information; and a zone-floor division setting unit (9ac) that sets a zone on the basis of the number of passengers from each floor indicated by the user information detected by the individual departure-floor/individual destination-floor user detection unit.
(54) Title of the invention : WIRELESS COMMUNICATION METHOD AND DEVICE

(51) International classification : H04W 72/04
(31) Priority Document No : NA
(32) Priority Date : NA
(33) Name of priority country : NA
(86) International Application No : PCT/CN2017/104577
  Filing Date : 29/09/2017
(87) International Publication No : WO/2019/061350
(61) Patent of Addition to Application Number : NA
  Filing Date : NA
(62) Divisional to Application Number : NA
  Filing Date : NA

(57) Abstract :
Provided in the embodiments of the present application are a wireless communication method and device, capable of improving communication performance in the aspect of use of configuration resources. The method comprises: receiving by a first device first information sent by a second device, the first information being used to configure a first resource set to the first device; determining, on the basis of the first resource set, by the first device a first resource for transmitting a first channel which is between the first device and the second device; and determining, on the basis of the first resource set, by the first device a second resource for transmitting a second channel which is between the first device and the second device.

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(72) Name of Inventor :
1) TANG, Hai

No. of Pages : 40 No. of Claims : 13
Disclosed by embodiments of the present application are a switching method, an access network device, and a terminal device, the method comprising: a first access network device triggering a terminal device and/or a second access network device to configure a second protocol stack, the second protocol stack being used to maintain the order of data packets of the second access network device and the terminal device and/or a key of the data packets of the second access network device and the terminal device; before the first access network device triggers the terminal device and/or the second access network device to use the second protocol stack to maintain the order of the data packets of the terminal device, the first access network device using a first protocol stack to sequence data packets to be processed of the first access network device and the terminal device. The method, access network device and terminal device of the embodiments of the present application facilitate the reduction of the data transmission delay for the terminal device in a switching process.
Provided are a data distribution method and device, and a storage medium and a system. The method may comprise: receiving an access state report sent by at least one access device, wherein the access state report comprises multiple pieces of network state information for characterizing access networks provided by corresponding access devices; and determining, based on network state information about access networks provided by various access devices and a data stream to be transmitted, data distribution amounts corresponding to various access devices. Accordingly, multi-connection data transmission control is carried out for a data stream to be transmitted, so as to improve the throughput of service data.

No. of Pages : 30 No. of Claims : 15
Title of the invention: METHOD FOR ACTIVATING AND DEACTIVATING CELL, TERMINAL EQUIPMENT AND COMPUTER STORAGE MEDIUM

Abstract:
Disclosed in the present invention are a method for activating and deactivating cell, a terminal equipment and computer storage medium, wherein the method comprises: on the basis of an instruction for activating the target band width part (BWP), activating an auxiliary cell that corresponds to the target BWP; and/or on the basis of an instruction for deactivating the target BWP, deactivating the auxiliary cell that corresponds to the target BWP.
Disclosed in embodiments of the present application are a communication method, a network device, and a terminal device. The method comprises: in a case in which a terminal device moves from a first public land mobile network (PLMN) to a second PLMN or moves from a first core network to a second core network, a target network device obtains context information of the terminal device; and the target network device communicates with the terminal device according to the context information. By means of the communication method and the network device in the embodiments of the present application, power consumption of a terminal and overheads of a network can be reduced, thereby improving mobile performance of the terminal.

No. of Pages : 43  No. of Claims : 16
A valve leaflet connecting device includes: a base; and first and second followers extending from the base. A first arm extends from the first follower in a direction away from the second follower and away from the base to define an acute angle between the first follower and first arm for capturing a first leaflet there between. A second arm extends from the second follower in a direction away from the first follower and away from the base to define an acute angle between the second follower and second arm for capturing a second leaflet there between. The first and second followers are resiliently deformable between: (i) an open condition, in which: the point from which the first arm extends from the first follower; and the point from which the second arm extends from the second follower, are spaced more than 15mm; and (ii) a closed condition, in which: the point from which the first arm extends from the first follower; and the point from which the second arm extends from the second follower, are spaced less than 5mm. Deforming means deform the followers towards the closed condition. A positioner extends from the base, between the first and second followers, and a fastener releasably secured to the positioner, includes first and second fastener jaws. The first and second jaws: extend away from the base; and are movable between: (i) a splayed condition in which leaflets may be received between the first and second fastener jaws; and (ii) a securing condition in which the first and second fastener jaws secure the leaflets there between. In use: (i) the first and second followers may be: passed axially through a valve, between first and second valve leaflets; and resiliently deformed by opening and closing of the valve leaflets; (ii) the first arm may capture the first leaflet between the first arm and the first follower, and the second arm may capture the second leaflet between the second arm and the second follower, with the first and second followers disposed between the first and second leaflets; (iii) the deforming means may deform the first and second followers towards the closed condition, thereby moving the first and second leaflets towards each other; (iv) the fastener may receive the first and second leaflets between the fastener jaws when the fastener jaws are in the spayed condition; and (v) moving the fastener jaws towards the securing condition secures the first and second leaflets to each other. Alternatively, the arms and fastener jaws may extend towards the base.
Title of the invention: METHOD FOR DEVICE TO DEVICE COMMUNICATION, AND TERMINAL DEVICE

Abstract:
Disclosed in the present application are a method for device to device (D2D) communication, and a terminal device. The method comprises: a first terminal device receives SCI sent by a second terminal device, the SCI indicating a time-frequency resource used by the second terminal device for transmitting a data channel; the first terminal device determines whether the format of the SCI is a first format or a second format, wherein the SCI comprises a resource reservation bit, the resource reservation bit in SCI of the first format is not used for indicating whether the second terminal device reserves a time-frequency resource for the next data transmission, and the resource reservation bit in SCI of the second format is used for indicating whether the second terminal device reserves a time-frequency resource for the next data transmission; if the first terminal device determines that the format of the SCI is the first format, the first terminal device prohibits data transmission on a plurality of such time-frequency resources distributed in accordance with a first time period. Thus, a terminal device can obtain, according to the detected format of SCI, the resource occupancy state of another terminal device that sends the SCI, so as to effectively perform resource avoidance.
Title of the invention: PRODUCTION OF RADIOISOTOPES

Abstract:
A method of obtaining, from a target compound, a radioisotope of a target element comprised in the target compound includes irradiating the target compound with high energy photon irradiation (gamma irradiation). Thereby the target element radioisotope is formed. The method is performed such that the target element radioisotope is of different oxidation state than the target element, and is comprised in a target element radioisotope compound that is separable from the target compound by a physical and/or chemical separation method.

No. of Pages : 21 No. of Claims : 27
Provided in the embodiments of the present application are a transmission parameter determination method, a terminal device and a network device. The terminal device of release (Rel) 15 determines a transmission parameter on the basis of a new MCS table, or determines a transmission parameter on the basis of an existing transmission parameter, thereby satisfying the transmission requirements of the terminal device of Rel 15. The method comprises: the terminal device determines a first transmission parameter according to the channel busy ratio (CBR) and the priority of service to be transmitted; and the terminal device sends the service to be transmitted using the first transmission parameter.
An operational accelerator, relating to the technical field of data calculation, and aimed at reducing the time for processing a multiplication operation of two NN matrices. The operational accelerator comprises: a first memory (501), a second memory (502), an operational circuit (503) and a controller (504), wherein the operational circuit (503) can communicate data with the first memory (501) and the second memory (502) via a bus; the operational circuit (503) is used for extracting matrix data in the first memory (501) and the second memory (502) and performing a multiplication operation; and the controller (504) is used for controlling, according to a pre-set program or an instruction, the operational circuit (503) so that same completes the multiplication operation. The operational accelerator can be used for performing a multiplication operation on two matrices.
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(72) Name of Inventor:
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2) YANG, Haitao
3) LIU, Shan

(57) Abstract:
The present application relates to the field of image processing and addresses the problem of high coding complexity. Disclosed in embodiments of the present application are a method and device for encoding and decoding image data. The decoding method comprises: obtaining a code stream containing image data; parsing the code stream to obtain a node dividing scheme information of a first-level coding tree and a node dividing scheme information of a second-level coding tree, wherein the node dividing scheme information of the second-level coding tree indicates a dividing scheme corresponding to a first node in the second-level coding tree, the dividing scheme corresponding to the first node is a dividing scheme in a set of candidate dividing schemes corresponding to the first node determined according to a first predetermined dividing condition, and the first predetermined dividing condition indicates whether it is required that the first node should only be divided according to a target dividing scheme; if the dividing scheme corresponding to the first node is to not continue dividing, parsing the code stream to obtain coding information of the first node; and according to the coding information of the first node, decoding and reconstructing a coding unit corresponding to the first node to obtain an image of corresponding image data.
The present invention relates to a method for restoring sexual reproduction between two sterile, female strains of Trichoderma reesei using a helper strain ∆MAT, said helper strain being a fertile female strain of Trichoderma reesei in which the sexual-type locus MAT has been eliminated.

Figure 4: Protocole de la mise en œuvre de la méthode de la souche assistante

No. of Pages : 33 No. of Claims : 16
A wearable antenna is described, for wirelessly receiving sensor data generated by an implantable sensor device implanted in a uterus, the wearable antenna, in use, extending around the waist of the wearer's body, and having a downwardly extending portion for location at the front of the wearer's body. In this way, an improved electromagnetic interaction between the wearable antenna and the implantable sensor can be achieved. Further, the wearable antenna may have an undulating shape around at least a portion of the wearer's waist, to permit expansion and contraction of the wearable antenna about the wearer's waist.
Title of the invention: FIBER-REINFORCED MOLDING COMPOUNDS AND METHODS OF FORMING AND USING THE SAME

Abstract:
Fiber-reinforced molding compounds and methods of forming and using the same. A method may include dosing into a melt stream a composite material including pre-impregnated reinforcing filaments and a second polymeric material (which could have a second melt temperature greater than the first polymeric material). Another method may include dosing into a melt stream a composite material including carbon reinforcing filaments pre-impregnated by a polymeric material. Yet another method may include pre-impregnating carbon reinforcing filaments with a polymeric material offline of an extrusion process to form pre-impregnated strands. Another method may include pre-impregnating reinforcing filaments with a polymeric material offline of an extrusion process to form pre-impregnated tape. An additional method may include forming pre-impregnated flakes of one or more predetermined shapes including reinforcing filaments pre-impregnated by a polymeric material. The polymeric material may protect at least 30% of the reinforcing filaments.
(54) Title of the invention : METHOD OF FIXING A WEAR ELEMENT ON THE FRONT EDGE OF A SUPPORT AND CORRESPONDING FIXING MEANS

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(57) Abstract :
The invention relates to a method of fixing a wear element (2) on the front edge of a support (1) using fixing means, where the wear element (2) comprises two arms (3) with first through openings (4) and the support (1) has a second through opening (5) sandwiched between the first through openings (4). The fixing means comprise a C-shaped first body (6), a wedge (14), ratchet means (24) between both and a second body (8), which are housed in the openings in an assembled position. The method consists of positioning the first body (6) and the second body (8) in the openings, inserting the wedge (14) between both, positioning a screw (21) between the wedge (14) and the second body (8) and screwing it in such a way that the wedge (14) moves with respect to the second body (8) and the first body (6) until the wedge (14) reaches its assembled position, and at least partially unscrewing the screw (21) and removing the screw (21) from the fixing means.
A cylinder aligning sleeve and adapter plate for use within an internal combustion engine. The sleeve includes apertures placed contiguously with holes within the adapter plate to form a flow passage through the dead space between compression and crosshead pistons. The flow passage exits to a vent line where gas detection may occur along with safe venting of any gas detected. The sleeve serves to ensure concentric alignment of the compression cylinder with the engine block bore.
The invention relates to an antimicrobial mixture containing 4-(3-ethoxy-4-hydroxy-phenyl)butan-2-one and an additional compound chosen from chlorhexidine digluconate, chlorhexidine hydrochloride and a polyhexamethylene biguanide salt, and also to a cosmetic composition containing such a mixture. Use in caring for, making up and cleansing keratin materials.
(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :26/12/2019

(43) Publication Date : 21/02/2020

(54) Title of the invention : METHOD FOR INDICATING THE NUMBER OF TRANSMISSION PORTS OF UE, UE AND NETWORK DEVICE

| (51) International classification    | :H04B 7/06                      |
| (31) Priority Document No          | :NA                             |
| (32) Priority Date                 | :NA                             |
| (33) Name of priority country      | :NA                             |
| (86) International Application No  | :PCT/CN2017/103016              |
| Filing Date                        | :22/09/2017                     |
| (87) International Publication No  | :WO/2019/056322                 |
| (61) Patent of Addition to Application Number | :NA                         |
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| (62) Divisional to Application Number | :NA                        |
| Filing Date                        | :NA                             |

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3) TANG, Hai

(57) Abstract:
Disclosed in the invention are a method for indicating the number of transmission ports of UE, a network device, user equipment (UE) and a computer storage medium. The method comprises: if a current frequency point and bandwidth combination is a frequency point and bandwidth combination that has a performance degradation condition, determining whether there is a performance degradation in the current frequency point and bandwidth combination to obtain a determination result; and determining, according to the determination result, to indicate the UE on a network side to use a first number or a second number of transmission ports; wherein the first number is less than the second number.

No. of Pages : 30 No. of Claims : 15
Embodiments of the present application relate to a resource allocation method, a terminal device, and a network device. The method comprises: a first terminal device sends a request message to the network device, the request message being used for requesting the network device to allocate multiple carriers to the first terminal device; the first terminal device receives resource configuration information sent by the network device according to the request message, the resource configuration information being used for indicating a first transmission resource allocated by the network device to the first terminal device, and the first transmission resource comprising resources on a mixed carrier; the first terminal device determines a second transmission resource according to the first transmission resource; and the first terminal device sends data to a second terminal device by means of the second transmission resource. By means of the resource allocation method, the terminal device, and the network device according to the embodiments of the present application, carrier resources can be allocated more flexibly and the resource utilization rate is improved.
A fluid product dispensing device, comprising a main body (10), at least one individual tank (21) containing a single dose of powder, opening means (80) for opening an individual tank each time the device is actuated, a mouthpiece (200) defining a dispensing opening (5), movable support means (50) suitable for moving an individual tank (21) against said opening means (80) at each actuation, said movable support means (50) being movable between a non-dispensing position and a dispensing position, said movable support means (50) being urged towards the dispensing position of same by elastic means (70), such as a spring or a spring blade, and being held in the non-dispensing position by immobilising means (100), an inhalation trigger system (60) that comprises a deformable air chamber (61) cooperating with said dispensing opening (5), a trigger element (600) cooperating with said air chamber (61) and with said immobilising means (100), such that, during inhalation through said dispensing opening (5), said air chamber (61) is deformed and said trigger element (600) releases said immobilising means (100), such that, during inhalation, a tank is moved against and opened by said opening means (80), said fluid product dispensing device comprising an electronic device for counting or indicating doses (300) comprising a sensor (306) suitable for detecting the movement or deformation of a part of said fluid product dispensing device generated during or after inhalation by the user.
The present disclosure provides a flexible container (10). In an embodiment, the flexible container comprises a first multilayer film (12) and a second multilayer film (14). Each multilayer film comprises a seal layer. The multilayer films are arranged such that seal layers oppose each other and the second multilayer film is superimposed on the first multilayer film. The films are sealed along a common peripheral edge (16) to form a closed chamber (18). In one embodiment, a free moving sheet of three-dimensional random loop material (3DRLM) is located the closed chamber. In another embodiment, an oversized sheet (128) of 3DRLM is located in the closed chamber.
Title of the invention: COST EFFECTIVE FRAME DESIGN FOR THINNER WAFERS

Abstract:
A slim solar module (1) is proposed. It comprises a solar laminate (3) comprising plural solar cells (9) interposed between front and rear cover sheets (13, 15), a frame (5) enclosing the solar laminate (3) and at least one reinforcement strut (7) arranged at a rear surface of the solar laminate (3). A ratio between a frame surface and a frame thickness shall be between 45000 and 70000. For example, the frame may have a thickness of less than 35 mm. Specifically, the frame may have a length of 1665 mm, a width of 991 mm and a thickness of 30 mm. Due to the reduced thickness, the solar module has a reduced volume being beneficial during transport to a destination location. However, the thickness has been optimized to, with the reinforcement struts, still providing for sufficient mechanical stability for the solar module.
Title of the invention: METHOD FOR OBTAINING VISCOSE FILAMENT RAYON WITH CYCLICALLY VARYING LINEAR DENSITY CALLED FLAME RAYON, AN INSTALLATION FOR THE REALIZATION OF THIS METHOD, AND A PRODUCT, OBTAINED USING THIS METHOD AND THIS INSTALLATION

Abstract:
Innovation suggests methods and installations for productions of viscose filament rayon with cyclically varying linear density. According to the method of the invention, constantly synchronized viscose solution supplying and spinning devices actuation is interrupted, as first (27) and second (28) spinning devices and arranging freshly spun yarn in centrifuge system 39-5 are actuated by the use of existing power feeding installation (40-4), motors 40-1 and 40-2 and reduction gear groups 39-1 and 39-2 named as the first power feeding and actuating installation. According to the method of the invention new power feeding 40-7 and actuating 40-3 installation is added to the same spinning machine named second power feeding and actuating installation which work runs under unit 42 control. According to the invention power shaft 21 actuation do not depends on other spinning devices actuation anymore and quantity of viscose dozed to the spinning could be changed independently of other devices work. When to the spinning machine one or two individual installations for dying are joined suggested method allows production of dyed in one or two colours filament rayon with cyclically varying linear density.

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<td>Name of Applicant: 1) E. MIROGLIO JOINT- STOCK COMPANY</td>
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<td>Address of Applicant: Industrial Quarter 8800 Sliven Bulgaria</td>
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<td>Name of Inventor: 1) RIMINI, Gaetano 2) PENEV, Penyo Grigorov 3) ANGELOV, Lyusien Borisov</td>
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No. of Pages: 14 No. of Claims: 7
Title of the invention: FIRE EXTINGUISHING SYSTEM FOR TUNNELS

Abstract:
The invention solves the problem how to extinguish fires by using a design that extinguishes them without needing the direct presence of people during the process. The system is designed based on the use of firefighting vehicles (A), a fixed ceiling frame (B) on which the vehicles (A) move, filling stations in the service tunnel or a lay-by, and software for controlling and operating the firefighting vehicle (A) which is installed in the control centre which is not necessarily located in the road tunnel. The frame of the firefighting vehicle (A2) has a low profile which enables access across the entire tunnel. Only approximately 30 seconds pass from the moment a fire is detected to the time the system begins extinguishing it. An infrared camera (A11) is installed into the firefighting vehicle (A) in case of poor visibility; a battery drive (A14) ensures operation for several hours; there is enough extinguishing agent in the tank (A3) to put out a large fire; the range of the spray cannon (A5) is long enough to cover the width of the largest existing tunnels, and it enables precise spraying because the vehicle (A) can extinguish fire from various angles.
An anchor assembly (10) comprises an anchor (12) comprising a body (15) defining a cavity (16). The anchor (12) further comprises a reinforcing member (18) extending through the cavity (16) and outwardly from the body (15). The anchor assembly (10) further includes an insertion device (14) insertable into the cavity (16). The insertion device (14) comprises a securing member (49) movable between securing and non-securing positions. When the movable securing member (49) is in the securing position in the cavity (16), the securing member (49) can engage the reinforcing member (18) to secure the insertion device (14) to the anchor (12).
The invention relates to a method for projecting immersive content, comprising a step of cropping (2) a digital image (1), selecting the size of the image, and also correcting (3) the optical distortion of the digital image (1) in order to project same. The method of the invention can be used to project optimised immersive-type audiovisual content in real spaces, for a single user or a group of users.
(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application : 27/12/2019
(21) Application No.201917054116 A
(43) Publication Date : 21/02/2020

(54) Title of the invention : BLENDS OF LINEAR LOW DENSITY POLYETHYLENES

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(72) Name of Inventor :
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(57) Abstract :
A polyethylene blend comprising a uniform dispersion of constituents (A) and (B): (A) a Ziegler-Natta catalyst-made linear low density polyethylene and (B) a metallocene catalyst-made linear low density polyethylene, a composition comprising the polyethylene blend and at least one additive, methods of making and using same, and manufactured articles and films comprising or made from same.

No. of Pages : 23 No. of Claims : 10
Title of the invention: PACKAGING WITH THREE-DIMENSIONAL LOOP MATERIAL

The present disclosure provides a packaging article (10). In an embodiment, the packaging article comprises (A) a rigid container (12) having side walls (14) and a bottom wall (16), the walls defining a compartment (20), and (B) a sheet (22) of 3-dimensional random loop material (3DRLM) in the compartment. A food item (C) may be located in the compartment, the food item contacts the sheet of 3DRLM.
Title of the invention: BLENDS OF LINEAR LOW DENSITY POLYETHYLENES

| (51) International classification | :C08L 23/08 |
| (31) Priority Document No | :62/512865 |
| (32) Priority Date | :31/05/2017 |
| (33) Name of priority country | :U.S.A. |
| (86) International Application No | :PCT/US2018/034845 |
| Filing Date | :29/05/2018 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

**Abstract:**
A polyethylene blend comprising a uniform dispersion of constituents (A) and (B): (A) a Ziegler-Natta catalyst-made linear low density polyethylene and (B) a metallocene catalyst-made linear low density polyethylene, a composition comprising the polyethylene blend and at least one additive, methods of making and using same, and manufactured articles and films comprising or made from same.

No. of Pages: 20  No. of Claims: 10
The present disclosure provides a method of determining a relative decrease in catalytic efficacy of a catalyst in a test sample of a catalyst solution with unknown catalytic activity. The method includes (a) mixing the test sample with a test solvent to form a test mixture and (b) measuring the increase in the temperature of the test mixture at predetermined time intervals immediately after forming the test mixture. A predetermined feature is used to determine both a test value in the increase in temperature measured in (b) and a control value in a known increase in temperature of a control mixture of the test solvent with a control sample of a control catalyst solution. The relative decrease in catalytic efficacy of the catalyst in the test sample having the unknown catalytic activity is then determined from: Relative Decrease in Catalytic Efficacy = Control Value - Test Value/ Control Value


A security device is provided, comprising: a colour shifting element that exhibits different wavelengths of light at different viewing angles, and; an at least partially transparent light control layer covering at least a part of the colour shifting element and comprising a surface relief adapted to modify the angle of light from the colour shifting element, wherein; a first region of the light control layer comprises a first optical characteristic, whereby light at a first viewing angle from the first region of the light control layer is perceived to have a resultant optical effect that is the resultant of the wavelength of light exhibited at that viewing angle due to the combination of the colour shifting element and the surface relief of the light control layer, and the first optical characteristic, and; a second region of the light control layer either: (i) is substantially colourless such that light at the first viewing angle from the second region is perceived to have a resultant optical effect exhibited at that viewing angle due to the combination of the colour shifting element and the surface relief of the light control layer, or; (ii) comprises a second optical characteristic different from the first optical characteristic, whereby light at the first viewing angle from the second region of the light control layer is perceived to have a resultant optical effect that is the resultant of the wavelength of light exhibited at that viewing angle due to the combination of the colour shifting element and the surface relief of the light control layer, and the second optical characteristic. Methods of manufacture thereof are also disclosed.

No. of Pages : 53
No. of Claims : 24
Title of the invention: SUBLINGUAL FORMULATION WITH WATER-SOLUBLE COCRYSTALS OF ACETYLSALICYLIC ACID WITH CITRIC ACID, SODIUM BICARBONATE, AND L-THEANINE FOR THE TREATMENT OF ACUTE MYOCARDIAL INFARCTION

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Abstract:
A water-soluble aspirin, citric acid, sodium bicarbonate, L-theanine cocrystal composition which includes a quantity of acetylsalicylic acid is described. The composition may be created by a method including various steps, including a cocrystallization step. The water-soluble cocrystal composition is suitable for sublingual administration, preferably to humans.

No. of Pages: 24 No. of Claims: 50
The invention relates to a polymer comprising one or more diene units and carrying, along the main polymer chain, one or more pendant groups of the following formula (I): (I), wherein: - PAr is a polyaromatic group comprising at least two condensed aromatic hydrocarbon rings, each of said condensed aromatic rings optionally being substituted by one or more carbon chains which are identical or different and independent of one another, aliphatic or aromatic, linear, branched or cyclic, optionally substituted or interrupted by one or more heteroatoms; - Sp is an atom or a group of atoms; and - D is a group attached to the main polymer chain.

No. of Pages : 26 No. of Claims : 17
(54) Title of the invention : METHOD FOR APPLYING A SPRAY TO A FIELD

(51) International classification : A01M 7/00
(31) Priority Document No : 10 2017 210 804.5
(32) Priority Date : 27/06/2017
(33) Name of priority country : Germany
(86) International Application No : PCT/EP2018/066546
    Filing Date : 21/06/2018
(87) International Publication No : WO/2019/002077
(61) Patent of Addition to Application Number : NA
    Filing Date : NA
(62) Divisional to Application Number : NA
    Filing Date : NA

(57) Abstract:
The invention relates to a method for applying a spray, particularly a pesticide, to a field (24), comprising the steps: - detecting plants in a field portion (22) of the field (24) by means of an optical and/or infrared detection unit; - identifying at least one row of plants (32) in the detected field portion (22); - defining a plant region (36) comprising the at least one identified row of plants (32) and a weed region (38), different from the plant region (36), in the detected field portion (22); - determining a plant code of the weed region (38); and - applying spray to the weed region (38), particularly to the field portion (22) as a factor of the determined plant code by means of a spraying device.

No. of Pages : 11 No. of Claims : 16
(54) Title of the invention: ABSORBENT ARTICLE

(51) International classification: A61F 13/496
(31) Priority Document No: 2017-110867
(32) Priority Date: 05/06/2017
(33) Name of priority country: Japan
(86) International Application No: PCT/JP2018/005799
    Filing Date: 19/02/2018
(61) Patent of Addition to Application Number: NA
    Filing Date: NA
(62) Divisional to Application Number: NA
    Filing Date: NA

(57) Abstract:
Provided is an absorbent article wherein both of the following are achieved in a more improved manner: a ventral part and a dorsal part are not easily separated when the absorbent article is worn; and the ventral part and the dorsal part are easily separated longitudinally when the absorbent article is removed. In this absorbent article, the ventral part (11) and dorsal part (13) are joined to each other at a joint part (14a) with widthwise end parts thereof overlapped on at least one side. The joint part is provided with a plurality of fusion-bonding parts (30). The fusion-bonding part has: a fused part (MC) wherein a plurality of sheets of the ventral part and a plurality of sheets of the dorsal part are fused to each other in the thickness direction; and a side wall part (SW) wherein a plurality of sheets of the ventral part and plurality of sheets of the dorsal part are fused to each other in the thickness direction so as to extend in a tubular shape in the thickness direction from the peripheral edge of the fused part. The position of the fused part in the thickness direction is offset from the boundary between the ventral part and dorsal part. The dimension of the side wall part in the thickness direction is greater than the dimension of the fused part in the thickness direction. The longitudinal dimension of the side wall part is smaller than the widthwise dimension thereof.
The present invention relates to a measuring cuvette (1) for counting and/or characterizing cells, the measuring cuvette (1) comprising a base (11) and a transparent lateral enclosure (12) extending from the base (11) so as to form with the latter an optical measurement chamber (13); the base (11) having a through-orifice (111) with a diameter of 30 to 100 μm for cells to pass through, characterized in that the base (11) and the transparent lateral enclosure (12) form a one-piece cuvette (1) suitable both for impedance measurement and for optical measurement. The invention also relates to a system for characterizing cells, comprising the measuring cuvette (1).
Title of the invention: STABILIZER FOR VEHICLE, AND SHOT PEENING JIG FOR STABILIZER

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<td>STABILIZER FOR VEHICLE, AND SHOT PEENING JIG FOR STABILIZER</td>
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<td>(57)</td>
<td>The stabilizer (10) has bend sections (21, 22). The circumferential positions on the radial cross section of each of the bend sections (21, 22) are designated as follows: the center of the inside of the bend is 0°; and the center of the outside of the bend is 180°. Each of the bend sections (21, 22) includes a bend interior section (41) located at 0°, a bend exterior section (42) located at 180°, a first side section (51) located at 90°, and a second side section (52) located at 270°. Compressive residual stress is present in the bend interior section (41) from the surface to a first depth (D1). Compressive residual stress is present in the bend exterior section (42) to a second depth (D2). Compressive residual stress is present in the first side section (51) to a third depth (D3). Compressive residual stress is present in the second side section (52) to a fourth depth (D4). The first depth (D1) is deeper than the second depth (D2). The fourth depth (D4) is deeper than the third depth (D3).</td>
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An image of the stabilizer is shown with labels indicating the positions (0°, 90°, 180°, 270°) and sections (41, 42, 51, 52) along with their respective depths (D1, D2, D3, D4).

Abstract:
The stabilizer (10) has bend sections (21, 22). The circumferential positions on the radial cross section of each of the bend sections (21, 22) are designated as follows: the center of the inside of the bend is 0°; and the center of the outside of the bend is 180°. Each of the bend sections (21, 22) includes a bend interior section (41) located at 0°, a bend exterior section (42) located at 180°, a first side section (51) located at 90°, and a second side section (52) located at 270°. Compressive residual stress is present in the bend interior section (41) from the surface to a first depth (D1). Compressive residual stress is present in the bend exterior section (42) to a second depth (D2). Compressive residual stress is present in the first side section (51) to a third depth (D3). Compressive residual stress is present in the second side section (52) to a fourth depth (D4). The first depth (D1) is deeper than the second depth (D2). The fourth depth (D4) is deeper than the third depth (D3).
An apparatus for dispensing a mixture of a diluent (1) and an additive (2) for sanitation, cosmetic or cleaning applications comprises a mixing unit (10) for creating a mixture of the diluent (1) and the additive (2) a diluent supply (11) supplying the diluent (1) to the mixing unit (10), an additive supply (21) supplying the additive (2) to the mixing unit (10), an outlet (8) for dispensing the mixture, wherein the diluent supply (11) comprises a pump (51) arranged to increase the pressure of the diluent (1) before the diluent (1) enters the mixing unit (10).
The invention relates to a process (10) for producing propylene, comprising: carrying out a method (1) for propane dehydrogenation in order to obtain a first component mixture (A); carrying out another propylene production method (2) in order to obtain a second component mixture (B); and forming a separation product (P2) predominantly containing propane, by means of at least one propane separation step (S1), at least part of the first component mixture (A) being supplied to the at least one propane separation step (S1). According to the invention, the separation product (P2) predominantly containing propane is to be at least partially recirculated into the other propylene production method (2). The invention further relates to a corresponding facility and to a method for retrofitting a steam cracking facility (30).
The invention relates to a process (10) for producing propylene, comprising: carrying out a method (1) for propane dehydrogenation in order to obtain a first component mixture (A); carrying out a steam cracking method (2) in order to obtain a second component mixture (B); forming a first separation product (P1) at least predominantly containing propylene, by means of at least one first separation step (S1); forming a second separation product (P2) at least predominantly containing propane, by means of the at least one first separation step (S1); forming a third separation product (P3) at least predominantly containing ethylene, by means of the at least one second separation step (S2); and forming a fourth separation product (P4) at least predominantly containing ethane, by means of the at least one second separation step (S1). According to the invention, at least part of the first component mixture (A) is subjected to at least one first pre-separation step (V1) in order to obtain a third component mixture (C), which includes a pressure increase and at least partial removal of hydrogen; at least part of the second component mixture (B) is subjected to at least one second pre-separation step (V2) in order to obtain a fourth component mixture (D), which includes a pressure increase, at least partial removal of hydrogen, and at least partial removal of methane; and at least part of the third component mixture (C), along with at least part of the fourth component mixture (D), is subjected to the at least one first separation step (S1). The invention further relates to a facility and a method for retrofitting a steam cracking facility.
Disclosed are a method for device-to-device (D2D) communication, a terminal device, and a network device. The method comprises: a first terminal device determining a first control channel resource in a pre-configured resource pool for transmission of first resource scheduling information and determining a second control channel resource in a pre-configured resource pool for transmission of second resource scheduling information, the first control channel resource having a time domain length greater than a time domain length of the second control channel resource; and the first terminal device transmitting the first resource scheduling information on the first control channel resource and transmitting the second resource scheduling information on the second control channel resource, the first resource scheduling information and the second resource scheduling information being respectively used by a second terminal device and a third terminal device to determine a data channel resource of the first terminal device. The first terminal device transmits corresponding resource scheduling information on the pre-configured resource pool, such that new and old versions of terminal devices can jointly perform data transmission in a communication system and interference therebetween can be reduced.
**Title of the invention:** COMPOSITION, PREPARATION METHOD AND EVALUATION OF A COMPLEX IMMUNOGEN NAMED I-SPGA FOR PRODUCTION OF IMMUNOLOGICAL ACTIVE PROTEINS (IAP)

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**Abstract:**

The present invention relates to the composition and method of preparing an immunogen designated as I-spga consisting of a complex antigen prepared from 18 to 26 species of pathogenic microorganisms isolated from patients, inactivated with binary ethyleneimine (BEI) and formalin, diluted in a SPGA immunopotentiator mixed with QS-21 adjuvant. By inoculating the hens with the I-spga immunogen, hyperimmune eggs (Imunospga) are obtained which contain immunologically active proteins specific to the 18-26 antigens used for immunization. The immune response of the hens is specific to the used antigens by amplification of the antigenic signal by the SPGA immunopotentiator and due to a special immunization program that allows the immune system to act complex and intense: The I-spga complex antigen contains 18-26 microorganisms isolated from patients, bacterial bodies, components from the bacterial bodies obtained by ultrasonography, cilia, exotoxins, endotoxins, spores, viruses, fungi or yeasts. This pathogenic material is inactivated with BEI and formalin. The I-spga antigen is of three types. The standard I-spga antigen is composed of 18 to 24 antibiotic-resistant bacterial species isolated from patients in Romania. The specific I-spga complex antigen is composed of the I-spga complex antigen containing a mixture of 7-9 strains from a single species of bacteria, fungi or yeasts isolated from patients in Romania mixed with SPGA and QS-21, used for inoculation of hens previously immunized with standard I-spga antigen. The personalized I-spga antigen is composed of patient-derived pathological material containing cellular debris and pathogenic germs inactivated with BEI and formalin and mixed with SPGA and QS-21 and is used to immunize hens previously immunized with the standard I-spga antigen. This now patented technology encompasses a new generation of biological products in which the immune response of the hens to different groups of parenterally inoculated antigens at different time intervals is overlapping. Chicken response is uniform and additional administration of immunogens and SPGA as an immunopotentiator amplifies the antigenic signal and immune response. The I-spga immunogen as well as the immune response contain two markers, G and A, which identify the I-spga antigen used for immunization against the antigens used to produce the Imunoinstant group bio-preparations or similar products. The I-spga immunogen is used to immunize the hens for obtaining immunologically active proteins that can be used to treat immune deficiencies, psoriasis, epidermolysis bullosa, other dermatitises, nosocomial infections, antibiotic-resistant infections in the urinary system of children and grownups.
Title of the invention: POLYAROMATIC MOLECULE HAVING A NITRILE OXIDE FUNCTION

Abstract:
The invention relates to a compound of the following formula (I): (I) wherein: - PAr is a polyaromatic group comprising at least two condensed aromatic hydrocarbon rings, each of said condensed aromatic rings optionally being substituted by one or more carbon chains which are identical or different, aliphatic or aromatic, linear, branched or cyclic, optionally substituted or interrupted by one or more heteroatoms; and - Sp is an atom or a group of atoms.

No. of Pages: 33 No. of Claims: 21
The present technique relates to a signal processing device, a signal processing method, and a program that allow one DSD signal to also support a PCM signal output. A distribution device comprises: an extraction unit for extracting, when generating a PCM signal with a prescribed sampling frequency from a DSD signal, a prescribed number of samples from the DSD signal, the prescribed number of samples mainly including samples with a prescribed interval determined by the prescribed sampling frequency; and a filtering unit for generating the PCM signal with the prescribed sampling frequency by filtering the prescribed number of samples extracted. The present technique can be applied to, for example, a distribution device that provides a client device with a PCM signal.
(54) Title of the invention: FOCUSING CONTROL METHOD AND DEVICE, COMPUTER STORABLE MEDIUM AND MOBILE TERMINAL

(51) International classification: H04N 5/232, G03B 13/36

(31) Priority Document No: 201710458412.3
(32) Priority Date: 16/06/2017
(33) Name of priority country: China

(86) International Application No: PCT/CN2018/090624
Filing Date: 11/06/2018


(61) Patent of Addition to Application Number: NA
Filing Date: NA

(62) Divisional to Application Number: NA
Filing Date: NA

(57) Abstract:
The present application relates to a focusing control method and device, a computer storable medium and a mobile terminal, the method comprising: entering a photo-taking preview mode and identifying whether there is a face area in a preview window; acquiring a preset travel path of a lens matched with the face area when the area of an existing face area is less than a preset value, the starting point of the preset travel path being a first position, the ending point thereof being a second position close to the far focus position, and the first position not coinciding with the second position; and according to the preset travel path, controlling a motor to drive the lens to move along an optical axis between the first position and the second position so as to complete focusing of the face area.

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(72) Name of Inventor: 1) LI, Xiaopeng

No. of Pages: 21 No. of Claims: 13
Provided are a recording paper and a method for manufacturing the same, the recording paper having an excellent appearance and having not only high adhesion to a support and a resin coating, but also high adhesion, particularly water-resistant adhesion, to inks and toners of various types of printing systems. This recording paper is provided with a support comprising a thermoplastic resin film, and a resin coating, the resin coating containing a resin that is a reaction product of a cationic water-soluble polymer and a silane coupling agent, the content of the silane coupling agent component in the resin coating being 15-35% by mass with respect to the cationic water-soluble polymer component, and the resin coating not containing thermoplastic resin particles.
Disclosed are a measurement configuration method and a related product. The method comprises: acquiring configuration information, wherein the configuration information comprises a measurement configuration of a terminal in a disconnected state, and the disconnected state comprises at least one of an IDLE state and an INACTIVE state; and acquiring a measurement result according to the measurement configuration. The embodiments of the present application reduce signalling overhead of a terminal performing a network configuration after switching to a connected state, and facilitate improving the network configuration efficiency of the terminal.
Title of the invention: POLYMERS COMPRISING IMIDAZOLE DERIVATIVES AND THEIR USE IN ELECTROCHEMICAL CELLS

Abstract:
Here are described polymers comprising monomeric units from vinylimidazole derivatives and their use in electrode materials and/or electrolyte compositions, as well as their methods of preparation. Also described are electrode materials, electrodes, and electrochemical cells comprising the polymers and their use.
Disclosed in the present invention are a system information validity indication method, a network device, a terminal device and a computer storage medium. The method comprises: configuring for at least one system information block (SIB) a validity indication; and sending to the terminal device the validity indication corresponding to an SIB needing to be reacquired.

No. of Pages : 20  No. of Claims : 12
(54) Title of the invention: CHANNEL RESOURCE SET INDICATION METHOD, TERMINAL DEVICE AND NETWORK DEVICE

(51) International classification: H04W 72/02, H04W 72/12
(31) Priority Document No: NA
(32) Priority Date: NA
(33) Name of priority country: NA
(86) International Application No: PCT/CN2017/105012
Filing Date: 30/09/2017
(87) International Publication No: WO/2019/061498
(61) Patent of Addition to Application Number: NA
Filing Date: NA
(62) Divisional to Application Number: NA
Filing Date: NA

(57) Abstract:
Disclosed in the present invention are a channel resource set indication method, a terminal device and a network device. The method comprises: determining at least two resource sets, the at least two resource sets at least including a first resource set and a second resource set, different resource sets respectively corresponding to different demodulation reference signal (DMRS) mapping types or corresponding scheduling types, and determining a first resource from one of the two resource sets. The present invention can improve the resource scheduling flexibility of each scheduling type, realize a more efficient resource utilization rate and transmission performance for channel transmission, and avoid larger signaling overheads.

No. of Pages: 32 No. of Claims: 15
(54) Title of the invention: B4GALT1 VARIANTS AND USES THEREOF

(51) International classification: C12N 9/10
(31) Priority Document No: 62/515140
(32) Priority Date: 05/06/2017
(33) Name of priority country: U.S.A.
(86) International Application No: PCT/US2018/035806
    Filing Date: 04/06/2018
(61) Patent of Addition to Application
    Number: NA
    Filing Date: NA
(62) Divisional to Application Number
    Number: NA
    Filing Date: NA

(57) Abstract:
Variant B4GALT1 genomic, mRNA, and cDNA nucleic acid molecules, and polypeptides, methods of detecting the presence of these molecules, methods of modulating endogenous B4GALT1 genomic, mRNA, and cDNA nucleic acid molecules, and polypeptides, methods of ascertaining the risk of developing cardiovascular conditions by detecting the presence or absence of the variant B4GALT1 genomic, mRNA, and cDNA nucleic acid molecules, and polypeptides, and methods of treating cardiovascular conditions are provided herein.

No. of Pages: 128 No. of Claims: 87
To protect an illumination device that illuminates the vicinity of a vehicle, and provide an illumination device having greater convenience and marketability due to the design of an illuminated position. An illumination device (50) attached to an automatic two-wheeled vehicle (1), wherein the automatic two-wheeled vehicle (1) is provided with a step (11) on which a rider places a foot, and a front cowl (5) disposed in front of the foot of the rider. The illumination device (50), in a position laterally inward from a lateral outer end (11b) of the step (11) and rearward of the front cowl (5), irradiates irradiation light (C) downward of the vehicle body. The illumination device (50) is positioned so as to overlap the step (11) in a plan view. The automatic two-wheeled vehicle (1) is provided with a bulging part (5a) that bulges laterally outward or toward the rear of the vehicle body. A light-emitting part of the illumination device (50) is installed in the lower part of the bulging part (5a), and both the step (11) and the road surface (G) are irradiated by the irradiation light (C).
The embodiments of the present application provide a data transmission method and a terminal device, being able to improve the uplink transmission rate. The method comprises: receiving at least two DMRS port groups configured by a network device; determining a target reference signal resource corresponding to each of the at least two DMRS port groups; determining, according to the target reference signal resource, transmission parameters for transmitting data on the DMRS port group corresponding to the target reference signal resource; and when the transmission parameters for transmitting data on each DMRS port group are determined, performing data transmission on the at least two DMRS port groups.
Title of the invention: SELF-REGULATING PRESSURE IN DEODORANT BOTTLES

Abstract:
Innovation is a technical addition, an innovative stretchable chamber (3) filled with air (5) under pressure that can replace the way of using existing working methods of the bottle (1) under pressure. The basis of the innovation is to replace the current flammable gas from the bottle (1) with the use of atmospheric air (5) under pressure, which is separated from the content (4) with the provided innovative chamber (3) within the bottle (1). That way, the content (4) from the bottle (1) under pressure would be used effectively, in an environmentally acceptable way. The applied technological process would reduce the current negative effect of using the content (4) from the bottle (1) under pressure. There would be a longer period of use of content (4), i.e., existing bottles (1) would be further upgraded for the efficient and economical use of content (4). In such a way, the work process would not be harmful to the environment and human health. The method of applying the innovation shown in Figure 4, works in a following way. The chamber (3) is filled with high pressure air (5), divided into several compartments (18) which are used for the separation of air 5. At the connection point (6) between the chamber and the bottle (1), there are membranes that suffer the difference of high pressure from the influence of the chamber (3) and the low pressure from the influence of the additional chamber (17). At the bottle bottom (2) there are needles (19) with heads, which drill the membranes one by one, when the air (5) pressure decreases in the additional chamber (17), due to the release of the content (4) and the proportional expansion of the additional chamber (17) towards the wall of the bottle (1). The needles (19) with heads are partly made of rubber, positioned at the connection point (6) between the chamber and the bottle (1). They are placed in such a way that the user can individually activate them by hand from the outside of the bottle (1) and if necessary, make a greater pressure in the bottle (1) for ejecting the content (4) with higher intensity. The filling of the innovative bottles (1) is done by the licensed automatic machines in an elevated air pressure space.
Provided are a data transmission method, a terminal device and a network device. After the network device learns that the terminal device needs to perform a data replication service and/or an sTTI transmission service, logical channel configuration can be carried out accordingly, thereby implementing the rational scheduling of resources. The method comprises: sending status information to a network device, wherein the status information indicates that a terminal device needs to perform a target service, and the target service comprises a data replication service and/or an sTTI transmission service.

**Abstract:**

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200

开始

终端设备向网络设备发送状态信息，该状态信息指示该终端设备需要进行目标业务。该目标业务包括数据复制服务和/或sTTI传输服务。

BB

结束
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No. of Pages : 37 No. of Claims : 15
(57) Abstract:
Provided are a data transmission method, a terminal device, and a network device. The method comprises: a terminal device generates indication information, the indication information being used for indicating a delay requirement of the terminal device; the terminal device sends the indication information to a network device. In embodiments of the present invention, a terminal device indicates a delay requirement of the terminal device to a network device by means of indication information, so that a network can allocate, according to the delay requirement indicated by the terminal, to the terminal a transmission resource meeting the delay requirement, thereby reducing a transmission delay and improving user experience.

No. of Pages : 25  No. of Claims : 15
The Patent Office Journal No. 08/2020 Dated 21/02/2020

10428

| (12) PATENT APPLICATION PUBLICATION | (21) Application No.201917054223 A |
| (19) INDIA |  |
| (22) Date of filing of Application :27/12/2019 | (43) Publication Date : 21/02/2020 |

(54) Title of the invention : RANDOM ACCESS METHOD, NETWORK DEVICE AND TERMINAL DEVICE

| (51) International classification : | H04W 74/08 |
| (31) Priority Document No : | NA |
| (32) Priority Date : | NA |
| (33) Name of priority country : | NA |
| (86) International Application No : | PCT/CN2017/093735 |
| Filing Date : | 20/07/2017 |
| (87) International Publication No : | WO/2019/014903 |
| (61) Patent of Addition to Application Number : | NA |
| Filing Date : | NA |
| (62) Divisional to Application Number : | NA |
| Filing Date : | NA |

(57) Abstract :
Disclosed in embodiments of the present application are a random access method, network device and terminal device. The method comprises: a network device receiving a plurality of preambles transmitted by a terminal device in a random access process; and the network device returning at least one random access response (RAR) corresponding to at least one preamble in the plurality of preambles to the terminal device as feedback. The method, network device and terminal device in the embodiments of the present application are advantageous in increasing the reliability of preamble transmission and the probability for a network device to respond to a preamble.

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(72) Name of Inventor :
1) TANG, Hai

No. of Pages : 29 No. of Claims : 15
Provided in an embodiment of the present invention are a wireless communication method and device capable of minimizing self-interference at a terminal device and improving communication performance. The method comprises: determining a magnitude of self-interference at a terminal device generated in a first uplink frequency band and a first downlink frequency band over which the terminal device performs communication with a network device; and transmitting a first message to the network device, the first message indicating the magnitude of the self-interference at the terminal device generated in the first uplink frequency band and the first downlink frequency band.
In some aspects, the disclosure relates to compositions and methods of engineering a transgene. In some embodiments, the disclosure provides self-regulating recombinant nucleic acids, viral vectors and pharmaceutical compositions comprising a MeCP2 transgene. In some embodiments, compositions and methods described by the disclosure are useful for treating diseases and disorders associated with a loss of function mutation, for example Rett syndrome.
Title of the invention : TRANSDERMAL THERAPEUTIC SYSTEM CONTAINING ASENAPINE AND SILICONE ACRYLIC HYBRID POLYMER

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Abstract:
The present invention relates to transdermal therapeutic systems (TTS) for the transdermal administration of asenapine comprising an asenapine-containing layer structure, said asenapine-containing layer structure comprising A) a backing layer and B) an asenapine-containing layer, wherein the transdermal therapeutic system comprises a silicone acrylic hybrid polymer.

No. of Pages : 58 No. of Claims : 19
Bromine containing compounds, such as calcium bromide, sodium bromide and the like, are prepared in high purity and more quickly with less waste by using a process with two bromination stages and often a third step wherein the crude product mixture can be adjusted to meet specific product requirements. In the first bromination stage, the majority, but not all, of a substrate is brominated using a reductive bromination reaction, the remaining unreacted substrate is converted to product in the second stage through another a reductive bromination reaction, although the specific reagents may be different, wherein the addition of bromine and a reducing agent are carefully monitored.

No. of Pages : 26 No. of Claims : 9
(54) Title of the invention : A METHOD FOR DETERMINING THE ABSOLUTE AMOUNT OF FETAL NUCLEIC ACID

(51) International classification : C12Q 1/68, C12N 15/117, C12N 15/10
(31) Priority Document No : 12/561,241
(32) Priority Date : 16/09/2009
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2010/027879
Filing Date : 18/03/2010
(87) International Publication No : WO/2011/034631
(61) Patent of Addition to Application Number : NA
Filing Date : NA
(62) Divisional to Application Number : 3139/DELNP/2012
Filed on : 12/04/2012

(57) Abstract :
Provided are compositions and processes that utilize genomic regions that are differentially methylated between a mother and her fetus to separate, isolate or enrich fetal nucleic acid from a maternal sample. The compositions and processes described herein are particularly useful for non-invasive prenatal diagnostics, including the detection of chromosomal aneuploidies.

No. of Pages : 442 No. of Claims : 10
Title of the invention: A METHOD FOR PRODUCING MONOCHLORO-TRIFLUOROPROPENEM

Abstract:
A method for producing monochloro-trifluoropropene, which is formed by reacting 1,1,1,3,3-pentachloropropane and/or 1,1,3,3-tetrachloro-2-propene and hydrogen fluoride in a reactor, from an azo trope or azo trope like combination of the monochloro-trifluoropropene and HF which comprises (a) distilling a reaction mixture including hydrogen fluoride, monochloro-trifluoropropene, and hydrogen chloride in a rectification column, (b) separating to remove hydrogen chloride as an overhead stream including the hydrogen chloride and a bottoms stream in a distillation column, (c) cooling the bottoms stream to form two liquid phases, (d) separating said two liquid phases in a liquid phase separator into a first light phase comprising hydrogen fluoride in excess over an azo trope or azo trope like combination of monochloro-trifluoropropene and hydrogen fluoride and a second heavy phase comprising an excess of monochloro-trifluoropropene over a combination of monochloro-trifluoropropene and hydrogen fluoride and a second heavy phase comprising an excess of monochloro-trifluoropropene over an azo trope or azo trope like combination of monochloro-trifluoropropene and hydrogen fluoride and a second heavy phase comprising an excess of monochloro-trifluoropropene over an azo trope or azo trope like combination of monochloro-trifluoropropene and hydrogen fluoride, (e) distilling said first light phase in a distillation column to produce a top stream of an azo trope of monochloro-trifluoropropene and hydrogen fluoride and a bottoms stream of hydrogen fluoride, (f) recycling said bottoms stream to said reactor, (g) distilling said second heavy phase in a distillation train to provide a monochloro-trifluoropropene stream.
Title of the invention : DRAIN OF AN INSPECTION CHAMBER

Abstract:
The invention relates to a drain or a portion of an inspection chamber, and a mould assembly for manufacturing thereof. The drain or the inspection chamber portion comprises a plastic circumferential wall, which circumferential wall, in the case of the drain, is preferably provided with openings for connection of the drain to one or more pipes. The drain or the inspection chamber portion can be manufactured by rotation moulding. The circumferential wall comprises a hollow-walled section provided with an internal wall and an external wall, wherein the internal wall and the external wall are locally abutted against each other for formation of reinforcements. These reinforcements are arranged such that they jointly span the entire hollow-walled section, seen in circumferential direction, yet without forming therewith one continuous abutment between the internal wall and the external wall.
Title of the invention: A METHOD FOR DEPOLYMERIZING LIGNIN

Abstract:
A method for depolymerizing lignin, the method comprising reacting lignin-containing material with a hierarchical catalyst composition comprising a continuous magnetic macroporous scaffold in which is incorporated mesoporous aggregates of magnetic nanoparticles, wherein a free-radical-producing enzyme is embedded in mesopores of the mesoporous aggregates of magnetic nanoparticles, to produce depolymerized products from said lignin.

No. of Pages: 70 No. of Claims: 22
The axial end of the outer peripheral surface of the inner ring of a rolling bearing of a bearing unit for an air turbine has a sloped surface, the diameter of which changes from large to small toward the downstream side in the direction in which compressed air is supplied. A seal member does not have a metallic core, consists only of an elastic material, and has a base which extends radially and an elastically deformable lip section which extends from the radially inner end of the base and which is sloped to the downstream side in the direction in which the compressed air is supplied. When the compressed air does not act, the sloped surface of the lip section, which is located on the upstream side in the direction in which the compressed air is supplied, is in contact with the sloped surface of the inner ring. When the compressed air acts, the area of contact between the sloped surface of the lip section, which is located on the upstream side in the direction in which the compressed air is supplied, and the sloped surface of the inner ring is smaller than in the case in which the compressed air does not act.
Morphic Form B of phosphonic acid, \([(S)-2-(4-amino-2-oxo-1(2H)-pyrimidinyl)-l-(hydroxymethyl)ethoxy]methyl]mono[3-(hexadecyloxy)propyl] ester characterized by an X-ray diffraction pattern including peaks at about 5.8, 12.5, and 24.0 degrees 20.
Title of the invention: DEVICE FOR PROCESSING SIGNALS FROM A PRESSURE-SENSING TOUCH PANEL

Abstract:
A device (42) is provided for processing signals (10) from a projected capacitance touch panel (43), the touch panel (43) including a layer of piezoelectric material (9) disposed between a plurality of first electrodes (7, 27) and at least one second electrode (8). The device is configured, in response to receiving input signals (10) from a given first electrode (7, 27), to generate a pressure signal (15a, 15b) indicative of a pressure applied to the touch panel (43) proximate to the given first electrode (7, 27) and a capacitance signal (54a, 54b) indicative of a capacitance of the given first electrode (7, 27). The device (42) includes an amplifier (52) configured to generate an amplified signal (14a, 14b) based on the input signals (10). The device (42) also includes an analog-to-digital converter (50a, 50b) configured to be synchronised (53) with the capacitance signal (54a, 54b), and to generate the pressure signal (15a, 15b) by sampling the amplified signal (14a, 14b) at times corresponding to the amplitude of the capacitance signal (54a, 54b) being substantially equal to a ground, common mode or minimum value.
The invention is related to chimeric Virus-Like Particles (VLPs) containing and displaying epitopes and antigen from Zika Virus (ZIKV); and to methods for creation and production of such chimeric VLPs to their applications, including but not limited to vaccines, diagnostics, clinical studies, assay development and antibody discovery.
Title of the invention: METHODS OF TREATING SYMPTOMS OF GASTROPARESIS USING VELUSETRAG

Abstract:
The present invention relates to methods and pharmaceutical compositions for treatment of all symptoms of gastroparesis in a human patient, the method comprising administering to the human patient between about 0.5 mg/day to about 30 mg/day, about 0.5 mg/day to about 15 mg/day, about 0.5 mg/day to about 5 mg/day, or about 5 mg/day, of velusetrag or a pharmaceutically-acceptable salt thereof.
Title of the invention: METHOD FOR NUCLEIC ACID DETECTION, PRIMER FOR NUCLEIC ACID DETECTION, AND KIT FOR NUCLEIC ACID DETECTION

Abstract:
[Problem] An objective of the present invention is to develop a new method for nucleic acid detection which is even suitable for detecting short-chain nucleic acids. [Solution] The present invention provides a method for nucleic acid detection, wherein: i) a DNA/RNA complex is formed by hybridizing a detection target nucleic acid 1 with a nucleic acid detection primer 3; ii) a first polynucleotide part 301 is removed from the nucleic acid detection primer 3 by using a nuclease 4 to decompose at least a part of the DNA/RNA complex; and (iii) the nucleic acid detection primer 3 is hybridized with a template nucleic acid 2, and a reaction is performed to amplify the template nucleic acid 2 by using a polymerase 5.
A method of selecting a set of beams to be monitored by a User Equipment, UE, in a telecommunication network, said telecommunication network comprising a Base Station, BS, function coupled to at least one Access Node, AN, serving said UE, said method comprising the steps of receiving measurement data comprising measurements of qualities of beams observed by said UE, wherein said beams originate from said at least one AN to said UE, and originate from at least another AN in said telecommunication network to said UE, retrieving at least one measurement data from a particular UE that matches the received measurement data, wherein the historical database comprises historical measurement data comprising measurements of qualities of beams observed by UE’s in said telecommunication network over time, selecting a set of beams to be monitored by said UE based on said retrieved at least one measurement data from said particular UE and based on subsequent measurement data of said particular UE over time in said historical database, and transmitting said selected set of beams to be monitored to said UE.
Title of the invention: IMPROVEMENTS TO A VENTILATED REINFORCED-CONCRETE WALL MODULE FOR CONSTRUCTING BUILDINGS IN GENERAL AND RESPECTIVE INDUSTRIALIZED CONSTRUCTION SYSTEM

Abstract:
This is a ventilated wall module (10) of the type used in civil construction for a range of buildings using pre-fabricated components, such as one-storey homes, large houses, houses, schools, hospitals, industrial sheds, inter alia; said wall module (10) comprises a pair of panels (20A) and (30A) that are produced independently of one another by means of automated, robotic equipment (E1), based on large moving metal surfaces (M1) that slide on rails (T1); said mechanized method (M1) developed for the production of the panels (20A) and (30A) includes an industrialized construction system (SC) for producing each wall module (10) comprising the combination of the coordination and compatibilization of the designs to be implemented with the pre-installation of the complementary components such as electrical boxes (c1) or other necessary elements.
**Title of the invention**: COMMUNICATION METHOD, COMMUNICATIONS DEVICE, AND COMMUNICATIONS SYSTEM

| (51) International classification | :H04W 68/00,H04W 8/08 |
| (31) Priority Document No | :201710640133.9 |
| (32) Priority Date | :31/07/2017 |
| (33) Name of priority country | :China |
| (36) International Application No | :PCT/CN2018/097138 |
| (86) Filing Date | :26/07/2018 |
| (87) International Publication No | :WO/2019/024747 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

**Abstract**: Embodiments of the present application provide a communication method, device and system, capable of avoiding triggering of a re-registration process of a terminal due to a context loss of the terminal which is being served when an AMF entity fails. The method comprises: a communication device obtains a first group identifier of a terminal group to which a first terminal belongs, the first terminal being served by a first mobility management entity; and in a case where an exception occurs to the first mobility management entity, the communication device sends a message related to the first terminal to a second mobility management entity according to the first group identifier, wherein the second mobility management entity is a mobility management entity having context of the first terminal.

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No. of Pages : 54 No. of Claims : 31
**Title of the invention:** SPIRAL WOUND MEMBRANE MODULE INCLUDING INTEGRATED DIFFERENTIAL PRESSURE MONITORING

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<tr>
<td>(31) Priority Document No</td>
<td>:62/537481</td>
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<td>(32) Priority Date</td>
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| (57) Abstract : |
A spiral wound membrane module including a specialized end cap assembly including a connecting conduit defining a passageway extending radially inward from its outer periphery, and a differential pressure sensor connected to the passageway of the connecting conduit.

No. of Pages : 11 No. of Claims : 5
Abstract:
Protective jackets for cable comprise: (A) an exterior layer (1) free of a pest repellant, and (2) having external and internal facial surfaces; (B) an inner layer (1) having a Shore D hardness of equal to or greater than (≥) 63, (2) comprising a pest repellant, and (3) having two facial surfaces; and (C) optionally, a tie layer in contact with the internal facial surface of the exterior layer and a facial surface of the inner layer.
The present invention relates to a liquid silicone rubber (LSR) composition, and articles and coatings made therewith. Also disclosed is a process to provide for the composition, and a process to coat on textile.

No. of Pages : 25 No. of Claims : 17
Disclosed are a permission control method and a related product, relating to the technical field of mobile terminals. The method comprises: a mobile terminal (200) using a processor (110) to notify, where it is determined that an operation requested by a user is of a pre-set operation type, more than one biological identification module of the mobile terminal to acquire N pieces of biological information about the user; and then, the processor (110) matching the N pieces of biological information with a pre-set biological information template, and if the N pieces of biological information all successfully match the pre-set biological information template, executing the operation requested by the user. Therefore, a user can execute an operation of a pre-set operation type only under the condition that N pieces of biological information are all successfully matched, so that the security of a mobile terminal can be improved, and information leakage or property loss caused by the mobile terminal (200) being maliciously operated can be prevented.
This disclosure describes various techniques and systems for rapid low-cost access to suborbital and orbital space and accommodation of acceleration of sensitive payloads to space. For example, a distributed gas injection system may be used in a ram accelerator to launch multiple payloads through the atmosphere. Additionally or alternatively, multiple projectiles may assemble during flight through the atmosphere to transfer and/or resources to another projectile.

Fig. 4

No. of Pages : 32 No. of Claims : 13
In the present invention a plasma gap between a tungsten electrode and a perforated nickel plate creates hydrogen on one side of a crucible and plasma gap between a piece of nickel wire and two perforated nickel plates is used to create oxygen in the other half of the same crucible. The newly created Hydrogen gas is pumped into a storage tank and the newly created Oxygen is pumped into a similar tank for storage. After storage a combiner tank allows a stochiometric mixture of Hydrogen and Oxygen in the appropriate ratio(s) to then release the combined mixture for use in combustion in either a turbine engine, a piston engine, or to create steam to drive a turbine.
A method of establishing a Packet Data Unit, PDU, session between a User Equipment, UE (51; 600), and a data network identified by a Data Network Name, DN N, in a telecommunication network. The telecommunication network comprising an Access and Mobility Function, AMF (56; 66; 500), and a Policy Control Function, PCF (60; 700). The method comprising the steps of receiving (3; 310), by the AMF (56; 66; 500), a registration request initiated by a UE (51; 600) for registering the UE (51; 600) in the telecommunication network; retrieving (16; 320), by the AMF (56; 66; 500), from the PCF (60; 700), PDU session establishment information, wherein the step of retrieving (16; 320) is triggered upon receiving (3; 310) the registration request; receiving (16b, 330), by the AMF (56; 66; 500), from the PCF (60; 700), PDU session establishment information comprising one or more DNNs to which PDU sessions are to be established by the UE (51; 600), and transmitting (21 a; 340), by the AMF (56; 66; 500), to the UE (51; 600) an instruction comprising one or more DNNs for establishing at least one PDU session between the UE (51; 600) and at least one DNN of the one or more DNNs upon receipt of the instruction. Complementary methods and equipment arranged to perform such a method are also presented.
This disclosure describes various techniques and systems for rapid low-cost access to suborbital and orbital space and accommodation of acceleration of sensitive payloads to space. For example, a distributed gas injection system may be used in a ram accelerator to launch multiple payloads through the atmosphere. Additionally or alternatively, multiple projectiles may assemble during flight through the atmosphere to transfer and/or resources to another projectile.
The invention proposes an end-fired melting furnace and a method of melting raw materials by an end-fired melting furnace (10) which has a melting tank (7), a melting chamber (8), first and second ports (21, 22), at least one burner (11, 12), and at least one auxiliary fuel injector arranged in the end-fired melting furnace in said roof or in said first and second side walls respectively so that the at least one auxiliary fuel injector introduces a fraction X2 of auxiliary fuel, in the direction of said re-circulating combustion products (104), without additional oxidiser, into said re-circulating combustion products in the direction of the flow of re-circulating combustion products, and with a chosen velocity such that X2 mixes with re-circulating combustion products before being combusted by the oxidiser entering the furnace.
The invention relates to flame-retardant polyamide compositions, containing a polyamide having a melting point of less than or equal to 290 °C as component A, fillers and/or reinforcing materials as component B, phosphinic acid salt of formula (I) as component C, wherein R1 and R2 mean ethyl, M means Al, Fe, TiOp or Zn, m means 2 to 3, and p = (4 m) / 2, a compound selected from the group of Al, Fe, TiOp or Zn salts of ethylbutylphosphinic acid, of dibutylphosphinic acid, of ethylhexylphosphinic acid, of butylhexylphosphinic acid and/or of dihexylphosphinic acid as component D, phosphonic acid salt of formula II as component E, wherein R3 means ethyl, Met means Al, Fe, TiOq or Zn, n means 2 to 3, and q = (4 n) / 2, a melamine polyphosphate having an average degree of condensation of 2 to 200 as component F, and a gray colorant as component G. The gray polyamide compositions can be used to produce fibers, films, and molded bodies, in particular for applications in the electrical and electronics fields.
Disclosed are flame-retardant polyamide compositions with a heat deflection temperature HDT-A of at least 280 °C, containing - a polyamide with a melting point of greater than or equal to 290 °C as component A, - fillers and/or reinforcing materials as component B, - a phosphinic acid salt of formula (I) as component C, where R1 and R2 represent ethyl, M represents Al, Fe, TiOp or Zn, m represents 2 to 3, and p = (4 m) / 2 - a compound selected from the group containing Al-, Fe-, TiOp- or Zn-salts of ethylbutyl phosphinic acid, dibutyl phosphinic acid, ethylhexyl phosphinic acid, butylhexyl phosphinic acid and/or dihexyl phosphinic acid as component D, and - a monoethyl phosphinic acid salt of formula II as component E, where R3 represents ethyl, Met represents Al, Fe, TiOq or Zn, n represents 2 to 3, and q = (4 n) / 2. The polyamide compositions can be used to produce fibres, films and moulded bodies, in particular for electrical and electronic applications.
The Patent Office Journal No. 08/2020 Dated 21/02/2020

(12) PATENT APPLICATION PUBLICATION
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(54) Title of the invention : STATIC MIXER WITH A TRIANGULAR MIXING CONDUIT

(51) International classification : B01F 5/06
(31) Priority Document No : 62/531558
(32) Priority Date : 12/07/2017
(33) Name of priority country : U.S.A.
(86) International Application No : PCT/US2018/041393
   Filing Date : 10/07/2018
(87) International Publication No : WO/2019/014181
(61) Patent of Addition to Application Number : NA
   Filing Date : NA
(62) Divisional to Application Number : NA
   Filing Date : NA

(57) Abstract:
A static mixer 10 for mixing a fluid flow having at least two components is disclosed, as well as a method for mixing first and second components with the static mixer 10. The static mixer 10 includes a mixing conduit 20 having a first inner surface 38a, a second inner surface 38b that extends from the first inner surface 38a, and a third inner surface 38c that extends from the first inner surface 38a to the second inner surface 38b. The first, second, and third inner surfaces 38a, 38b, 38c define a mixing passage receiving the fluid flow. The first and second inner surfaces 38a, 38b are offset by a first acute angle, the first and third surfaces 38a, 38c are offset by a second acute angle, and the second and third surfaces 38b, 38c are offset by a third acute angle. The static mixer 10 includes a mixing element 100 positioned in the mixing passage.

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No. of Pages : 30 No. of Claims : 22
The present invention provides a method of authenticating a transaction performed by a mobile communication user equipment, UE, device which has performed an authentication and key agreement procedure between the UE device and a mobile management entity of a visited network in order to establish a secure context between the UE device and the visited network, the method comprising sending a service validation message from the UE device to the visited network, the service validation message having been digitally signed by the UE device using an integrity protection key shared between the UE device and a home operator network; and forwarding the service validation message from the visited network to the home operator network.
A rotary screen transfer printing machine and a control system thereof. The rotary screen transfer printing machine comprises a feeding unit (100), a printing unit (200), a drying unit (300), and a receiving unit (400); the printing unit (200) comprises at least one rotary screen transfer printing assembly (5) and a guide belt assembly (7); each rotary screen transfer printing assembly (5) comprises a rotary screen plate roller (51) and a transfer roller (52); the rotary screen plate roller (51) is close to the transfer roller (52); the transfer roller (52) is seamlessly coated with rubber or a resin having good affinity for a water-based ink. The control system comprises: a Motion controller (520); a conveying synchronization module, used for controlling the feeding unit (100), the printing unit (200), the drying unit (300), and the receiving unit (400) to synchronize the conveying speeds of the four units; and a rotary screen transfer printing synchronization module (540), used for controlling phase synchronization between an annular guide belt (71) and the rotary screen transfer printing assembly (5) and phase synchronization between the rotary screen transfer printing assemblies (5) to ensure register or registration accuracy, the Motion controller (520) being connected to each module by means of a fieldbus.
The invention relates to a fluid system for producing extracellular vesicles from producing cells, comprising at least one container, a liquid medium contained by the container and producer cells, characterised in that it also comprises microcarriers suspended in the liquid medium, the majority of the producer cells being adherent to the surface of the microcarriers, and a liquid medium agitator, the agitator and the dimensions of the container being capable of controlling a turbulent flow of the liquid medium in the container.
A smart phone or Bluetooth ear-set having a digital two-way radio function according to the present invention comprises: a receiver unit to which an analogue voice signal is input; a first amplification unit which amplifies the analogue voice signal that is input by the receiver unit; an A/D converter which converts the amplified analogue voice signal that is output by the first amplification unit into a digital voice signal; a control unit which receives and outputs the digital voice signal that is output by the A/D converter, and which outputs a digital voice signal that is received by an antenna and is input; an RF transceiver which controls an input of a signal that is received by the antenna to the control unit, and a transmission of a signal that is output by the control unit using the antenna; a D/A converter which converts the digital voice signal that is output by the control unit into an analogue voice signal; a second amplification unit which amplifies the analogue voice signal that is output by the D/A converter; and a voice output unit which externally transmits the analogue voice signal that is output by the second amplification unit, wherein the control unit is characterised by facilitating a full-duplex communication with other wireless communication devices using a time division function control of the antenna.
One embodiment of a substrate supporting apparatus comprises: a support member for supporting a substrate; and a temperature compensating member disposed at the edge of the support member, and compensating the temperature of the substrate, wherein the support member may be made of a light-transmissive material, the temperature compensating member may be made of an opaque material, and the surface of the temperature compensating member may be made of a material having corrosion resistance against a cleaning gas.
The present invention relates to a braking device and method, and particularly but not exclusively relates to a gyroscopic braking device and method. A braking device (1) comprising a body (2); inner supporting means (4) for supporting the body (2) for rotation about a first axis (101); outer supporting means (6) for supporting the inner supporting means (4) for rotation about a second axis (102); means (14,15,16,30,31) for rotating the body (2) about the first axis (101); means (17) for connecting a rotation that is desired to be braked about a fourth axis (104) to the body (2) so as to transmit rotation and torque to the body (2) about the second axis (102); suspension means (9,10,1,29) for supporting the outer supporting means (6).
A drivetrain assembly for a wind turbine includes a main shaft, a bearing operatively coupled to an end of the main shaft, a bearing housing surrounding the bearing, and a gearbox having, at least, a ring gear. The ring gear is positioned adjacent to the bearing housing and includes an outer circumferential surface. The drivetrain assembly also includes at least one flexible member arranged at an interface between the bearing housing and the ring gear. As such, the flexible member(s) is configured to reduce vibrations generated by the gearbox.
An aqueous dispersion of capsules comprising a resin having at least one repeating unit of formula I, II and/or III and which is obtainable by contacting in a liquid comprising water, a compound A comprising at least 2 functional groups selected from the group of functional groups -X-C(=O)-CHR1-C(=O)-R2, -X-C(=O)-C=C-R2; or -X-C(=O)-CR1=CR2-NR11 R12, with a compound B comprising at least two -NH2, -NH3+ or -N=C=O, wherein X, R1, R2, R3, R11 and R12 have the same meaning as that defined in the claims. The invention also includes a method of producing the aqueous dispersion and further relates to an aqueous ink jet ink comprising the resin capsules.
Title of the invention: ECHOGENIC IMAGE ENHANCING COMPOSITIONS, PREPARATION AND USE THEREOF

Abstract:
The invention pertains to an echolucent image enhancing hydrophobic, water-immiscible composition, wherein the composition turns echogenic when foamed with air or gas bubbles formed from mechanically inserting (i) air or gas; or (ii) aqueous solution with air or gas into the hydrophobic, water-immiscible composition. The invention also pertains to a foamed echogenic image enhancing hydrophobic, water-immiscible composition and optionally comprising aqueous solution forming a single-phase, said composition comprising air or gas bubbles retained in the composition, and wherein the volume ratio of aqueous solution: hydrophobic, water-immiscible composition is preferably in the range of between 0: 100 (i.e. no aqueous solution) and 75:25, preferably between 0: 100 and 60:40.

No. of Pages : 12 No. of Claims : 19
A method and apparatus for surface finishing of pieces obtained by 3D printing wherein the piece to be treated and a liquid process plasticizer are heated together in an hermetically sealed treatment chamber up to a working temperature lower than the boiling temperature of the process plasticizer. The air/vapour mixture is maintained in continuous circulation in the chamber to keep the temperature and concentration uniform and to contact the piece with the air/vapour mixture so as to avoid condensate formation on the piece surface and allow process plasticizer vapours to be absorbed by the piece surface without condensate formation. Vapour exposure time is fixed depending on the desired penetration depth. The apparatus comprises a chamber (11) with heating means (15), means for circulating the air/vapour mixture in the chamber (11) to maintain uniform temperature and concentration conditions therein, and a unit (24) for separating the process plasticizer vapours from the air/vapour mixture by condensation. A unit (39) for filtration of the residual air/vapour mixture is also provided.
A chromic composition adapted for application to a substrate comprising a reversible colour-change composition and a binder composition is provided. The colour change composition includes a leuco-dye and/or liquid crystal. The composition may be applied to keratinous material, polymers or other substrates to provide a colour change effect and other desirable properties such as natural feel and durability.
(54) Title of the invention: FEEDSTUFF ADDITIVE CONTAINING BACILLUS SUBTILIS AND BACILLUS LICHENIFORMIS, FEEDSTUFF COMPOSITION CONTAINING SAME ADDITIVE, AND PREPARATION METHOD FOR SAME FEEDSTUFF ADDITIVE

(51) International classification: A23K 10/16, A23K 50/10
(31) Priority Document No: NA
(32) Priority Date: NA
(33) Name of priority country: NA
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4) WOO, Seo Hyung

(57) Abstract:
The present application relates to a feedstuff additive containing Bacillus subtilis and Bacillus licheniformis, a feedstuff composition containing the feedstuff additive, and a preparation method for the feedstuff additive

No. of Pages: 20 No. of Claims: 7
(54) Title of the invention: α, β-UNSATURATED AMIDE COMPOUND


(31) Priority Document No: 2017-123231
(32) Priority Date: 23/06/2017
(33) Name of priority country: Japan

(86) International Application No: PCT/JP2018/023723
Filing Date: 22/06/2018
(87) International Publication No: WO/2018/235926

(61) Patent of Addition to Application Number: NA
Filing Date: NA
(62) Divisional to Application Number: NA
Filing Date: NA

(57) Abstract:
The purpose of the present invention is to provide an α, β-unsaturated amide compound or a pharmaceutically acceptable salt thereof or the like, which has anti-cancer activity or the like. An α, β-unsaturated amide compound represented by formula (I) and a pharmaceutically acceptable salt thereof or the like have anti-cancer activity or the like. (In the formula, A represents an optionally substituted heterocyclic diyl group; R1 represents a hydrogen atom or an optionally substituted lower alkyl group; R2 represents an optionally substituted aryl group, an optionally substituted cycloalkyl group, an optionally substituted aliphatic heterocyclic group or an optionally substituted aromatic heterocyclic group; X represents -O-, -S-, -SO2-, -NRX1- (wherein RX1 represents a hydrogen atom or a lower alkyl group), -CH=CH-, -CO- or -NH-CO-; and n1 and n2 may be the same or different, and each represents 0 or 1.)
The present invention provides dihydroxydiazinone compounds of general formula (I) in which R1, R2, R3, and R4, are as defined herein, methods of preparing said compounds, intermediate compounds useful for preparing said compounds, pharmaceutical compositions and combinations comprising said compounds and the use of said compounds for manufacturing pharmaceutical compositions for the treatment or prophylaxis of diseases, in particular of hyperproliferative diseases, as a sole agent or in combination with other active ingredients.
(54) Title of the invention: POWDER COATING METHOD AND COATED ARTICLE

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(72) Name of Inventor:
1) MCCORMICK, Michael Denis
2) AIXALA-MARIMON, Oriol
3) ZIMMERMANN, Frank

(57) Abstract:
The invention relates to a method of coating an article and to a coated article. A method according to the invention comprises: providing a substrate coated with a first powder coating layer; optionally heating the substrate and first layer so as to at least partially melt or soften the first powder coating layer, wherein said first powder coating layer is not or only partially cured; applying a second powder coating layer on said first layer; and curing said first and second layer.

No. of Pages: 25 No. of Claims: 11
The invention relates to an aqueous composition comprising a copolymer obtained by a particular polymerization reaction using an anionic monomer comprising a polymerizable olefinic unsaturation and a carboxylic acid function and a monomer of formula (I): the invention also relates to this copolymer per se, and to a method for the preparation thereof and to the use thereof as a superplasticizer.

No. of Pages : 30 No. of Claims : 21
The present invention provides intermediates useful for the synthesis of an aminopyrimidine derivative or pharmaceutically acceptable salt thereof having a selective inhibitory activity against protein kinases, especially against the protein kinases for mutant epidermal growth factor receptors; and processes for preparing the same. And also, the present invention provides novel intermediates useful for said process and processes for preparing the same.
A heat transfer system having a refrigerant circuit and a medium circuit. The refrigerant circuit has a refrigerant booster, an outdoor air heat exchanger, a medium heat exchanger, and a refrigerant flow path switching device, and a fluid containing an HFC-32 and/or HFO refrigerant is sealed therein as the refrigerant. The medium circuit has a medium booster, a medium heat exchanger, a first medium flow path switching device, and multiple indoor air heat exchangers, and carbon dioxide is sealed therein as a heat transfer medium.
The present invention provides an improved process for preparing an aminopyrimidine derivative or pharmaceutically acceptable salt thereof having a selective inhibitory activity against protein kinases, especially against the protein kinases for mutant epidermal growth factor receptors. And also, the present invention provides novel intermediates useful for said process and processes for preparing the same.
Disclosed herein are methods and compositions directed to a promising class of nanomaterials called organic nanoparticles, or carbon nanodots. The present disclosure provides a facile method for the conversion of biomolecule-based carbon nanodots into high surface area three-dimensional graphene networks with excellent electrochemical properties.
The present invention provides protected tetrasaccharides, their process of preparation and their use in the synthesis of oligosaccharides, in particular fragments of O-antigens from Shigella flexneri, for example of serotype 1a, 1b, 2a, 2b, 3a, X, 4a, 4b, 5a, 5b, 7a or 7b.
The invention proposes a cross-fired melting furnace and a method of melting raw materials by a cross-fired melting furnace (10) which has a melting tank (7), a melting chamber (8), N first ports (31, 36) associated N first burners (11, 16); N second ports (41,...46), an auxiliary fuel injector for introducing a fraction of the fuel required for melting as auxiliary fuel in the direction of the flow of recirculating combustion products without additional oxidiser, into said re-circulating combustion products in the direction of the flow of re-circulating combustion products, and with a chosen velocity such that X2 mixes with the re-circulating combustion products before being combusted by the oxidant entering the furnace.
The present invention provides a novel process for preparing an aminopyrimidine derivative or pharmaceutically acceptable salt thereof having a selective inhibitory activity against protein kinases, especially against the protein kinases for mutant epidermal growth factor receptors. And also, the present invention provides novel intermediates useful for said process and processes for preparing the same.
Abstract:
The present invention relates to new modified polymer polyols comprising at least one polyol and a stable dispersion of polymeric particles in the at least one polyol. The dispersed polymeric particles having a high content of P and N. There are also disclosed processes for the preparation of the herein described modified polymer polyols, and processes for preparing polyurethane materials containing them.

No. of Pages : 55 No. of Claims : 15
The invention relates to flame-retardant polyamide compositions with a high glow wire ignition temperature of at least 775 °C, containing a polyamide having a melting point of less than or equal to 290 °C as component A, fillers and/or reinforcing materials as component B, phosphinic acid salt of formula (I) as component C, wherein R1 and R2 represent ethyl, M represents Al, Fe, TiOp or Zn, m represents 2 to 3, and p = (4  m) / 2, a compound selected from the group of Al, Fe, TiOp or Zn salts of ethyl butylphosphinic acid, dibutylphosphinic acid, ethylhexylphosphinic acid, butylhexylphosphinic acid and/or of dihexylphosphinic acid as component D, phosphonic acid salt of formula (II) as component E, wherein R3 represents ethyl, Met represents Al, Fe, TiOq or Zn, n represents 2 to 3, and q = (4  n) / 2, and a melamine polyphosphate having an average degree of condensation of 2 to 200 as component F. The polyamide compositions can be used to produce fibers, films, and moulded bodies, in particular for applications in the electrical and electronics fields.
Immunogenic compositions are disclosed that include Neisseria meningitidis microvesicles, such as outer membrane vesicles (OMV) and/or blebs, from PorA- PorB- Neisseria, such as PorA-PorB-RmpM- Neisseria meningitidis. These immunogenic compositions are of use to induce an immune response to Neisseria, including Neisseria meningitidis and Neisseria gonorrhoea.
**Title of the invention:** PLANT FOR IMMERSION OF BODYWORKS

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**Abstract:**
A plant for the treatment of car bodies (11) comprises a plurality of car body transport units (13), a first transport line (14) along which the transport units with the car bodies move sequentially so as to pass over at least one treatment tank (12) and immerse the car bodies in the tank, and a second transport line (28) along which the empty transport units are brought back. The second transport line (28) is adapted to transport the transport units (13) rotated on one side vertically relative to their normal position for transporting the car bodies and a first and a second transfer device (32, 33) are provided for picking up a transport unit from the first transport line (14), rotating it on one side vertically so as to bring it into a return condition, and delivering it to the second transport line (28) and for then picking up a transport unit from the second transport line (28) in the return condition, rotating it into the normal position for transporting the car bodies and delivering it again to the first transport line (14).

**Fig. 1**

No. of Pages : 10 No. of Claims : 10
Disclosed herein are universal donor stem cells and cells derived therefrom and related methods of their use and production. The universal donor stem cells disclosed herein are useful for overcoming allogeneic immune rejection in cell-based transplantation therapies. In certain embodiments, the universal donor cells disclosed herein are pancreatic endoderm cells that do not express one or more MHC-Class I cell-surface proteins and whose expression of at least one NK activating ligand is disrupted or inhibited.
(51) International classification : H04W 36/00, H04W 24/10
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(33) Name of priority country : U.S.A.
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   Filing Date : 09/08/2018
(87) International Publication No : WO/2019/032025
(61) Patent of Addition to Application Number : NA
   Filing Date : NA
(62) Divisional to Application Number : NA
   Filing Date : NA

(57) Abstract:
The embodiments herein relate to a method, performed by a network node (110), for configuring mobility measurements to be performed by a User Equipment, UE (120). The network node (110) sends a configuration message to the UE (120). The configuration message comprises a plurality of measurement offsets associated to a single measurement object. The measurement offsets indicate offset values for triggering a measurement report. Each of the plurality of measurement report triggering offsets being related to a respective measurement. The embodiments herein further relate to a method, performed by the UE (120), for performing mobility measurements. The UE (120) receives a plurality of measurement offsets associated to a single measurement object, wherein the measurement offsets indicates offset values for triggering a measurement report, and wherein each of the plurality of measurement offsets is related to a respective measurement. The UE (120) further performs a mobility measurement process taking the measurement offset into account for triggering a measurement report transmission.
Provided is a novel nanoparticle, a contrast agent for magnetic resonance imaging containing the same, and a ligand compound used for the production of the nanoparticle. The present invention relates to a nanoparticle including: a metal particle containing ferric oxide; and a ligand represented by formula (3), where the ligand is bonded to a metal atom on the surface of the metal particle. (In the formula, \( m \) is an integer of 1 to 4, and the broken line represents a coordinate bond with a metal atom on the metal particle surface.)
Title of the invention: IMPROVED CONTROL CHANNEL MONITORING

Abstract:
A method for use in a User Equipment (100) configured to operate according to the New Radio (5G) standard, said method comprising: monitoring a control region for mini-slots for a transmission; detecting a start of the transmission; monitoring a control region of said transmission for regular slots; detecting that the transmission has ended; and in response thereto monitoring the control region for mini-slots again.

No. of Pages : 13 No. of Claims : 10
The present disclosure relates to compounds of formula (I) or a pharmaceutically acceptable salt thereof wherein R1 means a fluorine atom or a perhalogeno linear alkyl radical containing 1, 2 or 3 carbon atoms; R2 means a chlorine atom, a linear alkyl radical containing 1, 2 or 3 carbon atoms or a perhalogeno linear alkyl radical containing 1, 2 or 3 carbon atoms, and R means a hydrogen atom or a radical of formula (Ia). The present disclosure also relates to processes for their preparation as well their therapeutic uses, in particular such as for use in the treatment of malaria.
The present invention relates to an auxiliary memory device providing independent backup and recovery functions, enabling: easy use by attaching a commercialized auxiliary memory device in existing computers; minimization of access time to the auxiliary memory device; automatic backup of data in a computer auxiliary memory device; recovery of original data from a specific time using data that has been backed up through a simple operation when data on the auxiliary memory device has been damaged; and performing a recovery function for the auxiliary memory device by rebooting using backed-up OS information as needed.
A password input system equipped with a security setting function, according to the present invention, comprises: one input unit for input by a user; an output unit for outputting a current state and a result; a dedicated communication port for transceiving data with a password adaptor; a memory in which a program for the security setting function is saved; and a processor for executing the program saved in the memory, wherein when the password adaptor is coupled to the dedicated communication port while waiting for input of a password from the user, the password is received via communication with the password adaptor, and security which has been set is unlocked without input of the password by the user when the received password is compared to and matches a pre-saved password.
A method for processing of a cryptographically auditable transaction includes: receiving payment data, wherein the payment data includes at least a primary account number; transmitting the primary account number to a computing system; receiving a confirmation associated with the primary account number from the computing system; transmitting a payment request to the computing system, wherein the payment request includes at least a reference value associated with a payment transaction; receiving an acceptance request from the computing system, wherein the acceptance request includes at least the reference value, an acceptance address, one or more fee values, and a first digital signature generated by a third party; generating a second digital signature using at least the acceptance address; and transmitting at least the second digital signature to the computing system.
The invention relates to a wind turbine steel tower ring segment, a wind turbine tower section, a wind turbine, and a method for producing a wind turbine tower section. The invention particularly relates to a wind turbine steel tower ring segment for a wind turbine tower, comprising a casing segment extending in the direction of a segment height, a segment ring direction and a segment thickness with a first horizontal abutment side and a second horizontal abutment side, a first vertical abutment side and a second vertical abutment side, a first vertical flange being arranged on the first vertical abutment side and a second vertical flange being arranged on the second vertical abutment side, the first vertical flange and/or the second vertical flange forming an angle with a casing segment, at least one connection element being embodied on the first vertical flange and/or the second vertical flange for the arrangement of functional elements, the connection element protruding from the first vertical flange and/or the second vertical flange.
Title of the invention: ROTOR BLADE OF A WIND TURBINE ROTOR, WIND TURBINE AND METHOD FOR IMPROVING THE EFFICIENCY OF A WINDTURBINE ROTOR

Abstract:
The present invention relates to a rotor blade having: a rotor blade trailing edge extending between a rotor blade root and a rotor blade tip, over a rotor blade length; and an adapting profile depth between the rotor blade trailing edge and a rotor blade leading edge. In order to increase efficiency, at least one profile element with a continuous profiled section can be attached to or in the region of the rotor blade trailing edge in order to change the profile depth of the rotor blade, the extension of the profile depth beyond the rotor blade trailing edge being determined depending on a standardized, load-dependent dimensioning of the profile depth of the rotor blade and a load-level adapting to an installation site of the wind turbine.
The invention relates to a wind turbine steel tower section (200, 200', 200'', 300, 400), to a wind turbine tower (102, 500), to a wind turbine, and to a method for producing a wind turbine steel tower section (200, 200', 200'', 300, 400). The invention particularly relates to a wind turbine steel tower section (200, 200', 200'', 300, 400) for a wind turbine tower, comprising a first wind turbine steel tower ring segment (210, 310, 410, 510) with a first vertical abutment side (212), a second wind turbine steel tower ring segment (230, 320, 420, 520) with a second vertical abutment side, and a plate element (250, 250', 250'', 350, 450, 514, 524) which is arranged on one abutment and is connected to the first wind turbine steel tower ring segment and the second wind turbine steel tower ring segment. The first wind turbine steel tower ring segment, with the first vertical abutment side (212), and the second wind turbine steel tower ring segment, with the second vertical abutment side (232), are arranged adjacent on the abutment, and the plate element (250, 250', 250'', 350, 450, 514, 524) comprises a connection element (260, 260', 260'', 262, 262', 262'') protruding from the plate element (250, 250', 250'', 350, 450) for the arrangement of the functional elements.
**Title of the invention**: PORTABLE ELECTRONIC DEVICE

**Abstract**:
Portable electronic devices having I/O assemblies that can include optical and audio components are described. An exemplary I/O assembly can include a first camera module and a second camera module that can be carried within a camera module housing. A flex connector can carry a strobe that can be positioned between the first camera module and the second camera module. A trim can enclose the first camera, the second camera and the strobe and optically isolates the optical components. An exemplary portable electronic device can include a side wall retainer that defines its perimeter, a front cover glass and a rear cover glass that cooperate to form an enclosure. The I/O assembly can be secured to the enclosure both from inside and outside of the rear cover glass. I/O assembly can also include an audio transducer that can record sound when the camera module are recording videos.

**No. of Pages**: 25  **No. of Claims**: 60
**Title of the invention:** TAMPER-EVIDENT CLOSURE AND CONTAINER PROVIDED WITH THE SAME

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**Abstract:**

The invention relates to a tamper-evident closure (1) for a container (2), comprising a circumferential body (4) and a lid (6), wherein the circumferential body (4) is attachable to the container (2), and the lid (6) is arranged for providing a closable entrance to the container (2) through the circumferential body (4), wherein the closure (1) includes a skirt (8), which is connected to the circumferential body (4) and is arranged for extending beyond an externally extending rim (18) of the container (2), wherein the skirt (8) includes a portion having, when mounted to the container (2), an inner circumference that is smaller than an outer circumference of the rim (18), wherein the skirt (8) includes at least one tamper-indicating frangible connection (10), wherein the closure (1) further comprises means for increasing the inner circumference of the skirt (8) when the closure (1) is moved in a direction to remove it from the container (2), and wherein the skirt (8) is configured to deform when its inner circumference is increased such that at least one tamper-indicating frangible connection (10) breaks or tears.

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   Address of Applicant: Stationsplein 4 3818 LE Amersfoort Netherlands

**Name of Inventor:**

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3) VEREIJKEN, Johannes Martinus Petrus Leonardus
The invention relates to a flow meter with at least two spaced-apart measuring sensors, preferably ultrasonic sensors, wherein the coupling in and out of the measurement signals in or out of a fluid occurs via a coupling part which is inserted into a circumferential wall of a measuring channel produced via hydroforming. Alternatively, the coupling in and out of the measurement signals can also occur through a wall of the measuring channel.
Title of the invention: METHOD AND DEVICE FOR DECODING IMAGE BY USING PARTITION UNIT INCLUDING ADDITIONAL REGION

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| Filing Date                          | NA |

| Divisional to Application Number     | NA |
| Filing Date                          | NA |

Abstract:
Disclosed are a method and a device for decoding an image by using a partition unit including an additional region. The method for decoding an image by using a partition unit including an additional region comprises the steps of: partitioning, by referring to a syntax element acquired from a received bit stream, an encoded image, which is included in the bitstream, into at least one partition unit; setting an additional region for at least one partition unit; and decoding the encoded image on the basis of the partition unit for which the additional region is set. Therefore, the image encoding efficiency can be improved.

No. of Pages: 125 No. of Claims: 3
The present invention relates to a compound of the general formula (I). The compounds of formula I are useful for treatment of a cardiac disease, disorder or condition in a mammal.
The present invention relates to a pallet assembly (1) with an improved interlocking structure. The pallet assembly (1) comprises an upper deck member (100), a lower deck member (300) and a plurality of interlocking units (400), wherein each of the deck members (100, 300) is having a load bearing surface (110, 310), a bottom surface (130, 330) and a plurality of spaced apart supporting members (150, 350); wherein each of the upper and lower deck members (100, 300) is provided with at least one passage (170, 370) and an indentation (171, 371) is formed around the inner circumferential surface of each passages (170, 370) of the deck member (100, 300) proximate the load bearing surface (110, 310); and each of the interlocking units (400) comprises a first member (410) and a second member (430), each of the members (410, 430) is having a head section (411, 431) and a hollow body (413, 433), wherein the second member (430) of the interlocking unit (400) is provided with a contractible retaining means (435) at the lower end of the hollow body (433); wherein the passage (170) of the upper deck member (100) is mutually aligned with the corresponding passage (470) of the lower deck member (400) to form a receiving hole so as to readily receive the insertion of the interlocking unit (400), thereby securely interlock the engagement of the deck members (100, 370).
A weapon for firing cased telescoped (CT) ammunition includes a barrel (10), a barrel extension (32) comprising a chamber cavity aligned with the barrel, and a chamber assembly (42) with a translating chamber member (54) defining a chamber for holding a CT round for firing. The chamber member moves between a firing position in the chamber cavity and an ejection/loading position for ejecting a spent CT round and receiving a next CT round. A breech member (230, 252) closes a rear end of the chamber. A carrier performs a counter-recoil operation in which (1) the chamber member is moved from the ejection/loading position to the firing position with the next CT round therein, and (2) the breech is urged into a closed position against the next CT round in the chamber to remove headspace before the next CT round is fired from the weapon.
**Title of the invention:** MAGAZINE FOR CASED TELESCOPED AMMUNITION CARTRIDGES WITH SIDE-WALLS HAVING CARTRIDGE ORIENTATION RIBS

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<td>A magazine (100) for storing cased telescoped (CT) cartridges. The magazine includes vertically extending side-wall ribs (110, 112) that project inwards into a loading channel. The side-wall ribs are positioned in alignment with a circumferential groove (202) in each CT cartridge. The side-wall ribs prevent a backwards oriented CT cartridge from being pushed from the loading position through the loading channel into a body of the magazine. A moveable lip (1404) at the top of the magazine may move out of the way when the magazine is attached to a firearm, to allow the CT cartridge located in the loading position to be fed vertically out of the top of magazine. Each CT cartridge may include a thermal protective insert that provides thermal insulation from heat emanating from a barrel of a firearm when the CT cartridge is located in a chamber of the firearm.</td>
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Title of the invention: DIFFUSIVE APPLICATOR FOR COLD ATMOSPHERIC PLASMA SYSTEM

Abstract:
An apparatus or device for performing cold atmospheric plasma procedures. The device or apparatus has a housing, a chamber within the housing, an entry port to the chamber, a plurality of exit ports from the chamber, and a plurality of electrodes mounted in the housing, each of the plurality of electrodes having a distal end adjacent one of the plurality of exit ports. The entry port, chamber, exit ports and plurality of electrodes are configured to provide for an inert gas flowing in the entry port and through the chamber to the exit port to become plasmatised by electrical energy applied to the plurality of electrodes to form a cold plasma flowing from the exit ports.
The present disclosure describes computer systems and computer-implemented methods for managing an agricultural operation. Vehicle location information for at least one agricultural vehicle is received, and the vehicle location information is used to determine a vehicle path. Vehicle state information is received from the vehicle and is used to determine whether the vehicle is in a working or non-working state. The vehicle path is then rendered on a map display, with the map display visually distinguishing between sections of the vehicle path traversed while the vehicle is in the working state and sections of the vehicle path traversed while the vehicle is in the non-working state.

No. of Pages : 28 No. of Claims : 15
**Title of the invention:** COMPOSITIONS FOR DRUG DELIVERY AND METHODS OF USE THEREOF

**International classification:**

**Priority Document No:** 62/523510
**Priority Date:** 22/06/2017
**Name of priority country:** U.S.A.

**International Application No:** PCT/IB2018/000807
**Filing Date:** 22/06/2018

**International Publication No:** WO/2018/234871

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2) LARSEN, Finn
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**Abstract:**
Disclosed herein are compositions for administering vaginally of an active agent or a salt to a subject comprising the active agent or salt thereof, a bioadhesive, and an emulsion. Also disclosed herein are methods treating a disease of condition by administering vaginally to a subject a pharmaceutical composition, and kits comprising the pharmaceutical composition.

No. of Pages: 52
No. of Claims: 11
Title of the invention: ELECTRONIC DEVICE AND METHOD FOR CONTROLLING THEREOF

An electronic device and a controlling method are provided. The controlling method of the electronic device includes transmitting a signal to a plurality of external devices communicatively connected to the electronic device, receiving, from each of the plurality of external devices, intensity information of the signal sensed by an external device and identification information of an external device, determining at least one external device that is positioned in a same space as the electronic device, from among the plurality of external devices, based on the response signal, designating the at least one external device and the electronic device as a device group, and controlling the device group based on the user command, when a user command is input to at least one device from among the device groups.
A surgical tool, comprising a needle comprising an aperture of sufficient diameter for receiving a screw; a tool, insertable into said aperture for inserting said screw and capable of engaging with and turning the screw; said screw comprising a shaft having threads in a first direction, a head having a bottom face having a flange, and a coil; said coil wound around the screw shaft in an opposing second direction as to the first direction; said coil comprising a coil end which is defined to engage with the flange on the bottom face.
An electrode device (100) for use in delivery of electrical pulses to a desired tissue of a mammal. The electrode device comprises a handle portion (110) comprising first second electrode connections (111, 112), and first second needle electrodes (120, 120') comprising a respective first second attachment end (121, 121'). Each one of the first second electrode connections is configured with an inner electrode position (111a,112a) and an outer electrode position (111b, 112b), wherein the inner and outer electrode positions are electrically conducting. Further, each one of the first second attachment ends is configured with an insulating part (121a, 121'a) configured to electrically insulate one out of the inner electrode position and the outer electrode position when located therein, and configured with an electrically conducting part (121b, 121b) configured to conduct current supplied to the other one out of the inner electrode position or the outer electrode position when located therein.
The invention relates to a method for producing cut tobacco, involving the following steps: harvesting tobacco leaves; fermenting the harvested tobacco leaves; threshing the fermented tobacco leaves to obtain threshed tobacco material; humidifying the threshed tobacco material; cutting the humid tobacco material to obtain cut tobacco; drying the cut tobacco.
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<tr>
<th>(71) Name of Applicant</th>
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### Abstract
The present invention relates to a pharmaceutical composition comprising a weak acid drug, with the use of a bicarbonate salt to achieve a high incorporation of the drug into the liposome and a better therapeutic efficacy. Also disclosed is a method for treating a respiratory disease using the pharmaceutical composition disclosed herein.

No. of Pages: 22 No. of Claims: 16
A hand-held bioanalytic instrument is described that can perform massively parallel sample analysis including single-molecule gene sequencing. The instrument includes a pulsed optical source that produces ultrashort excitation pulses and a compact beam-steering assembly. The beam-steering assembly provides automated alignment of excitation pulses to an interchangeable bio-optoelectronic chip that contains tens of thousands of reaction chambers or more. The optical source, beam-steering assembly, bio-optoelectronic chip, and coupling optics register to an alignment structure in the instrument that can form at least one wall of an enclosure and dissipate heat.
### Title of the invention: INSPECTION APPARATUS AND METHOD FOR VISUAL INSPECTING ELASTIC PARTICLES

| (51) International classification | :B07C 5/02 |
| (31) Priority Document No | :17180514.6 |
| (32) Priority Date | :10/07/2017 |
| (33) Name of priority country | :EPO |
| (86) International Application No | :PCT/EP2018/068382 |
| Filing Date | :06/07/2018 |
| (87) International Publication No | :WO/2019/011809 |
| (61) Patent of Addition to Application Number | :NA |
| Filing Date | :NA |
| (62) Divisional to Application Number | :NA |
| Filing Date | :NA |

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### Abstract:
It is provided an inspection apparatus (10) for visual inspecting elastic particles comprising a conveyor belt (12) for feeding a plurality of particles, particularly in mainly horizontal direction, a fall channel (14) for letting the particles fall downwards due to gravity, wherein the fall channel (14) is arranged downstream the conveyor belt (12), and at least one flap (16) for stopping a horizontal portion of the movement of the particles leaving the conveyor belt (12), wherein the at least one flap (16) is arranged downstream the conveyor belt (12), wherein the flap (16) is resilient in horizontal direction for dissipating at least a part, particularly a majority, of the kinetic energy of the particle aligned in horizontal direction. Due to the resilient flaps (16) a horizontal rebounding of the elastic particles is reduced, so that a sorting out of unwanted particles out of a plurality of elastic particles during a visual inspection with a good accuracy is enabled.
An integrated device and related instruments and systems for analyzing samples in parallel are described. The integrated device may include sample wells arranged on a surface of where individual sample wells are configured to receive a sample labeled with at least one fluorescent marker configured to emit emission light in response to excitation light. The integrated device may further include photodetectors positioned in a layer of the integrated device, where one or more photodetectors are positioned to receive a photon of emission light emitted from a sample well. The integrated device further includes one or more photonic structures positioned between the sample wells and the photodetectors, where the one or more photonic structures are configured to attenuate the excitation light relative to the emission light such that a signal generated by the one or more photodetectors indicates detection of photons of emission light.
(51) International classification : C08K 3/32, C08K 5/3492, C08K 5/5313, C08K 5/5317, C08K 7/14

(31) Priority Document No : 10 2017 214 045.3
(32) Priority Date : 11/08/2017
(33) Name of priority country : Germany

(86) International Application No : PCT/EP2018/071443
Filing Date : 08/08/2018
(87) International Publication No : WO/2019/030250

(61) Patent of Addition to Application Number : NA
Filing Date : NA
(62) Divisional to Application Number : NA
Filing Date : NA

(57) Abstract :
The invention relates to flame-retardant polyamide compositions containing a polyamide having a melting point of less than or equal to 290 °C as component A, fillers and/or reinforcing materials as component B, phosphinic acid salt of formula (I) as component C, wherein R1 and R2 represent ethyl, M represents Al, Fe, TiOp or Zn, m represents 2 to 3, and p = (4/m) / 2, a compound selected from the group of Al, Fe, TiOp or Zn salts of ethyl butylphosphinic acid, dibutylphosphinic acid, ethylhexylphosphinic acid, butylhexylphosphinic acid and/or dihexylphosphinic acid as component D, phosphonic acid salt of formula (II) as component E, wherein R3 represents ethyl, Met represents Al, Fe, TiOq or Zn, n represents 2 to 3, and q = (4/n) / 2, a melamine polyphosphate having an average degree of condensation of between 2 to 100 as component F, a sterically hindered phenolic antioxidant as component G, and/or an organic phosphite and/or organic phosphonite as component H. The polyamide compositions can be used to produce fibers, films, and moulded bodies, in particular for applications in the electrical and electronics fields.

No. of Pages : 40 No. of Claims : 19
Compositions useful for the detection of single molecules in a sample are provided. In some aspects, the disclosure provides a nucleic acid connected to a nucleotide and two or more luminescent labels. In some embodiments, the nucleic acids described herein comprise one or more structural features that provide enhanced fluorescence intensity. In some aspects, methods of sequencing using the labeled nucleotides of the disclosure are provided.
The invention relates to additive mixtures for plastics containing phosphinic acid salt of formula (I) as component A, where R1 and R2 mean ethyl, M is Al, Fe, TiO₉ or Zn, m means 2 to 3, preferably 2 or 3, and p = (4 - m) / 2 is a compound selected from the group of Al salts, Fe salts, TiO₉ salts or Zn salts of ethylbutylphosphinic acid, dibutylphosphinic acid, ethylhexylphosphinic acid, butylhexylphosphinic acid and/or dihexylphosphinic acid as component B, phosphonic acid salt of formula (II) as component C, where R3 means ethyl, Met is Al, Fe, TiO₉ or Zn, n means 2 to 3, preferably 2 or 3, and q = (4 - n) / 2, and copper as component D.

No. of Pages : 41  No. of Claims : 25
The invention relates to a reactor and to a method for continuous polymerisation, in which said reactor for the continuous production of polymers, particularly synthetic rubbers, contains at least one substantially tubular reactor housing (4), wherein said reactor housing (4) has a drive shaft (30) that is connected to at least one agitator (38) arranged such that it can rotate inside the reactor housing (4), and the agitator contains at least one, and preferably two, three or four helical mixing elements (24) which are designed to be preferably close to the wall or to come into contact with the wall.

No. of Pages : 21 No. of Claims : 31
The invention relates to an extruder system for degassing a mixture (5), comprising a first extruder (1), a second extruder (2) arranged downstream of the first extruder (1) and a transfer zone (6) formed between these extruders, characterised by a pressure regulating device which can regulate the pressure at the outlet of the first extruder (1).
Title of the invention: PROCESS FOR THE PRODUCTION OF ISOOLEFIN POLYMERS WITH IMPROVED INITIATOR SYSTEM PREPARATION

Abstract:
The invention relates to an efficient process for the preparation of isoolefin polymers such as polyisobutene or butyl rubber by polymerization of isobutene and optionally further monomers in the presence of an initiator system prepared by continuously contacting at least one boron or aluminium compound and at least one initiator.
### Abstract:

Travel pillows with anchor mechanisms are disclosed. The travel pillows can include anchor mechanisms with anchor mechanism bodies such as straps. The anchor mechanism bodies can be attached to the travel pillow body, such as to the rear of the travel pillow body, or alternatively can be detachable from the travel pillow body. The anchor mechanisms can also include loops through which the anchor mechanism bodies can pass before reattaching to themselves or attaching to another element such as a cover of the travel pillow body. The anchor mechanism bodies can be placed around a portion of a headrest, such as headrest wings, to prevent or make less likely a user's head and/or body falling forward inadvertently.

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FIG. 2
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No. of Pages : 41 No. of Claims : 21
The invention relates to an efficient process for the preparation of isoolefin polymers such as polyisobutene or butyl rubber by polymerization of a liquid medium comprising the monomer(s) and ethane or carbon dioxide that is substantially dissolved therein.
**Title of the invention:** SYNCHRONOUS BELT DRIVE SYSTEM

| **(51) International classification** | F01L 1/02,F16H 7/08,F16H 7/12 |
| **(31) Priority Document No** | NA |
| **(32) Priority Date** | NA |
| **(33) Name of priority country** | NA |
| **(86) International Application No** | PCT/US2018/040965 |
| **Filing Date** | 05/07/2018 |
| **(87) International Publication No** | WO/2020/009703 |
| **(61) Patent of Addition to Application Number** | NA |
| **Filing Date** | NA |
| **(62) Divisional to Application Number** | NA |
| **Filing Date** | NA |

**Abstract:**
A synchronous belt drive system having: a synchronous belt with a tensile cord of high-modulus fiber such as glass, carbon, PBO, or aramid; a driver sprocket and at least one driven sprocket, at least one of which is an obround sprocket; and a tensioner having: a base having a cylindrical portion extending axially with a radially outer surface and a receiving portion, an eccentric arm pivotally engaged with the radially outer surface, a torsion spring disposed within the receiving portion, the torsion spring applying a biasing force to the eccentric arm, and a pulley journaled to the eccentric arm. Preferably, no one of the eccentric arm, pulley, or torsion spring is axially displaced along an axis A-A from the others. The obround sprocket has a toothed surface and at least one linear portion disposed between two arcuate portions having a constant radius, the linear portion having a predetermined length.
Title of the invention: NUMBER-OF-OCCUPANTS DETECTION SYSTEM, NUMBER-OF-OCCUPANTS DETECTION METHOD, AND PROGRAM

Abstract:
An occupant number sensing system (1) is configured to include: an image acquisition unit (110) for acquiring an image of a second vehicle present around a first vehicle, from an imaging device mounted on the first vehicle; and a count unit (120) for counting the number of occupants in the second vehicle using the image acquired by the image acquisition unit (110).
Title of the invention: HETEROCYCLIC COMPOUNDS AS ADENOSINE ANTAGONISTS

International classification: A61K 31/495,C07D 241/10
Priority Document No: 62/534176
Priority Date: 18/07/2017
Name of priority country: U.S.A.
International Application No: PCT/US2018/042777
Filing Date: 18/07/2018
International Publication No: WO/2019/018584
Patent of Addition to Application Number: NA
Filing Date: NA
Divisional to Application Number: NA
Filing Date: NA

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Abstract:
Aminopyrazine compounds as modulators of an adenosine receptor are provided. The compounds may find use as therapeutic agents for the treatment of diseases mediated through a G-protein-coupled receptor signaling pathway and may find particular use in oncology.

No. of Pages: 396 No. of Claims: 46
Title of the invention: AUTOMATIC ANALYZER AND METHOD FOR CARRYING OUT CHEMICAL, BIOCHEMICAL AND/OR IMMUNOCHEMICAL ANALYSES

Abstract:
The invention relates to a method and a device for carrying out chemical, biochemical and/or immunochemical analyses of liquid samples, which are present in a sample store (920) of an automatic analyzer (100), with the aid of liquid reagents which are present in at least one reagent store (950a, 950b) of the analyzer (100), with cuvettes (201) for receiving the liquid samples and reagents, wherein a plurality of cuvettes is arranged as at least one stationary, linear cuvette array (200) in the analyzer. The analyzer has movable and stationary automated components, wherein at least two automated components are designed so as to be movable in the x-direction independently of one another along or parallel to the line of movement defined by the linear cuvette array (200) and each have access to different cuvettes (201) or groups of cuvettes (201) in a freely selectable sequence.
Provided is a glove/logging system in which an air tightness inspection period and a replacement period can be accurately determined for each work glove attached to a device such as an isolator by recording and accumulating use conditions, such as operators, use frequencies, use periods, and work contents, to achieve improvements in the safety of using the work gloves and work efficiency, and in which inappropriate work, device abnormalities, etc. can be retroactively checked by tracing glove operations against occurrences of abnormalities that occurred during work. According to the present invention, a system for recording and accumulating information about use conditions of a work glove has: an operator tag; a glove tag; a reader for reading information from tags; and an information device for recording and accumulating information. The reader receives information from the operator tag or the glove tag, which passes through or stops in a reception region, through an antenna having an opening of a glove port as the main reception region, thereby communicating the information with the information device.
**Title of the invention:** COATING WITH DIAMOND-LIKE CARBON BY MEANS OF A PECVD MAGNETRON METHOD

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<td>26/07/2017</td>
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<td>International Application No</td>
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<td>International Publication No</td>
<td>WO/2019/020481</td>
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<td>Patent of Addition to Application Number</td>
<td>NA</td>
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**Abstract:**
The invention relates to a method for coating a substrate (1) with a diamond-like carbon (DLC) layer using a PECVD method with plasma generation by means of a magnetron target (magnetron PECVD) in a vacuum chamber (3) in which the magnetron (10), which is provided with the target (9), and the substrate (1) are arranged, wherein the method comprises introducing at least one reactant gas into the plasma, generated by the magnetron target (9), whereby fragments of the reactant gas are formed which are separated to form the DLC layer on the substrate (1). The method according to the invention is suitable for the large-scale coating of substrates (1), e.g. glass panes, with DLC layers. The obtained DLC layers have an exceptional quality with respect to scratch resistance and optics. The method according to the invention can be implemented using common separation devices. Heating the substrate is not required.
The invention relates to a generator (1) for a wind turbine (100), comprising a generator stator (3) with an installation portion (21) for fastening the generator stator (3) on a machine support (114) of the wind turbine (100), and a generator rotor (5) mounted so as to be rotatable about a generator axis (1) relative to the generator stator (3). According to the invention, the generator (1) has a single-stage transmission (11), which is designed to interact with the rotor blade hub (113) for conjoint rotation on the input side and is connected to the generator rotor (5) for conjoint rotation on the output side.
A gas leak determination device according to an embodiment comprises an absolute pressure information acquisition unit, temperature information acquisition unit, temperature correction factor calculation unit, conversion unit, and determination unit. For each gas section, the absolute pressure information acquisition unit acquires absolute pressure information indicating the absolute pressure of the gas section. The temperature information acquisition unit acquires temperature information indicating a tank surface temperature. For each gas section, the temperature correction factor calculation unit calculates a temperature correction factor for correcting the temperature of the gas section on the basis of the temperature information acquired during a prescribed period and the absolute pressure information acquired during the prescribed period. The conversion unit converts the absolute pressures of the gas sections into absolute pressures at a prescribed standard temperature on the basis of the absolute pressure information and the temperature correction factors calculated by the temperature correction factor calculation unit. The determination unit determines whether there is a gas leak of insulating gas from a tank on the basis of the absolute pressures at the prescribed standard temperature that have been arrived at through conversion by the conversion unit.
LUBRICANT, METAL MATERIAL, METHOD FOR PLASTICALLY FORMING METAL MATERIAL, AND METHOD FOR PRODUCING FORMED METAL MATERIAL

[Problem] To provide a novel lubricant which is capable of suppressing seizing of metal materials due to friction between the metal materials. 

[Solution] The above-mentioned problem is able to be solved by a lubricant which contains a smectite clay mineral and ammonium ions obtained by cationizing a primary amine, a secondary amine or a tertiary amine, and wherein: the ammonium ions are intercalated between layers of the smectite clay mineral; the primary amine, the secondary amine or the tertiary amine contains one or more long-chain alkyl groups, each of which has 8 or more carbon atoms in the main chain; and the total number of carbon atoms in the main chains of the long-chain alkyl groups is 16 or more.

FIG. 1

No. of Pages : 27 No. of Claims : 9
**Title of the invention:** ABSORBENT ARTICLE, AND PACKAGE FOR ABSORBENT ARTICLE

**Abstract:**
This absorbent article (1) is provided with an absorbent main body (10), waist parts (20, 30), and a tape member (40). The tape member (40) is provided with: a tape grip part (42) provided to one end of the tape member (40); and a fixed part (44) provided to another end thereof. The fixed part (44) is fixed to the non-skin-side surfaces of the waist parts (20, 30). The absorbent article is provided with a seal member (50) provided with a seal grip part (52) and an adhesive part (55). The seal grip part (52) is provided to one end (50e) of the seal member (50). The adhesive part (55) is provided to the skin-side surface and further towards the other end side than the one end (50e) of the seal member (50). The adhesive part (55) is adhered to the tape member (40). The seal member (50) which grips the seal grip part (52), and which has been separated from the tape member (40), is capable of being re-adhered via the adhesive part (55).
1,8-naphthyridinone compounds as modulators of an adenosine receptor are provided. The compounds may find use as therapeutic agents for the treatment of diseases mediated through a G-protein-coupled receptor signaling pathway and may find particular use in oncology.
Title of the invention: METHOD AND APPARATUS FOR CHANGING IMPEDANCE OF TERMINAL INCLUDED IN CONNECTOR

Abstract:
Disclosed is an electronic device comprising: a connector comprising multiple terminals for an electrical connection to a power supply apparatus capable of supplying power to the electronic device; and a control circuit, wherein the control circuit is configured to: detect moisture which has permeated the connector; in response to the detected moisture, change an impedance of at least one designated data terminal so as to allow the power supply apparatus to check the impedance of the at least one designated data terminal among the multiple terminals and change a magnitude of a voltage according to the impedance thereof; and receive the voltage, the magnitude of which has been changed, from the power supply apparatus. In addition, various embodiments recognized through the specification are possible.
According to the present invention, provided is a pillow comprising: a body including shoulder support parts, a cervical vertebrae support part, and an occipital region support part; a first wing part extended to one side of the body; and a second wing part extended to the other side of the body. Therefore, the respiratory tract is maximally opened when lying flat such that snoring is prevented and nose breathing is enabled because of a reverse gravity effect, and since the load of the head is dispersed on the entire floor, the burden applied to the cervical vertebrae and the shoulders by the weight of the head itself can be reduced.
Systems and methods for authentication of a consumer product are provided herein. An embodiment of a method for authentication of a consumer product includes providing the consumer product, optionally with packaging material associated therewith. Filtered light from an intrinsic portion of the consumer product or packaging material associated therewith is detected using a photodetector of a portable computing device to produce at least one single-color image data set representative of the intrinsic portion for at least one color. The at least one single-color image data set is compared with a stored data set that is representative of authentic information for the intrinsic portion using a microprocessor of the portable computing device, with the comparison conducted independent of and separate from any analysis of non-color data obtained from preconfigured security features. An indication of authenticity of the consumer product is provided based upon the comparison.
Title of the invention: METHOD FOR CONTROLLED PREPARATION OF LOW MOLECULAR WEIGHT CELLULOSE ETHER

Abstract:
A process includes: (a) providing an initial cellulose ether powder containing 0.5 to 10 weight-percent water based on total cellulose ether powder weight; (b) heating the initial cellulose ether powder to a temperature in a range of 30 to 130 degrees Celsius; (c) before, during and/or after heating in step (b), adding solid base to the cellulose ether powder and mixing with the initial cellulose ether powder to form a cellulose ether/base mixture; (d) adding volatile acid to the cellulose ether/base mixture and mixing; and (e) allowing the volatile acid to hydrolyze the initial cellulose ether to form a final cellulose ether having a lower viscosity than the initial cellulose ether.
A process to form an olefin-based polymer, said process comprising at least the following steps: a) polymerizing a reaction mixture comprising an olefin, in at least one reactor, in a solution polymerization, to form a polymer solution; b) feeding at least a portion of the polymer solution through at least one devolatilizer, to form the olefin-based polymer, in melt form; c) feeding at least a portion of the olefin-based polymer, in melt, form through a heat exchanger, and then into a pastillation apparatus to form polymer particles.
Method and control system to control the speed of centrifugal compressors (4, 5) operating within a vacuum pressure swing adsorption process to avoid an operation at which surge can occur and directly driven by electric motors (4, 5) that are in turn controlled by a variable frequency drives (12, 13), while subsequently operating the vacuum pressure swing process between set limits of highest adsorption and lowest desorption pressure. An optimal speed for operation of the compressors is determined at which the compressors will operate along a peak efficiency operating line of a compressor map thereof. This speed is adjusted by a feedback speed multiplier when the flow or other parameter referable to flow through the compressors is below a minimum and a feed forward multiplier during evacuation and evacuation with purge steps that multiplies the feedback multiplier to increase speed of the compressors and thereby avoid surge. The speed is then adjusted by a global speed factor which serves to adjust the average speed of the motors over all steps of the repeating cycle such that the process operates within high and low pressure limits.
A direct-current arc-extinguishing device, and particularly, a direct-current arc-extinguishing device for carrying out quick arc extinguishment on a mechanical switch and other mechanical contacts. A mechanical switch (K1) on which arc extinguishment needs to be carried out is serially connected to a load (RL1). The direct-current arc-extinguishing device is characterized by comprising a voltage detection switch (A) and a capacitor (C1); the voltage detection switch (A) and the capacitor (C1) are connected; during the breaking of the mechanical switch (K1), the capacitor (C1) forms a discharging circuit by means of the voltage detection switch (A) and the load (RL1), so as to carry out breaking and arc extinguishment on the mechanical switch (K1). The technical solution has a proper design, and has the advantages of low costs and a quick arc extinguishment speed.
A direct-current arc-extinguishing circuit and device, and particularly, a direct-current arc-extinguishing circuit and device for carrying out quick arc extinguishment on a mechanical switch and other mechanical contacts. A mechanical switch on which arc extinguishment needs to be carried out is serially connected to a load. The direct-current arc-extinguishing circuit is characterized by comprising a voltage detection switch and a capacitor; the voltage detection switch and the capacitor are connected; during the breaking of the mechanical switch, the capacitor forms a discharging circuit by means of the voltage detection switch and the load, so as to carry out breaking and arc extinguishment on the mechanical switch. The present invention has a proper design, and has the advantages of low costs and a quick arc extinguishment speed.
A hourglass type air spring assembly, comprising an upper cover plate (1), an air bag (2), an upper end plate (3), and a lower end plate (4). The periphery of the upper cover plate (1) is connected with the periphery of the upper end plate (3) by means of the air bag (2); a low-position hourglass elastomer (5) and a high-position elastomer (6) which are integrally formed are connected between the upper end plate (3) and the lower end plate (4); an annular notch (7) is formed between the low-position hourglass elastomer (5) and the high-position elastomer (6); and an annular rigid partition plate (8) fitted with the annular notch (7) is provided in the annular notch (7). The air spring assembly has the advantages of being simple in structure, convenient in installation, low in heavy-load vertical rigidity and high in comfort and stability.

No. of Pages : 6
No. of Claims : 9

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**Title of the invention : HOURGLASS TYPE AIR SPRING ASSEMBLY**

**Abstract :**

A hourglass type air spring assembly, comprising an upper cover plate (1), an air bag (2), an upper end plate (3), and a lower end plate (4). The periphery of the upper cover plate (1) is connected with the periphery of the upper end plate (3) by means of the air bag (2); a low-position hourglass elastomer (5) and a high-position elastomer (6) which are integrally formed are connected between the upper end plate (3) and the lower end plate (4); an annular notch (7) is formed between the low-position hourglass elastomer (5) and the high-position elastomer (6); and an annular rigid partition plate (8) fitted with the annular notch (7) is provided in the annular notch (7). The air spring assembly has the advantages of being simple in structure, convenient in installation, low in heavy-load vertical rigidity and high in comfort and stability.
Title of the invention: METHOD FOR LIMITING THE SPEED OF A MOTORCYCLE

Abstract:
The invention proposed offers a solution for using a speed limiter in a motorcycle that has high acceleration potential. The invention proposes a method for limiting the speed of a motorcycle using precise speed, acceleration and required engine torque parameters and a single control button for smart management of activation (12a) and deactivation (14) of the limiter and for capturing new speed limits \( V_{lim} \) in a simple way. It thus allows a speed limiting system to be used in a motorcycle that has a high power/weight ratio while avoiding sources of disruption to driving and effects liable to adversely affect stability.
In a method for adapting an amount of reductant for controlling the nitrogen oxide pollution of gases in an exhaust line, a first alignment (1) of the amount of measured nitrogen oxides is carried out (MCam SD, MCav SD) by the upstream and downstream sensors without a reductant injection and with a catalyst of the drained ammonia system. A second alignment (2) for reducing the calculated nitrogen oxides is carried out on the reduction measured through a difference between the amounts of upstream (MCam SS) and downstream (MCav SS) nitrogen oxides during the substoichiometric injection without creating an ammonia reserve in a catalyst of the system with a first correction of the amount of reductant. A third alignment (3) of an estimated retention efficiency of the nitrogen oxides is carried out on an efficiency measured by the sensors, said third alignment (3) being carried out by a second correction of the injected reductant amount as an adaptive correction.
The invention relates to an assembly for storing thermal energy. The assembly comprises a spatial heat reservoir, a solid natural material, which is designed to store heat, and a fluid, which is designed to transfer thermal energy to the heat storage material and to remove thermal energy from the heat storage material. The heat storage material is arranged within the heat reservoir. The heat reservoir has at least one inlet and at least one outlet, through which the fluid is conducted in order to store energy and remove energy. In order to store energy, heated fluid is introduced into the heat reservoir through the inlet, thermal energy is transferred to the heat storage material there, and the fluid is conducted out of the heat reservoir through the outlet. Correspondingly, in order to remove energy, cool fluid is introduced into the heat reservoir through the inlet, thermal energy is absorbed from the heat storage material there, and the fluid is conducted out of the heat reservoir through the outlet. An igneous rock is used as the heat storage material.
An embodiment of the present application discloses a method, a device, an electronic apparatus and a terminal apparatus for confirming delivery of an order. A specific embodiment of the method comprises: receiving payment request information sent by a user terminal, wherein the payment request information comprises identification information of the user terminal, coding information corresponding to an order and payment account information, and the payment request information is generated when the user terminal scans a payment QR code corresponding to the order on a delivery terminal; determining whether a payment amount corresponding to the order is greater than zero; returning a payment page corresponding to the order to the user terminal in response to a determination that the payment amount corresponding to the order is greater than zero; and pushing a customer delivery confirmation page corresponding to the order to the user terminal in response to receiving successful payment information from the user terminal with respect to the payment amount. The embodiment simplifies the payment process and delivery confirmation, thereby saving time on payment and delivery confirmation. The method also avoids a situation in which a courier signs to confirm a delivery.
Abstract:
Method for purifying a gaseous supply stream of natural gas comprising the following steps: Step a) Cooling the gaseous supply stream in a heat exchanger; Step b) Injecting the stream (2) from step a) into a phase separating chamber to produce a liquid stream and a gaseous stream; Step c) Separating the gaseous stream from step b) into a first membrane permeating unit from which exit at least one permeating gaseous stream and one partially condensed residual stream depleted of CO2 and enriched in methane; Step d) Injecting the residual stream from step c) into a phase separating chamber to produce at least one liquid stream comprising at least 0.5% mol, preferably at least 1% mol, of hydrocarbons having at least three carbon atoms initially contained in the supply stream and a gaseous stream; Step e) Heating the gaseous stream from step d) by injection into the heat exchanger countercurrent to the supply stream.

No. of Pages : 7 No. of Claims : 8
Disclosed in the embodiments of the present application are a method and a device for sorting cargo. One particular embodiment of the method comprises: acquiring an order to be assigned; with regard to each target sorting unit of a plurality of target sorting units, determining at least one of the following: the number of orders to be sorted of the target sorting unit, the number of types of cargo to be sorted or the number of identical cargo types between the target sorting unit and the order to be assigned; selecting a target sorting unit on the basis of at least one of the following of the target sorting units: the number of orders to be sorted, the number of types of cargo to be sorted or the number of identical cargo types; assigning the order to be assigned to the selected target sorting unit, for the selected target sorting unit to sort the cargo indicated by the order to be assigned. The method improves sorting efficiency.
A system, method, and apparatus for a visualization system for deep brain stimulation. The visualization system comprises a camera system, a display system, and an information analyzer. The information analyzer is configured to display a group of electrodes for the deep brain stimulation on a head of a patient on the display system such that a visualization of the group of electrodes is displayed overlaid on the head of the patient in real time in a position corresponding to an actual position of the group of electrodes in a brain in the head of the patient. An operation of the group of electrodes sending an electrical signal into the head of the patient is displayed in the visualization, enabling visualizing a physical reaction of the patient to the deep brain stimulation in conjunction with the visualization of the operation of the group of electrodes.
Title of the invention: METHOD FOR ACTIVATING T CELLS FOR CANCER TREATMENT

Abstract:
The present invention relates to a cancer-specific neoepitope represented by any one of SEQ ID NOs: 1 to 184, an antigen-presenting cell having the neoepitope loaded thereon, and a method for activating T cells for cancer treatment by means of the antigen-presenting cell. The antigen-presenting cell having the cancer-specific epitope loaded thereon provided by the present invention, i.e., a dendritic cell enables rapid and effective induction of the differentiation and proliferation of cancer antigen-specific T cells, preferably memory T cells, and the memory T cells thus activated can treat a cancerous or neoplastic condition or prevent the recurrence, progression, or metastasis of cancer while avoiding the defense mechanism of cancer cells.
Various molded chip combinations and methods of manufacturing the same are disclosed. In one aspect, a molded chip combination is provided that includes a first semiconductor chip (20) that has a first PHY region (75), a second semiconductor chip (19) that has a second PHY region (65), an interconnect chip (85) interconnecting the first PHY region to the second PHY region, and a molding (25) joining together the first semiconductor chip, the second semiconductor chip and the interconnect chip.
In a general aspect, motion is detected using vector representations of channel responses. In some aspects, a first set of channel responses are obtained based on wireless signals transmitted through a space during a first time period. From the first set of channel responses, a set of orthogonal axes in a frequency vector domain are determined. A second channel response is obtained based on a wireless signal transmitted through the space during a second time period, and a channel vector representing the second channel response in the frequency vector domain is determined. Motion of an object in the space is detected based on a projection of the channel vector onto one of the set of orthogonal axes.

No. of Pages : 33
No. of Claims : 30
A method for controlling mercury emissions within a FGD system, the method includes preparing a treatment composition for application on FGD system components, the treatment composition comprising a biocide, applying the treatment composition to an FGD system, wherein the FGD system includes an FGD scrubber, monitoring the bacterial load present within the FGD system, and optimizing the operating conditions of an aqueous system to determine when additional treatment is required.
Compounds of Formula (I) are provided herein. Such compounds, as well as pharmaceutically acceptable salts and compositions thereof, are useful for treating diseases or conditions, including conditions characterized by excessive cellular proliferation, such as breast cancer.

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(57) Abstract :
A pyrotechnic firing system for igniting an explosive charge comprising one or more firing modules, a firing control system, and an igniter cable system. The firing module can comprise a transceiver, a memory, an antenna, a processing means, and one or more cues. The firing control system can comprise a processing means, memory, transceiver, antenna, and display. The firing control system can identifying and obtaining information from one or more firing modules. The control system can then assign visual indicators to each of the one or more firing modules and display the visual indicators to a user on the display.

No. of Pages : 15
No. of Claims : 20
An apparatus for checking the diameter of crankpins (15) of a crankshaft in orbital motion about a geometrical axis in a numerical control machine tool includes a V-shaped reference device (10), a measuring device (6) and a support device (4) fixed to the tool holding slide (2) that movably supports the reference device and the measuring device. A control device (50) for controlling automatic displacements of the apparatus towards and away from a checking condition, includes a programmable electric motor (60) and a transmission mechanism (62). The programmable electric motor is programmed to define a start position in which the automatic displacement of the apparatus away from the checking condition can be stopped, for instance a rest position or an intermediate position between the rest position and the checking condition. The programmable electric motor is also programmed to define a displacement speed and a checking method includes steps for controlling the automatic displacements towards the checking condition.
The disclosure relates to a line commutated converter, LCC, for a high-voltage direct current, HVDC, power converter. The LCC comprises at least one bridge circuit for connection to at least one terminal of a DC system. Each bridge circuit comprises at least two arms, and each arm is associated with a phase of an AC system. Each arm comprises one or more upper thyristor valves and one or more lower thyristor valves connected in series, and a branch extending from between the upper and lower thyristor valves. Each arm further comprises a parallel capacitor module comprising at least one parallel capacitor being connected in parallel between at least one pair of branches comprising a first branch and a second branch wherein during commutation of a flow of current in the first branch to a flow of current in the second branch, the at least one parallel capacitor is configured to discharge current into the second branch in the same direction as the flow of current in the second branch.
An antibody-resin coupling apparatus quickly and efficiently activates resin beads and couples them to antibodies, while preventing breakdown and crosslinking of the beads, thereby improving downstream column purification processes, extending the usable life of the resin beads, and increasing molecule capture efficiency of the resultant resin-antibody complexes, to allow improved isolation and purification of factor VIII molecules or other drug compounds.

No. of Pages : 16 No. of Claims : 56
Title of the invention : EXHAUST-GAS-PURIFYING METAL SUBSTRATE AND EXHAUST GAS PURIFICATION DEVICE USING SAME

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(57) Abstract :
The invention provides: an exhaust-gas-purifying metal substrate capable of achieving both low pressure loss and high purification performance; and an exhaust gas purification device using the metal substrate. The invention relates to an exhaust-gas-purifying perforated metal substrate in which a corrugated foil and a flat foil are layered and made into a cylindrical shape, wherein: the perforated metal substrate includes from 50/in2 to 800/in2 of cells; the corrugated foil includes a plurality of first holes having an area that is from 2.0 to 50 times the average opening area of the cells; the flat foil includes a plurality of second holes having an area that is from 3.0 to 100 times the average opening area of the cells; and the average value of the area of the first holes in the corrugated foil is smaller than the average value of the area of the second holes in the flat foil.
Title of the invention: ANTIMICROBIAL COATING MATERIAL COMPRISING NANOCRYSTALLINE CELLULOSE AND MAGNESIUM OXIDE AND METHOD OF PREPARATION THEREOF

Abstract:
A nontoxic antimicrobial chemical trap that comprises a film comprising an antimicrobial layer that comprises nanocrystalline cellulose (NCC) and an antimicrobial substance selected from the group consisting of MgO and Mg(OH)2. In some embodiments, the antimicrobial trap comprises at least one additional layer of NCC above or below said antimicrobial layer. Methods of preparation of the antimicrobial chemical trap and of articles coated thereby are disclosed, as well as methods of controlling microbial population by use of the antimicrobial chemical trap, are disclosed as well.

No. of Pages: 35
No. of Claims: 71
The purpose of the present invention is to provide a solar panel float that can be assembled easily and in which an increase in the number of components can be suppressed. This float (10) on which a solar panel (11) is installed comprises: an annular float part (30); a first support part that supports an edge part (11u) on one side of the solar panel (11); and a second support part that supports an edge part (11d) on the other side of the solar panel (11). The first support part includes a first support plate part (40) that rises up from a wall surface on one side of the inner periphery (30a) of the annular float part (30). The first support plate part (40) is formed by a cut-and-raised piece made by cutting a flat-plate part, which is formed integrally at the time of molding the annular float part (30) so as to close the inner periphery (30a), and raising the flat-plate part by employing a lower side part thereof as a bending fulcrum.

No. of Pages : 41 No. of Claims : 5
A reactor (1) is provided with an annular iron core (2), and four coils (C1-C4), which are individually wound on the iron core (2). The first electrodes of the four coils (C1-C4) are connected to the output terminals of the four choppers (11-14), respectively, and the second electrodes of the four choppers are connected to a load (15). Consequently, the four choppers (11-14) can be connected in parallel to the load (15) by means of the one reactor (1).

CONTINUED TO PART- 2