

[SS 1] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 1] water and treatment and system

Results in EPODOC 65.611

[SS 2] ultra w violet

Results in EPODOC 12.499

[SS 3] ss1 and ss2

Results in EPODOC 764

[SS 4] ..li nbdoc 15



1/764 © EPODOC / EPO

PN - [WO2018043039](#) A1 20180308

PR - JP20160170127 20160831

AP - WO2017JP28517 20170807

DT - *; Rep

CT - |JP| ISR (A1)

[JPH08162935](#) A 19960621 [YA] (ORIGIN ELECTRIC, et al)

[Y] 1-2

* , paragraphs [0002], [0010] to [0011]; fig. 1 (Family: none) *

[A] 3-15;

[JP2001068498](#) A 20010316 [Y] (TOSHIBA CORP)

[Y] 1-2

* , paragraphs [0001], [0027] to [0031]; fig. 1, 5 & EP 1079434 A2 paragraphs [0001], [0030] to [0032]; fig. 3, 7 & KR 10-2001-0070032 A *;

[JPH1023744](#) A 19980123 [Y] (TOSHIBA CORP)

[Y] 2

* , paragraphs [0006] to [0009], [0012], [0037]; fig. 1, 14 to 16 (Family: none) *;

[JPH07131314](#) A 19950519 [A] (AMADA CO LTD)

[A] 1-15

* , paragraphs [0003] to [0004]; fig. 3 (Family: none) *;

[JPS63211813](#) A 19880902 [A] (HITACHI LTD)

[A] 1-15

* , page 1, lower left column, line 19 to page 2, upper left column, line 1; fig. 2-1, 2-2 & US 4831288 A1 column 6, lines 7 to 19; fig. 7 & DE 3717253 A1 *

CUI - [H02M1/08](#) ; [H03K17/12](#)

PA - PANASONIC IP MAN CO LTD [JP]

TI - SWITCHING CIRCUIT

AB - Provided is a switching circuit that is constituted by a driving power supply (1), a driving circuit (3), a first transistor (4), and a second transistor (5), wherein the first and second transistors (4) and (5) respectively have gate terminals (G1) and (G2), drain terminals (D1) and (D2), and first source terminals (S1) and (S2) and second source terminals (SS1) and (SS2) through which main current passes, the second source terminals (SS1) and (SS2) are connected at a connection portion between the negative electrode terminal of the driving power supply (1) and the ground terminal of the driving circuit (3), so that the influence of the main current on each of the gate driving paths of the first and second transistors (4) and (5) is eliminated, and the gate driving paths are separated, so that the main current can be balanced by equalizing parasitic impedance.

2/764 © EPODOC / EPO

PN - [CN107659560](#) A 20180202

PR - CN20171750717 20170828

AP - CN20171750717 20170828

DT - I

PA - NAT COMPUTER NETWORK AND INFORMATION SECURITY MANAGEMENT CENTER

TI - Abnormal auditing method applied to mass network data flow log processing

AB - The invention discloses an abnormal auditing method applied to mass network data flow log processing. The method is characterized by comprising the following steps of **SS1**, feature extraction pretreatment, specifically including using MapReduce to extract features of network data flow logs; and **SS2**, abnormal auditing, specifically including using an outlier detection algorithm to segment and aggregate the network data flow logs. According to the network data flow auditing algorithm based on combination of MapReduce and outlier detection provided by the invention, a Hadoop open source system and the outlier detection algorithm are combined to perform large-scale analysis, the logs at the same time slot of different dates are aggregated, and abnormal detection based on change of own behavior habits of a user can be effectively analyzed.

3/764 © EPODOC / EPO

PN - [CA2988513](#) A1 20161222

PR - SE20150050853
20150618; WO20161853566
20160616

AP - CA20162988513 20160616

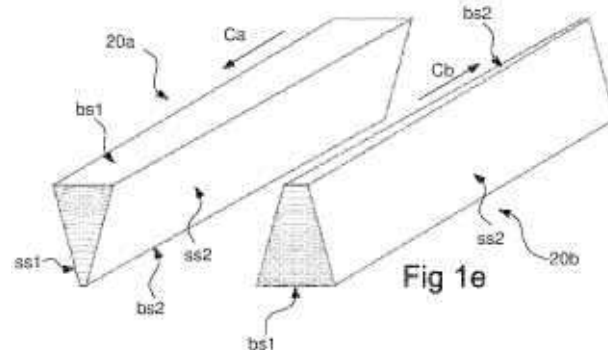
DT - I

CCI - [B27M3/0026](#) ; [B27M3/0053](#) ;
[E04C2/12](#) ; [E04C3/122](#)

CCA - [B27B1/005](#)

PA - STORA ENSO OYJ [FI]

TI - METHOD OF PRODUCING A
LAMINATED WOOD PRODUCT,



AND LAMINATED WOOD
PRODUCTS

- AB - The present disclosure provides a method of forming a laminated wood product, which is adapted for receiving a load in a direction perpendicular to a principal fiberdirection of the wood. The method comprises cutting a log (2) along the principal fiberdirection of the log, into a plurality of wood lamellae (20a, 20b), such that the wood lamellae are formed as radial sections of the log, forming the wood lamellae (20a, 20b) to provide each wood lamella with a trapezoidal cross section, whereby the wood lamellae present a respective planar major base surface (bs1) that is formed at a radially outer part of the log (2) and a respective planar minor base surface (bs2) that is formed at a radially inner part of the log (2), arranging the lamellae (20a, 20b) as at least one layer in which planar major base surfaces (bs1) of immediately adjacent lamellae (20a, 20b) face opposite directions, and gluing together the lamellae (20a, 20b) side surface to side surface (**ss1**, **ss2**) such that a wood billet is formed. The method further comprises arranging the wood lamellae (20a, b) such that the major base surfaces (bs1) of immediately adjacent wood lamellae taper in opposite directions, and the gluing comprises wet gluing.

4/764 © EPODOC / EPO

PN - [CN107522435](#) A 20171229

PR - CN20171867758 20170922

AP - CN20171867758 20170922

DT - I

CNOI - [C04B28/00](#) ; [C04B40/0046](#)

CNOL - C04B28/00, C04B14/02, C04B14/068, C04B2103/0089, INV
 - C04B40/0046, C04B24/14, C04B22/085, INV
 - C04B40/0046, C04B24/14, C04B22/08, INV

CNOA - [C04B2103/0089](#)

PA - CHONGQING KEZHONG BUILDING MAT CO LTD

TI - Concrete uniform in temperature in setting process and preparation method of concrete

AB - The invention discloses concrete uniform in temperature in a setting process. The concrete is prepared from, by mass, 80-110 parts of cement, 400-500 parts of polished gravels, 80-100 parts of common gravels, 350-360 parts of sand, 1-5 parts of a heat absorbing material, 100-130 parts of water and 3-5 parts of a waterproof agent. The preparation method includes steps: **SS1**, separating out mountain sand smaller than 0.35mm in diameter through a drum screen; **SS2**, separating out mountain sand smaller than 0.5mm in diameter through the drum screen; **SS3**, cleaning separated mountain sand in diameter larger than 0.35mm and smaller than 0.5mm through a sand cleaning roller; **SS4**, separating the mountain sand, cleaned by the sand cleaning roller and smaller than 0.5mm in diameter, through the drum screen; **SS5**, airing the separated mountain sand. Hydration heat can be mostly absorbed in a hardening process of the prepared concrete to reduce tensile stress of the outer wall surface and the inner surface of the concrete, and accordingly probability of cracking of the concrete can be lowered.

5/764 © EPODOC / EPO

PN - [CN107478364](#) A 20171215

PR - CN20171522811 20170630

AP - CN20171522811 20170630

DT - I

CNOI - [G01L1/242](#)

PA - CHINA SPECIAL EQUIPMENT INSPECTION AND RES INSTITUTE; BEIJING ZHONGJIAN HOPES TECH CO LTD

TI - Fiber grating sensor applied in single point stress monitoring

AB - The invention uses a fiber grating temperature sensor (TS1) fixed on a to-be-measured structure surface and three cascaded fiber grating strain sensors (**SS1**, **SS2**, **SS3**) welded on a measured steel structure surface to monitor the structural stress of the to-be-measured structure measuring point in three directions (0, 45 and 90 degrees). The method can replace a conventional resistance strain rosette measuring method and a measuring method in which three fiber grating sensors are mounted on the measuring point position; the fiber grating sensor applied in single point stress monitoring is anti-electromagnetic interference, waterproof, corrosion resisting, good in stability, small in size, easy to mount, and can monitor the single point stress of the to-be-measured structure in a long term.

6/764 © EPODOC / EPO

PN - [AU2016280249](#) A1 20171214

PR - SE20150050853 20150618; WO20161B53566 20160616

AP - AU20160280249 20160616

DT - I

CCI - [B27M3/0026](#) ; [B27M3/0053](#) ; [E04C2/12](#) ; [E04C3/122](#)

CCA - [B27B1/005](#)

PA - STORA ENSO OYJ

TI - Method of producing a laminated wood product, and laminated wood products

AB - The present disclosure provides a method of forming a laminated wood product, which is adapted for receiving a load in a direction perpendicular to a principal fiberdirection of the wood. The method comprises cutting a log (2) along the principal fiberdirection of the log, into a plurality of wood lamellae (20a, 20b), such that the wood lamellae are formed as radial sections of the log, forming the wood lamellae (20a, 20b) to provide each wood lamella with a trapezoidal cross section, whereby the wood lamellae present a respective planar major base surface (bs1) that is formed at a radially outer part of the log (2) and a respective planar minor base surface (bs2) that is formed at a radially inner part of the log (2), arranging the lamellae (20a, 20b) as at least one layer in which planar major base surfaces (bs1) of immediately adjacent lamellae (20a, 20b) face opposite directions, and gluing together the lamellae (20a, 20b) side surface to side surface (**ss1**, **ss2**) such that a wood billet is formed. The method further comprises arranging the wood lamellae (20a, b) such that the major base surfaces (bs1) of immediately adjacent wood lamellae taper in opposite directions, and the gluing comprises wet gluing.

7/764 © EPODOC / EPO

PN - [TW201731265](#) A 20170901

PR - WO2016JP55462 20160224

AP - TW20160114842 20160513

DT - I

CUI - [H04L12/28](#)

PA - MITSUBISHI ELECTRIC CORP [JP]

TI - Time-synchronous slave apparatus and communication control method

AB - A token management slave apparatus (TSS1) is included in a communication system. The communication system includes a master apparatus (M), a time-asynchronous slave apparatus (AS1, AS2) that communicates with the master apparatus (M) and that is not in time synchronization with the master apparatus (M), and a time-synchronous slave apparatus



(**SS1**, **SS2**, **SS3**) that communicates with the master apparatus (M) and that is in time synchronization with the master apparatus (M). The token management slave apparatus (TSS1) sets, in between a plurality of synchronous communication periods that are a plurality of periods in which the master apparatus (M) communicates with the time-synchronous slave apparatus (**SS1**, **SS2**, **SS3**), an asynchronous communication period that is a period in which the master apparatus (M) communicates with the time-asynchronous slave apparatus (AS1, AS2). The token management slave apparatus (TSS1) then commands the time-asynchronous slave apparatus (AS1, AS2) to communicate with the master apparatus (M) when the asynchronous communication period comes.

8/764 © EPODOC / EPO

PN - [CN206678832U](#) U 20171128
 PR - CN20172260128U 20170316
 AP - CN20172260128U 20170316
 DT - I
 PA - UNIV SOUTHWEST JIAOTONG
 TI - Electric Railway sectioning post intercommunication power supply structure
 AB - The utility model provides an electric Railway sectioning post intercommunication power supply structure belongs to a. C. Electrification railway power supply technical field. Power transmission line L11 and traction substation **SS1**'s input connection of the same kind is passed through in the S11's of transformer substation output of the same kind, simultaneously, the other output of the same kind passing through of the S1 of transformer substation power transmission line L12 and traction substation **SS2**'s input connection of the same kind, the switch K in the sectioning post P is closed, and traction substation **SS1** and traction substation **SS2**'s output is supplied power for contact net C1 and contact net C2 respectively, perhaps, power transmission line L21 and traction substation **SS1**'s input connection is all the way in addition passed through in the S2's of transformer substation output of the same kind, simultaneously, the S2 of transformer substation output is through the in addition all the way input

connection of power transmission line L22 with traction substation **SS2** all the way in addition, the switch K in the sectioning post P is closed, traction substation **SS1** and traction substation **SS2**'s output supplies power for respectively contact net C1 and contact net C2.

9/764 © EPODOC / EPO

PN - [CN107379569](#) A 20171124
PR - CN20171704267 20170817
AP - CN20171704267 20170817
DT - I
CNOI - [B29C65/64](#)
CNOA - [B29L2031/3437](#)
PA - GUANGDONG APPSCOMM CO LTD
TI - Method for decreasing length tolerance in band rear cover
AB - The invention discloses a method for decreasing the length tolerance in a band rear cover. A band comprises the plastic part rear cover and a decoration edge used for mounting a watch strap. The method comprise the following steps that **SS1**, the plastic part rear cover is subjected to injection molding, the left ends and the right ends of the upper side face and the lower side face of the plastic part rear cover are provided with straight insertion holes, and the depth of the straight insertion holes is 2-4 mm; **SS2**, an aluminum alloy decoration edge is used as the decoration edge, two matching columns on the aluminum alloy decoration edge are machined through a CNC program and located on the same side of the aluminum alloy decoration edge, the two matching columns are machined and molded in one effort during CNC program machining, clamps do not need to be replaced, and the relative position dimensional tolerance between the two matching columns is +/-0.02 mm; and **SS3**, the matching columns of the aluminum alloy decoration edge and the straight insertion holes of the plastic part rear cover are mounted in a matched mode, and the matching columns and the straight insertion holes are in interference fit.

10/764 © EPODOC / EPO

PN - [CN107377682](#) A 20171124
PR - CN20171533562 20170703
AP - CN20171533562 20170703
DT - I
CNOI - [B21D1/06](#)
PA - CRRC NANJING PUZHEN RAIL TRANSP CO LTD
TI - Flame adjusting and repairing process for stainless steel thin sheets used for rail vehicle body
AB - The invention discloses a flame adjusting and repairing process for stainless steel thin sheets used for a rail vehicle body. The flame adjusting and repairing process for the stainless steel thin sheets used for the rail vehicle body comprises the following steps that step **SS1**, a heating adjusting and repairing point area is designated on a welding seam of an adjusting and repairing sample plate, the diameters of heating adjusting and repairing points are controlled at 10mm-15mm, and spacing between the heating

adjusting and repairing points is controlled at 20mm-50mm; step **SS2**, the length of an adjusting and repairing flame of a firing gun is controlled at 50mm-60mm, and the tip end of the adjusting and repairing flame is used for point heating for the heating area designated on the welding seam; step **SS3**, the heating temperature is controlled at 700 DEG C to 900 DEG C; step **SS4**, the heating time of each adjusting and repairing point is controlled at 7s-10s; and step **SS5**, After heating is finished, the sample plate is cooled to the room temperature. According to the flame adjusting and repairing process for the stainless steel thin sheets used for the rail vehicle body, by designating the adjusting and repairing point area, heating temperature controlling is conducted by adopting a contact type thermocouple temperature measuring device, the reasonable adjusting and repairing flame parameter is set, cooling is conducted by adopting the cooling mode of air cooling or water cooling, welding residual stress of a component is obviously released, welding deformation is corrected, the flame adjusting and repairing successful rate and the production rate are improved, and the secondary deformation problem existing in traditional mechanical adjusting and repairing is avoided.

11/764 © EPODOC / EPO

PN - [CN107367923](#) A 20171121

PR - CN20171720958 20170822

AP - CN20171720958 20170822

DT - I

CNOI - [G04B47/00](#) ; [G06F3/04883](#)

PA - GUANGDONG LEXIN INTELLIGENT TECH CO LTD

TI - Control method for intelligent watch with pointer avoiding reading content

AB - The invention discloses a control method for an intelligent watch with a pointer avoiding a reading content. The method comprises steps: **SS1**, the communication unit of the intelligent watch receives communication of an information provider; **SS2**, the display unit of the intelligent watch displays the communication from the communication unit, or a user controls the display unit to display the push from the communication unit through touch control operation of a touch control unit; **SS3**, the judgment unit judges the current display of the display unit, if the current display is a message, a mail or an incoming call, the step **SS4** is carried out, and if not, the judgment unit stops working; **SS4**, the judgment unit reads data of the memory unit, the touch control operation gesture of the user is judged, if the touch control operation gesture of the user is a preset touch control operation gesture, the step **SS5** is carried out, and if not, the step **SS4** is repeated until the display unit gets a blank screen; and **SS5**, the control unit reads data of the memory unit, and each pointer is controlled to turn to a preset initial position.

12/764 © EPODOC / EPO

PN - [CN107356269](#) A 20171117

PR - EP20160168968
20160510; GB20150011076
20150623

AP - CN20171325735 20170510

DT - I

CCI - [G01R33/0064](#) ; [G01R33/0082](#) ;
[G01R33/07](#)

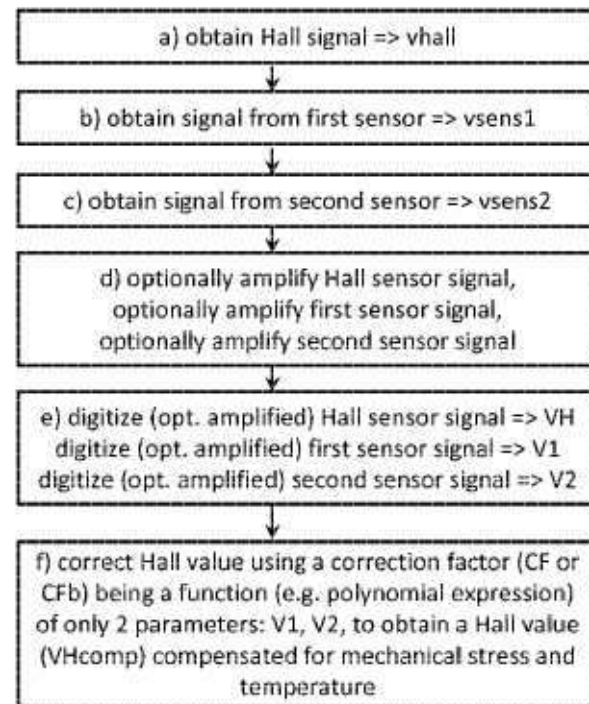
CUI - [G01R33/0023](#)

CNOI - [G01D5/142](#)

PA - MELEXIS TECH SA

TI - STRESS AND TEMPERATURE
COMPENSATED HALL SENSOR,
AND METHOD

AB - An integrated semiconductor device (100, 200, 1500) for measuring a magnetic field, comprising: a Hall sensor (11), a first lateral isotropic sensor (21) having a first stress sensitivity (**ss1**) and a first temperature sensitivity (TS1), a second lateral isotropic sensor (31) having a second stress sensitivity (**ss2**) and a second temperature sensitivity (TS2), optional amplifying means (13), digitization means (14); and calculation means configured for calculating a stress and temperature compensated Hall value in the digital domain, based on a predefined formula which can be expressed as an n-th order polynomial in only two parameters ($[\Delta]\sigma_{iso}$, $[\Delta]T$, V1 or V2). These parameters may be obtained directly from the sensor elements, or they may be calculated from a set of two simultaneous equations. A method of obtaining a Hall voltage signal, and compensating said signal for stress and temperature drift.



1400

FIG 14

13/764 © EPODOC / EPO

PN - [CA2983593](#) A1 20161117

PR - US201562161505P
20150514; WO2016US32321
20160513

AP - CA20162983593 20160513

DT - I

CCI - [A61K35/76](#) ; [C12N15/86](#)

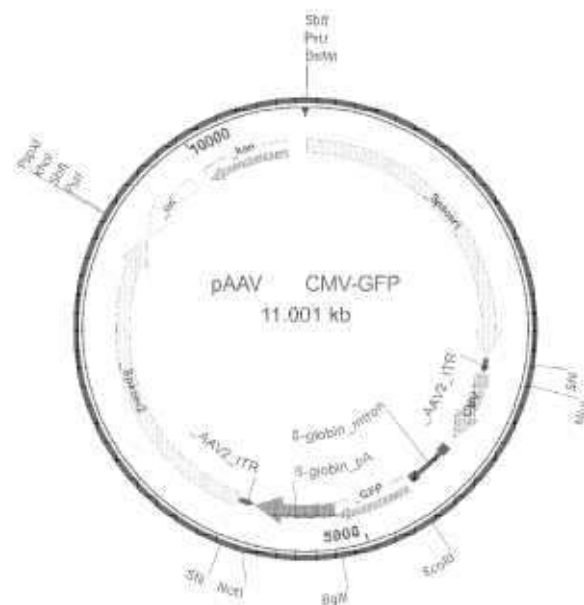
CCA - [C12N2750/14143](#) ;
[C12N2830/38](#)

PA - ST JUDE CHILDREN'S RES
HOSPITAL INC [US]

TI - NUCLEIC ACID MOLECULES
CONTAINING SPACERS AND
METHODS OF USE THEREOF

AB - The present invention relates to nucleic acid molecules containing spacers that can be packaged into viral particles and methods of producing them. In a first aspect, the invention features a nucleic acid molecule including a first spacer (SS1); a first inverted terminal repeat (ITR1); a cloning site (CS); a second inverted terminal repeat (ITR2); and a second spacer (SS2), such as a eukaryotic spacer; operably linked to each other in a 5'-to-3' direction as: **SS1-ITR1-CS-ITR2-SS2**. In an embodiment, the invention features a vector comprising any of the above-described nucleic acid molecules. In another aspect, the invention features a plurality of viral particles including the nucleic acid molecule. The invention further includes a host cell including any of the above-described vectors.

Figure 1



14/764 © EPODOC / EPO

DT - I

PA - UNIVNANJINGTECH

TI - Method for detecting glucose based on prussian blue membrane biological electrode

AB - The invention discloses a method for detecting glucose based on a prussian blue membrane biological electrode. The method comprises the following concrete steps: **SS1**) cleaning a sample tank; **SS2**) activating the enzyme reacting with the glucose on the prussian blue membrane biological electrode and cleaning the sample tank; **SS3**) performing high spot calibration and cleaning the sample tank; **SS4**) adding quantitative glucose solution in known concentration into the sample tank, using a detection circuit for detecting, judging as successful high spot calibration if the detected concentration scope of the glucose solution is within 95%-105% of the known concentration after the current value of the detection circuit is stable, cleaning the sample tank according to the process in the step **SS1**) and skipping to the step **SS6**, and if not, judging if the detection times exceeds three, if not, skipping to the step **SS3** and replacing the prussian blue membrane biological electrode and cleaning the sample tank; **SS5**) performing low spot calibration; and **SS6**) adding quantitative unknown glucose solution into the sample tank and regarding a display concentration of the detection circuit as the concentration of the to-be-detected glucose solution after the current value of the detection circuit is stable.

Do you wish to continue ? (Y/N) N

[SS 4] water and treatment and system

Results in EPODOC 65.611

[SS 5] ..li nbdoc 15



1/65.611 © EPODOC / EPO

PN - [KR20180036315](#) A 20180409

PR - KR20160126744 20160930

AP - KR20160126744 20160930

DT - I

TI - BALLAST**WATER TREATMENTSYSTEM** OF OZONE **TREATMENTAPPARATUS**

2/65.611 © EPODOC / EPO

PN - [RU2651180](#) C1 20180418

PR - RU20170125301 20170714

AP - RU20170125301 20170714

DT - I

CNOI - [B01F3/00](#)

PA - GOSUDARSTVENNOE UNITARNOE PREDPRIYATIE VODOKANAL SANKT PETERBURGA [RU]

TI - DISTRIBUTION **SYSTEM** OF COAGULANT FOR **WATER TREATMENT**

AB - FIELD: technology of **water** and air purification.SUBSTANCE: invention relates to **water**

treatment and **water** purification means. Distribution **system** of the coagulant for **water treatment** contains a limited part of tank 1, the cross-section of inlet 2 into which is blocked by beam distributor 3 formed of radially arranged tubes 4 which are perforated by holes 5. Holes 5 are directed along incoming flow 6 of **water**. Each radial perforated tube 4 of beam distributor 3 has, between the holes, projecting hook-shaped slats 7 bent along flow 6 and at an angle to it, forming ridges. Cross-section of outlet 8 of the limited part of tank 1 is covered by grid 9 with cells having dimensions smaller than the dimensions of the distances between ridges 7 on radial perforated tubes 4 of beam distributor 3. Limited part of tank 1 in cross section has an outer contour that coincides with the inner contour of the cross-section of the container in which it is installed.EFFECT: invention makes it possible to expand the functionality of the **water treatment system** by simultaneously feeding the coagulant into the **water** and forming vortex jets therein.1 cl, 1 dwg

3/65.611 © EPODOC / EPO

PN - [RU2650640](#) C1 20180416

PR - RU20170121510 20170619

AP - RU20170121510 20170619

DT - I

CNOI - [A61K47/02](#) ; [A61K47/36](#) ; [A61K31/194](#) ; [A61K31/714](#) ; [A61K33/10](#)

PA - GOSUDARSTVENNOE BYUDZHETNOE NAUCHNOE UCHREZHDENIE KURSKIJ NAUCHNO ISSLEDOVATELSKIJ INST AGROPROMYSHL [RU]

TI - ENERGOMETABOLIC COMPOSITION FOR THE PREVENTION AND **TREATMENT** OF RUMEN ACIDOSIS, METABOLIC ACIDOSIS IN NEONATAL COWS

AB - FIELD: veterinary.SUBSTANCE: invention relates to veterinary medicine and can be used in a **system** of measures for the prevention and **treatment** of rumen acidosis, metabolic acidosis in novice cows in the early lactation period. Energometabolic composition includes, as an alkalizing agent and for neutralizing the acid reaction of the composition, sodium bicarbonate, a flavor improver, metabolite and preservative - sodium chloride, improvement of cicatricial digestion - cyanocobalamin with the following ratio of components for a single dacha: sodium bicarbonate - 50 g, succinic acid - 20 g, beet molasses - 250 g, sodium chloride - 40 grams, cobalt chloride - 0.5 g, drinking **water** - 500-1000 ml, while the composition is used for the prevention and **treatment** of rumen acidosis, metabolic acidosis with a multiplicity of times every 5 days in the first month of the lactation period.EFFECT: invention provides an energometabolic composition suitable for a rapid course of use for relieving the symptoms of rumen acidosis and correcting pathobiochemical processes in the metabolic acidosis of neonatal cows.1 cl, 3 tbl, 2 ex

4/65.611 © EPODOC / EPO

PN - [RU2650247](#) C1 20180411

PR - RU20170133892 20170928

AP - RU20170133892 20170928

DT - I

CNOI - [F17D1/16](#)

PA - KUROCHKIN ANDREJ VLADISLAVOVICH [RU]

TI - **SYSTEM** OF PREPARATION AND TRANSPORTATION OF HIGH-VISCOSITY OIL (OPTIONS)

AB - FIELD: oil and gas industry.SUBSTANCE: invention relates to oil transport and can be used to prepare and transport high viscosity oil in the petroleum industry. Three variants of the **system** are proposed, including three-phase separators, a multiphase pump station, gas preparation unit, booster pump stations with track oil heaters or without them, equipped with blocks of oil degassing, fuel gas preparation, generation of electrical and heat energy, heating and pumping of oil, as well as an oil stabilization unit or an end separation plant. Second option is distinguished by the installation after the three-phase separator of the pump of the fractionation unit, and the third option is the pump, the electric dehydrators and the thermal pre-treatment unit of oil. When the first variant of the **system** is operating, the oil is separated to produce gas, some of which, after preparation, is supplied for own consumption, and the unused portion - to a multi-phase pumping station, formation **water** and dehydrated oil, which, in combination with an unused portion of the gas by means of a multi-phase pumping station, after stabilization in the oil stabilization unit or the end separation plant, is fed to the main pipeline. Booster pump station is installed in the dehydrated oil supply line, in the degassing unit of which oil is partially degassed to produce gas supplied to the fuel gas preparation unit, from which the fuel gas is directed to the electric and heat energy generation unit from which electric power and / or heat is directed to the heating and pumping unit, by means of which partially degassed oil is heated and / or pumped prior to the stabilization of the oil or the end separation unit. Operation of the second variant of the **system** is characterized in that the dehydrated oil is fractionated after separation to obtain a circulating light fraction directed to the well production line. In operation of the third variant of the **system**, the dehydrated oil, after separation by a pump, is fed to an electric dehydrator, and then to a thermal pre-training, where the oil is subjected to thermal conversion to obtain a circulating light fraction directed to the well production line.EFFECT: reduction of associated petroleum gas losses and reduction of oil transportation costs.3 cl, 3 dwg

5/65.611 © EPODOC / EPO

PN - [AU2018202177](#) A1 20180426

PR - AU20180202177
20180327; AU20150243729
20150324; DE201410206630
20140407; WO2015EP56239
20150324

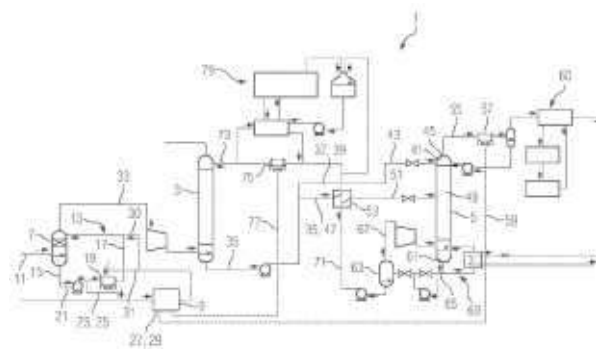
AP - AU20180202177 20180327

DT - I

CCI - [B01D53/1475](#) ; [B01D53/18](#) ;
[F23J15/04](#)

CUI - [B01D53/1425](#) ; [B01D61/025](#) ;
[C02F1/441](#)

CCA - [Y02C10/06](#) ; [Y02E20/326](#) ;
[B01D2257/504](#) ;
[B01D2258/0283](#) ;
[B01D2259/65](#) ; [F23J2215/40](#) ;
[F23J2219/40](#) ; [Y02A50/2342](#)



CUA	- C02F2103/18
PA	- SIEMENS AG
TI	- Device and method for separating carbon dioxide from a gas stream, in particular from a flue gas stream, comprising a cooling water system
AB	- DEVICE AND METHOD FOR SEPARATING CARBON DIOXIDE FROM A GAS STREAM, IN PARTICULAR FROM A FLUE GAS STREAM, COMPRISING A COOLING WATER SYSTEM A removal apparatus (1) for carbon dioxide from a gas stream, in particular from a flue gas stream, which comprises an absorber (3) for separating carbon dioxide from the gas stream by means of a scrubbing medium, a desorber (5) which is connected hydrodynamically to the absorber (3) for liberating the absorbed carbon dioxide from the scrubbing medium, a gas cooler (7) which is located hydrodynamically upstream of the absorber (3) for cooling the gas stream, and also a treatment unit (9) which is located downstream of the gas cooler (7) and is equipped and configured for purifying water from the gas cooler (7).
6/65.611	© EPODOC / EPO
PN	- US2018111096 A1 20180426
PR	- JP20150094657 20150507; WO2016JP62373 20160419
AP	- US201615562948 20160419
DT	- *; Rep
CUI	- B01D63/02 ; B01D65/02 ; C02F1/44 ; C02F3/12
CCA	- Y02W10/15
CUA	- B01D2317/04 ; B01D2321/185 ; C02F2303/16
PA	- SUMITOMO ELECTRIC INDUSTRIES [JP]
TI	- MEMBRANE SEPARATION TYPE ACTIVATED SLUDGE TREATMENT METHOD AND MEMBRANE SEPARATION TYPE ACTIVATED SLUDGE TREATMENT SYSTEM

AB - A membrane separation type activated sludge **treatment** method according to an embodiment of the present invention includes a step of performing biological **treatment** on waste **water**; and a step of performing membrane separation after the biological **treatment** step, wherein the membrane separation step is performed with a plurality of filtration modules including a plurality of hollow fiber membranes arranged adjacent to one another and oriented in one direction and a pair of holding members fixing both ends of the plurality of hollow fiber membranes, and a number of the filtration modules operated is changed in accordance with variations in an inflow rate of waste **water** in the biological **treatment** step.

7/65.611 © EPODOC / EPO

PN - [US2018111864](#) A1 20180426
 PR - US201615333150 20161024
 AP - US201615333150 20161024
 DT - *; Rep
 CUI - [B01D61/002](#) ; [B01F3/0803](#) ; [C02F9/00](#)
 CUA - [B01D3/065](#) ; [C02F1/445](#) ; [B01F2003/0896](#) ; [C02F2103/34](#) ; [C02F2301/08](#)
 PA - KUWAIT UNIV [KW]
 TI - METHOD OF RECYCLING BRINE FROM A MULTI-STAGE FLASH DESALINATION PLANT
 AB - The method of recycling brine from a multi-stage flash desalination plant recycles the high-salinity, high-temperature brine output from a multi-stage flash desalination plant to produce diluted brine suitable for reinjection back into the multi-stage flash desalination plant as a makeup stream. The high-salinity, high-temperature brine output from the multi-stage flash desalination plant is diluted with **water** extracted from treated wastewater effluent output from a wastewater **treatment** plant, thus providing further recycling of the treated wastewater effluent. Following osmotic transfer of the diluting **water** from the treated wastewater effluent to produce the diluted brine, the remaining concentrated treated wastewater effluent passes through a secondary filtration **system** to yield a solid product and a volume of permeate **water**. The volume of permeate **water** may be further mixed with the diluted brine.

8/65.611 © EPODOC / EPO

PN - [US2018110750](#) A1 20180426
 PR - US201715730011 20171011; US201662412393P 20161025
 AP - US201715730011 20171011
 DT - *; Rep
 CUI - [A61K47/10](#) ; [A61K47/42](#) ; [A61K9/2054](#) ; [A61K9/5057](#) ; [A61K31/225](#)
 PA - GLYKON TECH GROUP LLC [US]
 TI - HYDROXYCITRIC ACID COMPOUNDS AND CAPSULE LIQUID DELIVERY
 AB - A capsule oral delivery **system** is disclosed. The **system** includes an outer capsule completely enclosing an inner content, or a hard shell comprised of hydroxypropyl methylcellulose (HPMC) enclosing the content. A liquid formulation forming the inner content of the outer capsule is comprised of a hydroxycitric acid (HCA) salt, **water**, and glycerol, with the HCA being completely dissolved in the **water** and glycerol which may be the only components present in the capsule, which may be administered to a patient

in a method of **treatment** to cause weight loss when repeatedly administered.

9/65.611 © EPODOC / EPO
 PN - [US2018111847](#) A1 20180426
 PR - TR20140008819
 20140724; WO2015TR00278
 20150708
 AP - US201515328372 20150708
 DT - **
 CCI - [B01D5/0066](#) ; [C02F1/046](#)
 CUI - [B01D3/10](#) ; [B01D5/006](#) ;
[C02F1/20](#)
 CUA - [C02F2103/08](#) ; [C02F2201/008](#)
 PA - INSTILL WATER TECH INC [US]
 TI - **WATER PURIFICATION SYSTEM**
 AB - With the present invention, a portable **water** purification **system** for purifying salt **water** is provided. The said **water** purification **system** comprises a **water** purification capsule which is leakproof and in which vacuum is generated an evaporation member provided in the **water** purification capsule; and at least one condensation member provided in the **water treatment** capsule and positioned on the evaporation member. Thanks to the fact that the condensation member is located on the evaporation member dimensions of the **water** purification **system** are reduced while operational efficiency of the **water** purification **system** is kept high.

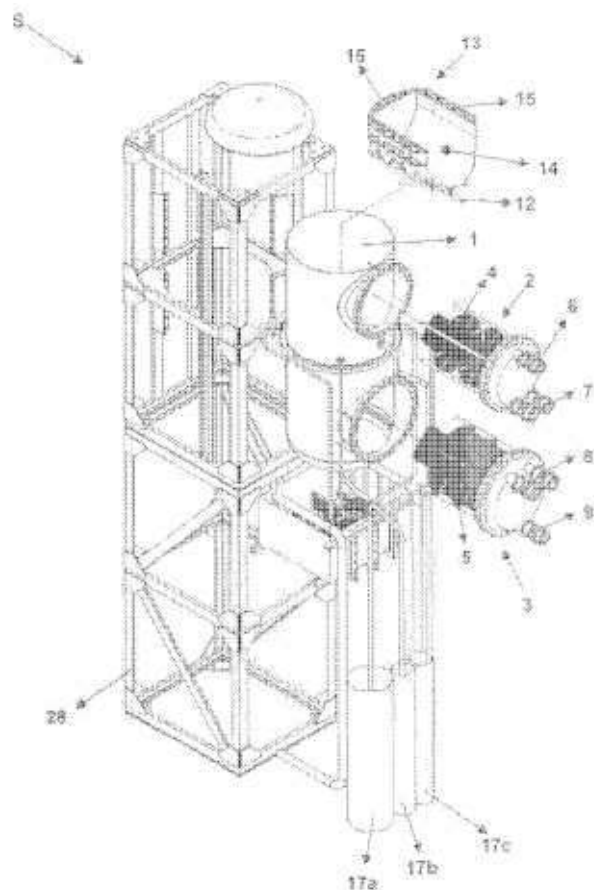


Figure - 2

10/65.611 © EPODOC / EPO

PN - [MX2017012692](#) A 20180209

PR - US201514674081
20150331; WO2016US22278
20160314

AP - MX20170012692 20160314

DT - I

CCI - [B01D17/02](#) ; [B01D17/0208](#) ;
[B01D17/0214](#) ; [B01D17/06](#) ;
[B03C11/00](#) ; [C02F1/40](#) ;
[C02F1/463](#) ; [C10G33/02](#)

CQI - [C02F1/48](#)

CCA - [B03C2201/02](#) ; [C02F2101/32](#) ;
[C02F2103/28](#) ; [C02F2103/30](#) ;
[C02F2103/32](#) ; [C02F2103/365](#) ;
[C02F2201/46135](#)

PA - CAMERON SOLUTIONS INC [US]

TI - **SYSTEM TO REDUCE INTERFACE EMULSION LAYER FORMATION IN AN ELECTROSTATIC DEHYDRATOR OR DESALTER VESSEL THROUGH USE OF A LOW VOLTAGE ELECTROSTATIC INTERFACE EMULSION TREATMENT SYSTEM INSIDE THE VESSEL.**

AB - A **system** (10) for separating the components of an incoming oil-**water** mixture includes two electrode sets (30/40), one set arranged to apply an electrostatic field to an oil layer residing within a separator vessel and the other set arranged to apply an electrostatic field to the interface emulsion layer residing within the separator vessel (12). The first set of electrodes (30) is in communication with a high voltage power source that ranges from 1 to 60 kV; the second set of electrodes (40) is in communication with a low voltage power source that is no greater than 5 kV. Each set of electrodes (30/40) may also be in communication with a second voltage source to provide

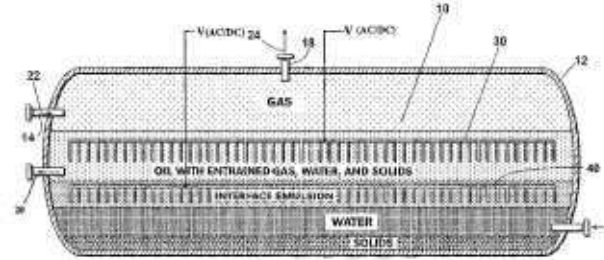


Fig. 2

increased power to promote effective coalescence.
The **system** (10) may also include power electronics to produce a variable amplitude and a variable frequency voltage supply to one or both electrode sets (30/40).

11/65.611 © EPODOC / EPO

PN - [KR101835848B](#) B1 20180319
PR - KR20160161124 20161130
AP - KR20160161124 20161130
DT - I
PA - ENK CO LTD [KR]
TI - MODULARIZATION OF BALLAST **WATER TREATMENT SYSTEM**

12/65.611 © EPODOC / EPO

PN - [KR101842057B](#) B1 20180326
PR - KR20170047497 20170412
AP - KR20170047497 20170412
DT - I
PA - HANLAIMS CO LTD [KR]
TI - Ballast **water treatment system** and Filter structure for Ballast **water treatment system**

13/65.611 © EPODOC / EPO

PN - [KR101839736B](#) B1 20180316
PR - KR20170169161 20171211
AP - KR20170169161 20171211
DT - I
PA - SAMSUNG ENV ENGINEERING CO [KR]
TI - Waste **water treatment system**

14/65.611 © EPODOC / EPO

PN - [US2018104400](#) A1 20180419
PR - US201715820672 20171122; WO2012US30350 20120323; US201414348533 20140328; WO2012US56781 20120923; US201161509240P 20110719; US201161466921P 20110323; US201161490183P 20110526
AP - US201715820672 20171122
DT - **
CCI - [A61M1/1656](#) ; [A61M1/28](#) ; [A61M1/285](#) ; [A61M1/166](#) ; [A61M1/1664](#) ; [A61M1/1668](#) ; [A61M1/167](#) ; [A61M1/1672](#) ; [A61M1/1674](#) ; [A61M1/282](#) ; [A61M1/288](#)

CUI - [A61M1/287](#) ; [A61M1/281](#)

CCA - [A61M2025/0002](#) ; [A61M2205/12](#) ; [A61M2205/128](#) ; [A61M2205/3334](#) ; [A61M2205/3351](#) ; [A61M2205/3355](#)

CUA - [A61M2205/123](#) ; [A61M2205/14](#) ; [A61M2205/18](#) ; [A61M2205/33](#) ; [A61M2205/3331](#) ; [A61M2205/52](#) ; [A61M2230/005](#)

PA - NXSTAGE MEDICAL INC [US]; NXSTAGE MEDICAL INC [US]

TI - Peritoneal Dialysis Systems, Devices, and Methods

AB - An automated peritoneal dialysis **system** provides both cycler-assisted peritoneal dialysis **treatment** and also continuous ambulatory peritoneal dialysis (CAPD). The **system** includes a fluid preparation and **treatment** device with a concentrate dilution components connected to a source of purified **water** and medicament concentrate. The **treatment** device has at least one mixing container connected via a pump and valves to the sources, the valves and the pump mixing and diluting the concentrate to form a medicament. An auxiliary port is provided for attaching a CAPD container and for receiving medicament. A controller is programmed to control the fluid preparation and **treatment** device to implement one or more cycler-assisted peritoneal dialysis **treatment** cycles using medicament from the mixing container and also to control the preparation of additional dialysate at the end of the cycler-assisted peritoneal dialysis **treatment** cycles to dispense additional dialysate through the auxiliary port for use in CAPD.

15/65.611 © EPODOC / EPO

PN - [WO2018070421](#) A1 20180419

PR - JP20160202404 20161014

AP - WO2017JP36809 20171011

DT - *; Rep

PA - EBARA JITSUGYO CO LTD [JP]

TI - AIR CONDITIONER

AB - [Problem] To provide an air conditioner that uses less energy to perform a separation **treatment** for latent heat and sensible heat, and that maintains comfortable indoor temperature and humidity conditions. [Solution] This air conditioner 1 is characterized in that: a latent heat **treatment system** 3 comprises a latent heat **treatment system** higher-temperature cold **water** section 11 where outside air OA and recycled air RA can be cooled/dehumidified, and a latent heat **treatment system** lower-temperature cold **water** section 13 where, downstream from the latent heat **treatment system** higher-temperature cold **water** section 11, cold **water** of a lower temperature than the latent heat **treatment system** higher-temperature cold **water** 11 can be used to cool/dehumidify the outside air OA and recycled air RA; a sensible heat **treatment system** 4 comprises a sensible heat **treatment system** higher-temperature cold **water** section 12 where cold **water** of a higher temperature than the latent heat **treatment system** lower-temperature cold **water** section 13 can be used to cool/dehumidify the recycled air; and the sensible heat **treatment system** 4 is further provided with a communicating section 33 that is able to open or close between the latent heat **treatment system** higher-temperature cold **water** section 11 and latent heat **treatment system** lower-temperature cold **water** section 13 of the latent heat **treatment system** 3, and open or close a downstream side of the sensible

heat **treatment system** higher-temperature cold **water** section 12 of the sensible heat **treatment system** 4, to adjust the volume of passing air.

Do you wish to continue ? (Y/N) **ultra and violet and water**

Results in EPODOC **2.019**

[SS 6] **n**

Results in EPODOC **1.517.572**

[SS 7] **ultra and violet and water**

Results in EPODOC **2.019**

[SS 8] **ss7 and system**

Results in EPODOC **740**

[SS 9] **..li nbdoc 15**



1/740 © EPODOC / EPO

PN - [CN107566141](#) A 20180109

PR - CN20161512539 20160630

AP - CN20161512539 20160630

DT - I

PA - ZTE CORP

TI - vSTP network element processing method and device, and network function virtualization **system**

AB - The invention provides a vSTP network element processing method and device, and a network function virtualization **system**. The method comprises the steps that a vSTP (virtual signaling transfer point) network element employs a narrow-band signaling resource through a first interface, wherein the narrow-band signaling resource comprises an SLB (signaling link blade) supporting a bearing resource; the first interface employs a second-stage MTP2 user adaptive layer protocol M2UA of a message transmission part for communication. According to the invention, the method solves a problem in related technologies that a vSTP network element does not support an E1/T1 interface and an **SS7** narrow-band signaling link.

2/740 © EPODOC / EPO

PN - [US2017310486](#) A1 20171026

PR - IL20160245299 20160425

AP - US201715495067 20170424

DT - *; Rep

CCI - [H04L9/0844](#) ; [H04L63/0428](#) ; [H04L63/06](#) ; [H04L63/304](#) ; [H04W12/02](#) ; [H04W12/04](#)

CQI - [H04L9/3263](#)
 CUA - [G06F21/335](#)
 CQA - [H04L63/0823](#)
 PA - VERINT SYSTEMS LTD [IL]
 TI - **SYSTEM** AND METHOD FOR DECRYPTING COMMUNICATION EXCHANGED ON A WIRELESS LOCAL AREA NETWORK
 AB - Systems and methods for obtaining authentication vectors issued, for use by a mobile communication terminal, by a Home Location Register (HLR) that serves a cellular communication network independently of any cooperation with the cellular network. Further to obtaining the authentication vectors, a terminal is caused to communicate over a WiFi WLAN using an encryption key derived from the obtained authentication vectors, e.g., per the EAP-SIM or EAP-AKA protocol. Since the encryption key is known, communication from the terminal is decrypted. The authentication vectors may be obtained by (i) an “impersonating” Visitor Location Register (VLR) server that does not serve the cellular network; (ii) an interrogation device which, by imitating a legitimate base station serving the cellular network, solicits the mobile communication terminal to associate with the interrogation device; or (iii) an **SS7** probe, which obtains authentication vectors communicated from the HLR server to other entities on the **SS7** network.

3/740 © EPODOC / EPO

PN - [WO2017180512](#) A1 20171019
 PR - US201662320627P 20160411
 AP - WO2017US26799 20170410
 DT - *; Rep
 CT - |US| ISR (A1)
[US2007143422](#) A1 20070621
 [X] (CAI YIGANG [US])
 [X] 1-3
 * ; paragraphs [0015], [0018], [0019]. *;
[US2014031009](#) A1 20140130
 [A] (VENDROW VLAD [US], et al)
 [A] 1-3
 * ; entire document. *;
[US8194581](#) B1 20120605
 [A] (SCHROEDER DEREK ANDREW [US], et al)
 [A] 1-3
 * ; entire document. *

CUI - [G04R20/14](#) ; [G06F21/50](#)

PA - TATA COMMUNICATIONS (AMERICA) INC [US]

TI - **SYSTEM** AND METHOD FOR REAL TIME FRAUD ANALYSIS OF COMMUNICATIONS DATA

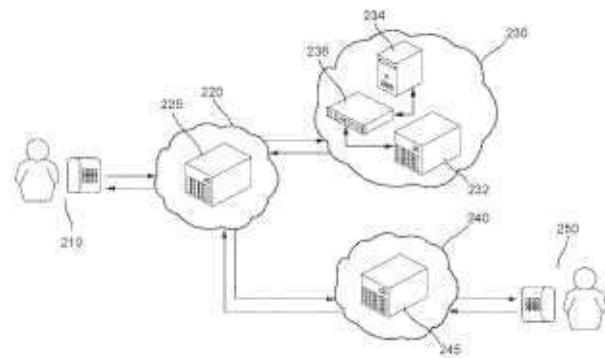


FIG. 2

AB - A telecommunications service provider's real time analysis **system** analyzes communications data to detect potentially fraudulent communications data, where the analysis is performed in real time in the routing path of the communications data. The communications data may include calls (e.g., **SS7**, VoIP, etc. based calls) and messages (e.g., SMS, MMS, etc.). The real time analysis **system** rejects potentially fraudulent communications data and non-fraudulent communications data in order to be used in real time in the routing path of the communications data. A rejection by the real time analysis **system** may cause non-fraudulent communications data to still be sent to the intended destination of the communications data. The real time analysis **system** can be in the routing path of the communications data without further routing non-fraudulent communications data traffic to the next appropriate hop in the routing path.

4/740 © EPODOC / EPO

PN - [GB2555519](#) A 20180502
 PR - GB20160014168 20160818
 AP - GB20170013310 20170818
 DT - W
 CT - || STSE (A)
[WQ2014122588](#) A1 20140814 [] (KNOWROAMING LTD [CA], et al);
[WQ2012080781](#) A1 20120621 [] (SAMARASEKARA GAYAN [LK], et al);
[CN105813072](#) A 20160727 [] (CHINA MOBILE COMM CORP);
[CN105554728](#) A 20160504 [] (SHENZHEN DIMIOR TECH CO LTD);
[CN101111016](#) A 20080123 [] (ZTE CORP [CN])
 CCI - [H04W8/02](#)
 CNOI - [H04W8/183](#) ; [H04W88/182](#) ; [H04W4/50](#)

PA - HAFEEZBANA[GB]

TI - A telecommunications method and **system**

AB - The present invention relates to routing communications within a communications network 303 including a plurality of core networks, and includes: within a server **system** 300, routing (201, figure 2) a telecommunications message for a telephony subscriber identity (e.g. an International Mobile Subscriber Identity, IMSI) to a simulated subscriber identity module, SIM / USIM / UICC 301, and performing a communication action (202) in relation to the telecommunications message at the simulated subscriber identity module. Actions which can be performed in relation to said telecommunications messages include rerouting the messages to different subscriber identities, providing an API to the simulated module for use by third parties, and simulating physical phone functions. Message may be received via a signalling gateway within the server **system** via an inter-network signaling protocol such as **SS7**. The server **system** may include a roaming network which can simulate, at least, a VLR and a MSC of the roaming network. The disclosed invention has similarities to a SIM gateway, SIM box or SIM bank, in which a collection of physical SIM cards are contained. In the present invention the collection of SIM cards is simulated within a processor.

5/740 © EPODOC / EPO

PN - [US2017244670](#) A1 20170824

PR - US201615049032 20160220

AP - US201615049032 20160220

DT - *; Rep

CT - || R141 (A1)

[US2004198386](#) A1 20041007 [] (DUPRAY DENNIS J [US]);
[US2006002403](#) A1 20060105 [] (BETTIS SONNY R [US], et al);
[US2006013200](#) A1 20060119 [] (BETTIS SONNY R [US], et al);
[US7075918](#) B1 20060711 [] (KUNG FEN-CHUNG [US], et al);
[US2007032225](#) A1 20070208 [] (KONICEK JEFFREY C [US], et al);
[US2009061854](#) A1 20090305 [] (GILLOT DAVID [BE], et al);
[US6363411](#) B1 20020326 [] (DUGAN ANDREW [US], et al);
[US2002188486](#) A1 20021212 [] (GIL REYNALDO [US], et al);
[US9485604](#) B2 20161101 [] (YANG YU [SE], et al)

CTNP - || R141 (A1)

[] - Rocha, Eduardo; Salvador, Paulo; Nogueira, Antonio. Detection of Illicit Traffic based on Multiscale Analysis. 17th International Conference on Software, Telecommunications & Computer Networks. SoftCOM 2009. Pub. Date: 2009. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5306872>

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[] - Morawski, Michal; Ignaciuk, Przemyslaw. Traffic Control Under Scarce Resources in Wireless Networks - A Game-Based Approach. 2015 19th International Conference on System Theory, Control and Computing (ICSTCC). Pub. Date: 2015. <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7321309>

- CCI - [H04L63/0209](#) ; [H04L63/0227](#)
- PA - AT & T MOBILITY II LLC [US]
- TI - Behavior-Based Filters For Signaling **System** Number 7 Networks
- AB - Concepts and technologies disclosed herein are directed to behavior-based filters for signaling **system** number 7 ("**SS7**") networks. According to one embodiment disclosed herein, a behavior-based **SS7** filter executed by a processor can receive **SS7** traffic. The behavior-based **SS7** filter can determine a behavioral characteristic from the **SS7** traffic and can compare a behavior of the **SS7** traffic, based upon the behavior characteristic, to a behavior profile. The behavior-based **SS7** filter also can determine whether the behavior of the **SS7** traffic fits within a tolerance threshold of the behavior profile. If the **SS7** traffic fits within the tolerance threshold, the behavior-based **SS7** filter can instruct a signal transfer point ("STP") to which the **SS7** traffic is directed to allow routing of the **SS7** traffic. If, however, the **SS7** traffic does not fit within the tolerance threshold, the behavior-based **SS7** filter can instruct the STP to deny routing of the **SS7** traffic.

6/740 © EPODOC / EPO

- PN - [US9628994](#) B1 20170418
- PR - US201514984911 20151230
- AP - US201514984911 20151230
- DT - *; Rep
- CT - || STSE (B1)
[US2012030293](#) A1 20120202 [] (BOBOTTEK ALEXANDER [US])
- CCI - [H04W12/12](#) ; [H04W64/00](#) ; [H04W68/12](#)
- CQI - [H04W24/08](#)
- CCA - [H04W88/08](#)
- PA - ARGELA YAZILIM VE BILISIM TEKNOLOJILERI SAN VE TIC A S [TR]
- TI - Statistical **system** and method for catching a man-in-the-middle attack in 3G networks
- AB - A novel method and **system** is introduced leveraging the data collected by a network probe to enhance cellular network capabilities to detect a man in the middle attack without using any software on the 3G mobile terminal. The new capabilities compile and process the data of call records collected from **SS7** and location update messages in real time to determine the active 3G subscribers and to tag cells as 2G within a 3G coverage area to instantly identify an unknown cell generated by a fake base station. The **system** also has a component to notify authorities or to terminate the call once the fraud is identified.

7/740 © EPODOC / EPO

PN - [US2017134917](#) A1 20170511

PR - US201715414684
20170125; US201514929987
20151102; US201414224509
20140325; US20070845633
20070827

AP - US201715414684 20170125

DT - **

CT - || R141 (A1)
[US5020121](#) A 19910528 [
] (ROSENBERG CHARLES J [US]);
[US2002112014](#) A1 20020815 [
] (BENNETT SIMON [CL], et al);
[US2002123359](#) A1 20020905 [
] (WEI WINSTON SER TUEN [SG],
et al);
[US2003083078](#) A1 20030501 [
] (ALLISON RICK L [US], et al);
[US2005148329](#) A1 20050707 [
] (BRUNET JEFFREY [CA], et al);
[US2002147724](#) A1 20021010 [
] (FRIES KAREN E [US], et al)

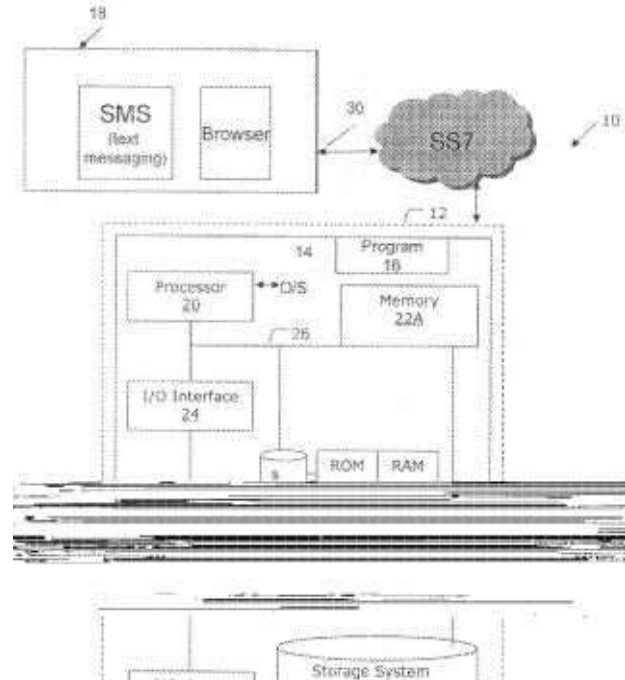
CCI - [H04M3/42382](#) ; [H04W4/14](#) ;
[H04W4/20](#)

CUI - [H04M1/72522](#) ; [H04L67/02](#)

PA - IBM [US]

TI - **SYSTEM** AND METHOD OF
CREATING AND PROVIDING SMS
HTTP TAGGING

AB - A **system** and method for sending
text messages and, more
particularly, a **system** and
method for forcing SMS capable
devices to communicate via SMS
using, for example, **SS7** protocol.
A method includes providing a
tag forcing a return text message
to be sent via **SS7** protocol. In
use, the **system** and method is
configured to force the use of
SMS messages via the **SS7**
protocol. The **system** and method
can be implemented over any
network, for example, and any
existing mobile device and
related infrastructure can be
modified to take advantage of



the benefits and functionality of
the **system** and method of the
invention.

8/740 © EPODOC / EPO

- PN - [CN106158561](#) A 20161123
- PR - CN20161538547 20160711
- AP - CN20161538547 20160711
- DT - I
- CT - || STSE (A)
[US4313474](#) A 19820202 [A] (NAZET RENE, et al)
[A] 1-8
* 全文 *;
[CN101694825](#) A 20100414 [Y] (ANHUI HUADONG PHOTOELECTRIC TE)
[Y] 1-8
* 说明书第0027、0029-0037段 *;
[CN102103961](#) A 20110622 [Y] (CHINESE ACAD INST ELECTRONICS)
[Y] 1-8
* 说明书第0028段 *;
[CN103996589](#) A 20140820 [A] (CHENGDU GUO GUANG ELECTRIC CO LTD)
[A] 1-8
* 全文 *
- CNOI - [H01J23/26](#) ; [H01J25/34](#)
- PA - ANHUI HUADONG PHOTOELEC TECH
- TI - Spiral line applied to travelling-wave-tube slow-wave **system** and preparing method
- AB - The invention discloses a spiral line applied to a travelling-wave-tube slow-wave **system**. The spiral line comprises an input spiral line and an output spiral line, the input spiral line and the output spiral line are made from tungsten narrow bands, and the specifications of the input spiral line and the output spiral line are 0.19+/-0.005 *0.45+/-0.005 mm. The invention further provides a preparing method of the spiral line applied to the travelling-wave-tube slow-wave **system**. The preparing method includes the following steps of SS1, winding; SS2, oil removing; SS3, forming; SS4, polishing; SS5, disassembling; SS6, electroplating; **SS7**, sintering; SS8, pitch detecting. According to the spiral line applied to the travelling-wave-tube slow-wave **system** and the preparing method thereof, the screw-pitch gradual-change size is designed and improved, the working bandwidth of a travelling wave tube is expanded, concussion in working frequency band of the travelling wave tube and second harmonic generation are avoided, and the working stability is improved.

9/740 © EPODOC / EPO

- PN - [TW362315B](#) B 19990621
- PR - US19950575413 19951220
- AP - TW19970101450 19970205
- DT - I
- CCI - [H04L63/0428](#) ; [H04W88/12](#) ; [H04W92/14](#)

CCA - [H04W4/18](#) ; [H04W12/02](#) ; [H04W92/02](#)

PA - QUALCOMM INC [US]

TI - Wireless telecommunications **system** utilizing CDMA radio frequency signal modulation in conjunction with the GSM a-interface telecommunications network protocol

AB - A method and apparatus for operating a wireless telecommunication **system** utilizing code division multiple access (CDMA) over-the-air with a global **system** for mobile communications (GSM) A-interface based network is described. A CDMA radio frequency (RF) signal interface provides a bi-directional interface to a subscriber unit, and a global **system** for mobile (GSM) communications A-interface **SS7** transport provides a bi-directional interface with GSM mobile services switching center (MSC). Additionally, a transparent message transport is provided over which signaling messages defined in the GSM A-interface protocol are exchanged between the GSM MSC and a subscriber unit. Other signaling message generating by the GSM MSC and subscriber unit are processed and various actions are taken in response, including the configuration and control of signal processing resources. This configuration and control includes the allocation of vocoding and devocoding resources in accordance with the requested type of service, and the invocation of CDMA based encryption capabilities. Other actions include the allocation of CDMA traffic channel processing resources and selection resources at the start of a signaling exchange between the subscriber unit and the BSS or MSC. The resources process both voice and data calls, and signaling messages, such as registrations, from the subscriber unit. The CDMA traffic channel resources are used to perform the IS-95 style CDMA signal processing functions including modulation and demodulation.

10/740 © EPODOC / EPO

PN - [CN106096741](#) A 20161109

PR - CN20161422904 20160614

AP - CN20161422904 20160614

DT - I

CNOI - [G06Q10/20](#) ; [G06Q50/06](#)

PA - NARI TECHNOLOGY DEV CO LTD; STATE GRID NARI NANJING CONTROL SYSTEM CO LTD

TI - Method of realizing intelligent fault operation and maintenance decision support **system**

AB - The invention discloses a method of realizing an intelligent fault operation and maintenance decision support **system**, comprising the following steps: SS1, a fault operation and maintenance information model is built; SS2, a fault operation and maintenance decision support **system** is constructed; SS3, an intelligent module of field operation equipment carries out state diagnosis; SS4, an intelligent management unit carries out centralized management; SS5, a cloud server makes analysis and decision and provides a scheme; SS6, an operation and maintenance management terminal confirms and modifies the scheme and judges whether the scheme is feasible, if the scheme is feasible, a solution is provided, and maintenance spare parts or information are/is provided for the field operation equipment, or, the method goes to **SS7**; **SS7**, a manufacturer support terminal makes confirmation and provides a scheme; and SS8, intelligent order delivery is carried out. According to the invention, fault information

combination thereof. In an example configuration, location can be provided in a hierarchy of various levels of accuracy/precision. Different levels can be representative of different resolutions of geography. An example **system** for facilitating party location based services includes a signaling **system** number 7 (**SS7**) network.

12/740 © EPODOC / EPO

- PN - [US2016156647](#) A1 20160602
- PR - DE201410117713 20141202
- AP - US201514955721 20151201
- DT - **
- CT - || R141 (A1)
[US6308276](#) B1 20011023 [] (ASHDOWN MIKE [US], et al)
- CCI - [H04Q3/0025](#) ; [H04W12/12](#)
- CUI - [H04L63/1416](#) ; [H04L63/166](#) ; [H04W8/04](#) ; [H04W8/06](#)
- CCA - [H04L63/0227](#)
- PA - GSMK GES FUER SICHERE MOBILE KOMMUNIKATION MBH [DE]
- TI - METHOD AND A DEVICE FOR SECURING A SIGNALLING **SYSTEM** NO. 7 INTERFACE
- AB - A method is provided for securing a Signalling **System** No. 7 interface, **SS7** interface, of a **system**, via which access to a local mobile radiocommunications network is carried out, in relation to an external **system**. The method protects the **SS7** network access points of telecommunication providers from **SS7**/MAP attacks by detecting and filtering these attacks.

13/740 © EPODOC / EPO

PN - [US2016112862](#) A1 20160421

PR - US201514976625
20151221; US20110929729
20110211; US20060490108
20060721; US20000576022
20000523; US20000196104P
20000411

AP - US201514976625 20151221

DT - **

CT - || R141 (A1)
[US9467844](#) B2 20161011 [
] (WALLACE ERIK L [US], et al);
[US7701925](#) B1 20100420 [
] (MASON JOHN R [US], et al);
[US6366777](#) B1 20020402 [
] (UUSITALO MARKKU [FI]);
[US5862481](#) A 19990119 [
] (KULKARNI SANJAY [US], et al);
[US6181935](#) B1 20010130 [
] (GOSSMAN WILLIAM E [US], et
al)

CCI - [H04L67/24](#) ; [H04L67/30](#) ;
[H04L67/22](#) ; [H04W4/02](#) ;
[H04W4/027](#) ; [H04W8/08](#) ;
[H04L67/04](#) ; [H04L67/18](#) ;
[H04L69/329](#) ; [H04W4/029](#)

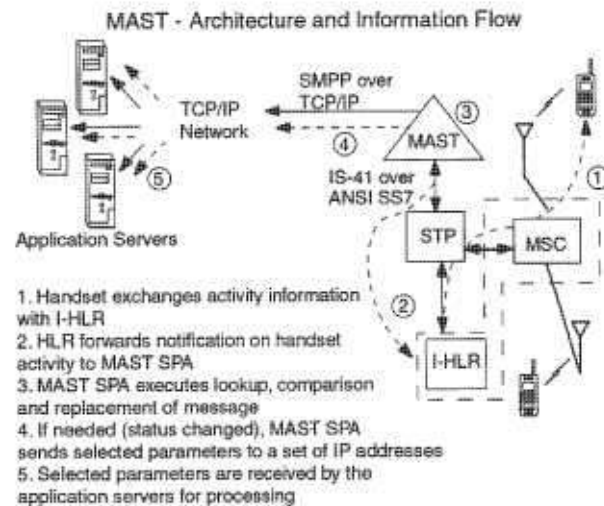
CUI - [H04L69/16](#) ; [H04W64/006](#)

CCA - [H04W80/04](#) ; [H04W92/02](#)

PA - TELECOMM SYSTEMS INC [US]

TI - Mobile Activity Status Tracker

AB - A technique and apparatus to
provide status tracking of
presence and/or location of a
mobile, wireless device to a
requesting entity even outside of
a particular wireless **system**.
This allows wireless service
providers the ability to monitor
and log changes in the status of
mobile stations within and/or
outside their networks.
Embodiments are disclosed
wherein presence and/or
location information is provided
to entities outside of a particular
servicing wireless network using
the mechanisms of call



processing components of a mobile network (e.g., call setup procedures), and using standard mechanisms currently available to any appropriately conforming Mobile Switching Center (MSC) element. A mobile activity status tracker (MAST) is disclosed which contains a database of information similar to the information contained in the Home Location Register. The MAST tracks and reports status and activity of mobile wireless devices in a wireless network using mobile registration message, mobile inactivity message forwarding, and/or mobile automatic notification of subscriber status to TCP/IP entities (e.g., application servers on the Internet or Intranet). The MAST **system** duplicates the same or similar information contained in a corresponding HLR, but is available as an external database entity which is not restricted by **SS7** standards. The tracking need not track call-specific information, e.g., called telephone numbers or information regarding conversations sustained by the tracked wireless subscribers.

PN - [US2016057591](#) A1 20160225

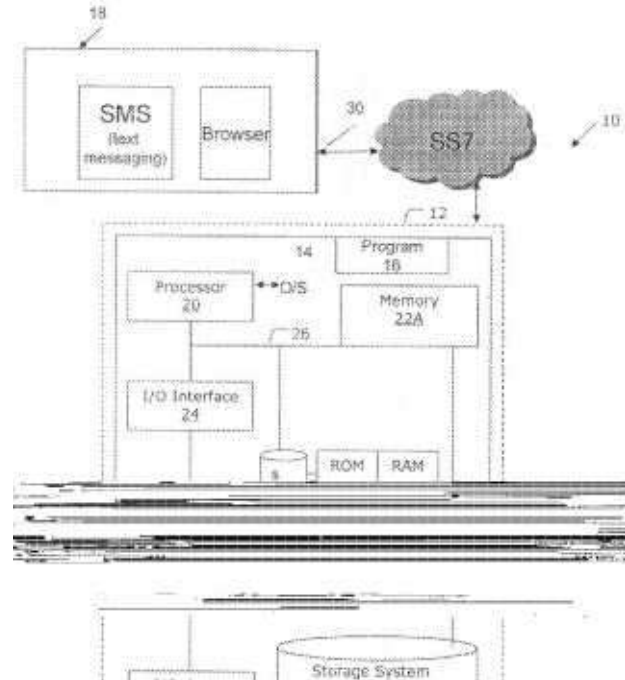
PNFP - US9686661 B2 20170620

PR - US201514929987
20151102; US201414224509
20140325; US20070845633
20070827

AP - US201514929987 20151102

DT - **

CT - || R141 (A1)
[US2002123359](#) A1 20020905 [
] (WEI WINSTON SER TUEN [SG],
et al);
[US2002193996](#) A1 20021219 [
] (SQUIBBS ROBERT FRANCIS
[GB], et al);
[US2003083078](#) A1 20030501 [
] (ALLISON RICK L [US], et al);
[US2005148329](#) A1 20050707 [
] (BRUNET JEFFREY [CA], et al);
[US2004095889](#) A1 20040520 [
] (CHANG JAMES TJIN-TEK [US], et
al);
[US6823060](#) B1 20041123 [
] (ADAMS JOHN [US], et al);
[US2004258215](#) A1 20041223 [
] (DEVITO NICHOLAS MICHAEL
[US], et al);
[US2005003838](#) A1 20050106 [
] (MCCANN THOMAS M [US], et
al);
[US2005108417](#) A1 20050519 [
] (HAUMONT SERGE [FI]);
[US2006280165](#) A1 20061214 [
] (BLUMENSCHN GORDON [US],
et al);
[US2007275739](#) A1 20071129 [
] (BLACKBURN ROMILLY [AU]);
[US7409428](#) B1 20080805 [
] (BRABEC FRANTISEK [US], et al)
- || STSE (B2)
[US6823060](#) B1 20041123 [
] (ADAMS JOHN [US], et al);
[US7409428](#) B1 20080805 [
] (BRABEC FRANTISEK [US], et al);
[US2002123359](#) A1 20020905 [
] (WEI WINSTON SER TUEN [SG],
et al);
[US2002193996](#) A1 20021219 [
]



] (SQUIBBS ROBERT FRANCIS
 [GB], et al);
[US2003083078](#) A1 20030501 [
] (ALLISON RICK L [US], et al);
[US2004095889](#) A1 20040520 [
] (CHANG JAMES TJIN-TEK [US], et
 al);
[US2004258215](#) A1 20041223 [
] (DEVITO NICHOLAS MICHAEL
 [US], et al);
[US2005003838](#) A1 20050106 [
] (MCCANN THOMAS M [US], et
 al);
[US2005108417](#) A1 20050519 [
] (HAUMONT SERGE [FI]);
[US2005148329](#) A1 20050707 [
] (BRUNET JEFFREY [CA], et al);
[US2006280165](#) A1 20061214 [
] (BLUMENSCHIN GORDON [US],
 et al);
[US2007275739](#) A1 20071129 [
] (BLACKBURN ROMILLY [AU])

CCI - [H04M3/42382](#) ; [H04W4/14](#) ;
[H04W4/20](#)

CUI - [H04M1/72522](#) ; [H04L67/02](#)

PA - (A1 B2)
 IBM [US]

TI - (A1)
SYSTEM AND METHOD OF
 CREATING AND PROVIDING SMS
 HTTP TAGGING
 - (B2)
System and method of creating
 and providing SMS HTTP tagging

AB - (A1 B2)
 A **system** and method for sending
 text messages and, more
 particularly, a **system** and
 method for forcing SMS capable
 devices to communicate via SMS
 using, for example, **SS7** protocol.
 A method includes providing a
 tag forcing a return text message
 to be sent via **SS7** protocol. In
 use, the **system** and method is
 configured to force the use of
 SMS messages via the **SS7**
 protocol. The **system** and method

CUI	- H04M7/127 ; H04L65/1026
CQA	- H04L45/245
PA	- (A1 B2) LEVEL 3 COMMUNICATIONS LLC [US]
TI	- (A1) CLASS 4 LONG DISTANCE SOFTSWITCH NETWORK WITH INTEGRATED CLASS 5 APPLICATION SERVICES - (B2) Class 4 long distance softswitch network with integrated class 5 application services
AB	- (A1 B2) A telecommunication system including a class 4 long distance softswitch network with one or more a core routing engines and one or more class 5 application servers. The class 4 long distance softswitch network further includes at least one edge device, which may be in the form of a session border controller or media gateway, with at least one connection, including PRI, SS7 and TDM connections, to at least one customer premise equipment of at least one retail customer, which may be an enterprise customer. The class 5 application server is configured to provide the customer with class 5 services within the class 4 network.

Do you wish to continue ? (Y/N) n

[SS 9] ultra and violet and treatment and water

Results in EPODOC 475

[SS 10] ..li nbdoc 15



PN - [CN206814433U](#) U 20171229
 PR - CN20172583523U 20170524
 AP - CN20172583523U 20170524
 DT - I
 PA - ZHOU WEIQING
 TI - Ultraviolet ray **water treatment** ware with purification performance
 AB - The utility model relates to an ultraviolet ray **water treatment** ware with purification performance, including stainless steel outer pipe, quartz inner tube, **ultra -violet** lamp and two lamp stands, two these lamp stands are fixed in this stainless steel outer pipe's two ends respectively to keep apart through a closing plate and this nonrust outer steel pipe are sealed respectively, in this stainless steel outer pipe is located to this quartz inner tube main part, its both ends run through respectively two these closing plates with protruding extend two these lamp stands in, and this closing plate and this quartz outer wall of the inner tube sealing connection, be equipped with a **water** inlet and a delivery port on the lateral wall of this stainless steel outer pipe near two ends respectively, still include a supersonic generator, this supersonic generator's work end is located in this stainless steel outer pipe to an outer wall for cleaning this quartz inner tube.

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PN - [CN206814558U](#) U 20171229
 PR - CN20172583583U 20170524
 AP - CN20172583583U 20170524
 DT - I
 PA - ZHOU WEIQING
 TI - Filter sterilization **water treatment** ware
 AB - The utility model relates to a filter sterilization **water treatment** ware, including stainless steel outer pipe, quartz inner tube, **ultra -violet** lamp and two lamp stands, two these lamp stands are fixed in this stainless steel outer pipe's two ends respectively to keep apart through a closing plate and this nonrust outer steel pipe are sealed respectively, in this stainless steel outer pipe is located to this quartz inner tube main part, its both ends run through respectively two these closing plates with protruding extend two these lamp stands in, and this closing plate and this quartz outer wall of the inner tube sealing connection, be equipped with a **water** inlet and a delivery port on the lateral wall of this stainless steel outer pipe near two ends respectively, be equipped with the first filter unit of mistake in this **water** inlet, be equipped with the second in this delivery port and cross filter unit to **water** to flow through this **water** inlet and delivery port filters, the particle number that this first filter unit excessively can pass through is less than this second and crosses the particle number that filter unit can pass through.

3/475 © EPODOC / EPO

PN - [CN206809869U](#) U 20171229
 PR - CN20172583555U 20170524
 AP - CN20172583555U 20170524

DT - I

PA - ZHOU WEIQING

TI - From filter sterilization **water treatment** ware that became invalid

AB - The utility model relates to a from filter sterilization **water treatment** ware that became invalid, including stainless steel outer pipe, quartz inner tube, **ultra -violet** lamp and two lamp stands, two these lamp stands are fixed in this stainless steel outer pipe's two ends respectively to keep apart with this stainless steel outer pipe is sealed through a closing plate respectively, in this stainless steel outer pipe is located to this quartz inner tube main part, its both ends run through respectively two these closing plates with protruding extend two these lamp stands in, and this closing plate and this quartz outer wall of the inner tube sealing connection, be equipped with a **water** inlet and a delivery port on the lateral wall of this stainless steel outer pipe near two ends respectively, an overflow mouth has been set up on the lateral wall in this stainless steel outer pipe middle part region, still include a filter, this filter is the ring -type, and its cover is then adorned in this stainless steel outer pipe on locating quartz inner tube, this filter is sealed with the stainless steel outer pipe inner wall respectively to through an elastic component elastic fixation in this overflow mouth opening part, realize sealing this overflow mouth.

4/475 © EPODOC / EPO

PN - [CN206814432U](#) U 20171229

PR - CN20172583521U 20170524

AP - CN20172583521U 20170524

DT - I

PA - ZHOU WEIQING

TI - Ultraviolet **water treatment** ware of manual purification

AB - The utility model relates to an ultraviolet **water treatment** ware of manual purification, including stainless steel outer pipe, quartz inner tube, **ultra -violet** lamp and two lamp stands, two lamp stands are fixed in stainless steel outer pipe's two ends respectively to keep apart through a closing plate and nonrust outer steel pipe are sealed respectively, in stainless steel outer pipe is located to quartz inner tube main part, its both ends run through respectively two closing plates with protruding extend two lamp stands in, and closing plate and quartz outer wall of the inner tube sealing connection, be equipped with a **water** inlet and a delivery port on the lateral wall of stainless steel outer pipe near two ends respectively, still include a supersonic generator, supersonic generator's work end is located in the stainless steel outer pipe to an outer wall for cleaning quartz inner tube, on stainless steel outer pipe's the wall in the vertical orientation below still be equipped with the gas vent respectively, be equipped with a solenoid valve on the gas vent, the control end of solenoid valve is parallelly connected with supersonic generator's control end to it opens and closes to have realized solenoid valve and supersonic generator linkage.

5/475 © EPODOC / EPO

PN - [WO2017192532](#) A1 20171109

PR - US201662330649P 20160502

AP - WO2017US30563 20170502

DT - **

CT - |KR| ISR (A1)
[US2008213128](#) A1 20080904 [XYA] (MANGIARDI JOHN R [US])
[X] 1-5, 8, 10-20
* See paragraphs [0017]-[0040]; claims 5, 7; and figures 1-2. *
[Y] 9
[A] 6-7;
[US7150576](#) B1 20061219 [Y] (KAMBEYANDA DONA M [US])
[Y] 9
* See column 5, lines 37-61; and figure 1. *;
[US2008271239](#) A1 20081106 [A] (WANG QIAN [CA], et al)
[A] 1-20
* See paragraphs [0026]-[0027], [0029], [0035]; and figures 1-2, 5, 10. *;
[US2015052678](#) A1 20150226 [A] (BAYLEY GRAEME S [US], et al)
[A] 1-20
* See paragraph [0075]; and figure 18. *;
[EP0262932](#) A2 19880406 [A] (MCILWRAITH DAVEY PTY LTD [AU])
[A] 1-20
* See column 2, lines 39-60; and figures 1, 3. *

CCI - [E03F5/0407](#) ; [E03C1/126](#) ; [E03C1/181](#)

CUI - [A61L2/10](#) ; [A61L9/20](#)

CQI - [E03C1/186](#) ; [E03C1/22](#)

CCA - [E03C1/182](#)

PA - SAFE HEALTH SOLUTIONS LLC [US]

TI - FLUID **TREATMENT** AND DISPOSAL SYSTEM AND METHODS OF USE

AB - A fluid **treatment** and disposal system includes a sink, having a basin, a sink drain inlet, and a sink drain trap. An open cavity is disposed behind a rearward wall of the sink basin, between a top portion of the sink and the sink drain trap. A curved transition surface receives fluid entering the sink. Embodiments of the drain are shaped to promote the evacuation of fluid from the basin while limiting turbulence. An exhaust port fluidly coupled with the open cavity evacuates the open cavity and surrounding environment. Embodiments optionally associate one or more of the following with the open cavity: **Ultra-Violet** (UV) Germicidal Lights, and Ozone **water**, copper-silver ionization, and/or sanitizing agent injection systems.

6/475 © EPODOC / EPO

PN - [US2017314243](#) A1 20171102

PR - US201715584364 20170502; US201662330649P 20160502

AP - US201715584364 20170502

DT - *; Rep

CCI - [E03F5/0407](#) ; [E03C1/126](#) ; [E03C1/181](#)

CUI - [A61L2/10](#) ; [A61L9/20](#)

CQI - [E03C1/186](#) ; [E03C1/22](#)

CCA - [E03C1/182](#)

PA - SAFE HEALTH SOLUTIONS LLC [US]

- TI - FLUID **TREATMENT** AND DISPOSAL SYSTEM AND METHODS OF USE
- AB - A fluid **treatment** and disposal system includes a sink, having a basin, a sink drain inlet, and a sink drain trap. An open cavity is disposed behind a rearward wall of the sink basin, between a top portion of the sink and the sink drain trap. A curved transition surface receives fluid entering the sink. Embodiments of the drain are shaped to promote the evacuation of fluid from the basin while limiting turbulence. An exhaust port fluidly coupled with the open cavity evacuates the open cavity and surrounding environment. Embodiments optionally associate one or more of the following with the open cavity: **Ultra-Violet** (UV) Germicidal Lights, and Ozone **water**, copper-silver ionization, and/or sanitizing agent injection systems.

7/475 © EPODOC / EPO

- PN - [CA2925771](#) A1 20171001
- PR - CA20162925771 20160401
- AP - CA20162925771 20160401
- DT - *; Rep
- CCI - [C02F1/325](#) ; [E04H4/1209](#) ; [E04H4/129](#)
- CCA - [C02F2103/42](#) ; [C02F2201/3223](#)
- PA - GECKO ALLIANCE GROUP INC [CA]
- TI - **ULTRA-VIOLET LIGHT WATER TREATMENT** SYSTEM FOR BATHING UNITS
- AB - A UV **water treatment** system comprising a reactor unit for receiving **water** therein and a power unit for powering the UV **water treatment** system. The reactor unit includes a housing and a pair of end caps that sealingly engage the housing at opposing ends. Optionally, the UV **water treatment** system may have a reduced footprint.

8/475 © EPODOC / EPO

- PN - [US2017283279](#) A1 20171005
- PR - US201615089184 20160401
- AP - US201615089184 20160401
- DT - *; Rep
- CT - || R141 (A1)
[US2016326021](#) A1 20161110 [] (SCHMITT CRAIG A [US], et al)
- CCI - [C02F1/325](#)
- CCA - [C02F2103/42](#) ; [C02F2201/3223](#) ; [C02F2201/326](#)
- CQA - [C02F2201/322](#) ; [C02F2303/04](#)
- PA - GECKO ALLIANCE GROUP INC [CA]
- TI - **ULTRA-VIOLET LIGHT WATER TREATMENT** SYSTEM FOR BATHING UNITS
- AB - A UV **water treatment** system comprising a reactor unit for receiving **water** therein and a power unit for powering the UV **water treatment** system. The reactor unit includes a housing and a pair of end caps that sealingly engage the housing at opposing ends. Optionally, the UV **water treatment** system may have a reduced footprint

9/475 © EPODOC / EPO

PN - [US2017127704](#) A1 20170511

PR - SE20140050700
20140610; WO2015EP62555
20150605

AP - US201515317654 20150605

DT - **

CCI - [A23L2/46](#) ; [A23L2/50](#) ;
[A23L2/60](#) ; [A23L3/28](#)

CUA - [A23V2002/00](#)

PA - TETRA LAVAL HOLDINGS &
FINANCE [CH]

TI - SYSTEM AND METHOD FOR
PROCESSING LIQUID OR SEMI-
LIQUID FOOD PRODUCTS

AB - A system for processing a liquid
or semi-liquid food product is
provided. The food product is a
composition of a first sub-
composition having a low
concentration, such as **water** or
a sugar solution, and a second
sub-composition having a high
concentration, such as a
concentrate. The high
concentration is greater than the
low concentration. The system
comprises an **ultra violet** (UV)
light **treatment** apparatus for
reducing an amount of
microorganisms in the first sub-
composition and a blending
apparatus for aseptically
combining the first sub-
composition and the second sub-
composition into the liquid or
semi-liquid food product.

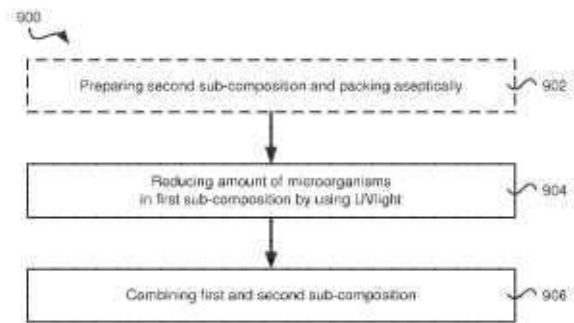


Fig 9

10/475 © EPODOC / EPO

PN - [CN205803212U](#) U 20161214

PR - CN20162717106U 20160708

AP - CN20162717106U 20160708

DT - I

PA - DUJIANGYAN HUINONG BIOLOGICAL TECH CO LTD

TI - Sewage **treatment** unit with fungus function disappears

AB - The utility model discloses a sewage **treatment** unit with fungus function disappears,

which comprises an equipment housing, the switch electric connection that **ultra -violet** lamp and equipment casing outer wall were equipped with, the outer wall symmetry of equipment casing is equipped with the fixed slot, the inboard of fixed slot is equipped with the plastics spiral pipe, the one end and the play liquid baffle fixed connection of plastics spiral pipe, be equipped with a plurality of liquid micropores on the play liquid baffle, go out the inner wall fixed connection that the liquid baffle passed equipment casing lateral wall and equipment casing, the other end of plastics spiral pipe with push away handle fixed connection, push away the grab handle outside bonding rubber pad of handle, the plastics spiral pipe is close to the one end that pushes away the handle and is equipped with the fungus liquid feed liquor pipe that disappears, it presss from both sides to be equipped with the stagnant **water** on the fungus liquid feed liquor that the disappears pipe. This sewage **treatment** unit with fungus function disappears, simple structure, convenient operation can be thoroughly effectually kills the bacterium.

11/475 © EPODOC / EPO

- PN - [CN205773501U](#) U 20161207
- PR - CN20162490233U 20160525
- AP - CN20162490233U 20160525
- DT - I
- PA - UNIV HARBIN ENG
- TI - Photocatalytic **treatment** contains heavy metal wastewater's device
- AB - An object of the utility model is to provide a photocatalytic **treatment** contains heavy metal wastewater's device, including urceolus, inner tube, the outside of urceolus installation inner tube, the inner tube is glass or quartz glass, installs the light source between inner tube and the urceolus, the fiber lamp may be seen for the **ultra -violet** lamp to the light source, and the top of inner tube sets up the inlet tube, tip installation **water** -locator under the inlet tube, and the below of inner tube sets up the outlet pipe, and photocatalysis is packed to inner tube liam dress perforated plate and filter cloth on the perforated plate. The utility model discloses spraying photocatalysis surface with sewage, can increasing the dissolved oxygen of aquatic, be favorable to going on of light catalytic reaction, add the lotion inlet tube, metal simple substance under the recoverable deposit on the photocatalysis plays regeneration photocatalysis's effect, extension photocatalysis's live time.

12/475 © EPODOC / EPO

- PN - [CN106455638](#) A 20170222
- PR - SE20140050700
20140610; WO2015EP62555
20150605
- AP - CN2015831447 20150605
- DT - I
- CCI - [A23L2/46](#) ; [A23L2/50](#) ;
[A23L2/60](#) ; [A23L3/28](#)
- CUA - [A23V2002/00](#)
- PA - TETRA LAVAL HOLDINGS &

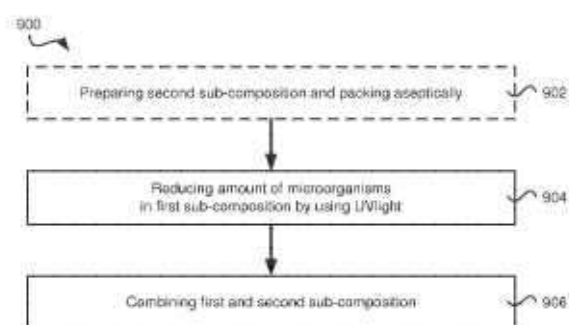


Fig 9

FINANCE

- TI - System and method for processing liquid or semi-liquid food products
- AB - A system for processing a liquid or semi-liquid food product is provided. The food product is a composition of a first sub-composition having a low concentration, such as **water** or a sugar solution, and a second sub-composition having a high concentration, such as a concentrate. The high concentration is greater than the low concentration. The system comprises an **ultra violet** (UV) light **treatment** apparatus for reducing an amount of microorganisms in the first sub-composition and a blending apparatus for aseptically combining the first sub-composition and the second sub-composition into the liquid or semi-liquid food product.

13/475 © EPODOC / EPO

- PN - [WO2017192080](#) A1 20171109
- PR - SE20160050595 20160503
- AP - WO2017SE50034 20170116
- DT - *; Rep
- CCI - [C02F1/325](#)
- CCA - [C02F2103/008](#) ; [C02F2201/3227](#) ; [C02F2201/324](#) ; [C02F2303/20](#) ; [C02F2303/22](#)
- PA - WALLENIIUS WATER AB [SE]
- TI - LIQUID **TREATMENT** SYSTEM COMPRISING A UV LIGHT ULTRAVIOLET LAMP
- AB - A liquid **treatment** system (2) comprising an elongated liquid **treatment** chamber (4) for receiving fluid, e.g. **water**, to be treated, the **treatment** chamber is provided with at least one **ultra-violet** (UV) light **treatment** lamp (6) arranged within an elongated protective UV-transparent sleeve (8) along a longitudinal axis A and having an outer surface (10) and an essentially circular cross-sectional shape. The liquid **treatment** system (2) comprises a cleaning arrangement (12) comprising at least one cleaning unit (14) configured to be moved by a driving arrangement (16) structured to drive the cleaning unit (14) in said **treatment** chamber (4) along said sleeve (8). The cleaning unit (14) comprises a first cleaning member (18) configured to be circumferentially arranged around said sleeve (8) and being resiliently biased to said outer surface (10)

by a biasing member (20). The first cleaning member (18) is structured to remove harder material, e.g. scaling, from the outer surface (10) of the sleeve (8) and is made from a spun, entangled, knitted or woven fibre cleaning material, and that the first cleaning member (18) has a tube-like shape, such that a cleaning area is obtained. The biasing member (20) is made from a material structured to apply an essentially even biasing force to substantially the entire cleaning area.

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- PN - [AU2016102108](#) A4 20170119
- PR - AU20160102108 20161213
- AP - AU20160102108 20161213
- DT - I
- PA - WOODRUFF CAMERON; HUNT JAMES
- TI - **Treatment** of Perfluorinated compounds in ground **water** using Reverse Osmosis and **Ultra Violet** filtration.
- AB - Abstract The Woodruff-Hunt PFOS/PFOA remediation process is used to remove PFOS/PFOA from home drinking **water** in areas where it is not cost effective to provide reticulated **water**. This process has the added advantage of removing the PFOS/PFOA over time rendering the ground **water** potentially safe for human consumption once again. Ss - Treated **Water** returned to the around Q) >4 0 (0) 4. cu -C cCc)

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- PN - [CN205821130U](#) U 20161221
- PR - CN20162804407U 20160728
- AP - CN20162804407U 20160728
- DT - I
- PA - JINING FENG PENG ENG EQUIPMENT CO LTD
- TI - Biological, chemical integrative sewage **treatment** device
- AB - The utility model discloses an it is biological, chemistry integrative sewage **treatment** device, it includes effluent **water** sump and microbiological **treatment** case, the effluent **water** sump upper end is provided with the medicine and adds the hole, the effluent **water** sump lower extreme is provided with latent hydroelectric machine, latent hydroelectric machine upper end is provided with the frame, be provided with driving shaft and driven shaft in the frame, be connected through drive gear between driving shaft and the driven shaft, driving shaft and driven shaft upper end are connected with stirring vane, be provided with the electrical heating board in the stirring vane, the box is drawn together to the microbiological **treatment** case and bag, the box upper end is provided with **ultra -violet** lamp and **water** inlet, be provided with a plurality of biofiltration membrane in the box, the box lower extreme is provided with the microorganism and adds hole and delivery port, carry out the preliminary **treatment** through chemical mode to sewage, fine being got off by the deposit of feasible inside pollutant, after filtering through filter equipment, let sewage through the microorganism case, make sewage reach the standard of emission, can effectual processing industry and domestic sewage, **water** resources are protected, and is worthy of popularization.

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