

Search history

Search 1: TAC= (hydrocarb* and separat* and electro*) (Results 3328)
Search 2: 1 and PD<20160329 (Results 2912)
Search 3: 2 and TAC=(shock* and wave*) (Results 20)

1) Family number: 42001176 (US2009301601 AA)

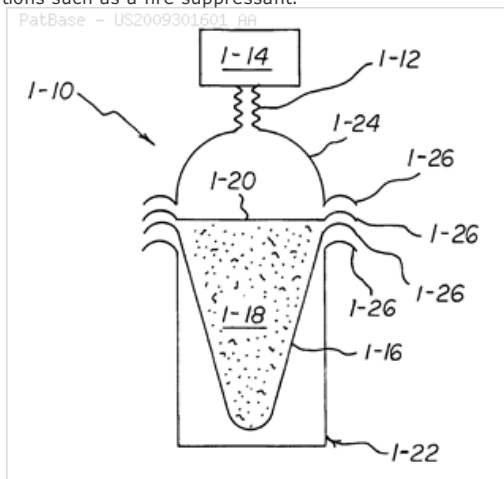
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Title: APPARATUS AND METHOD FOR USING TETRAZINE-BASED ENERGETIC MATERIAL

Abstract: The present invention comprises apparatus and methods employing a gas produced from a tetrazine-based energetic material such as that known as "BTATz" containing 3;6-BtS(1H-1,2,3,4-Tetrazol-5-ylamino)1-,2,4,5-tetrazine 3;6-BtS(1H-1,2,3,4-Tetrazol-5-ylamino)1-,2,4,5-tetrazine or salts thereof. The tetrazinebased energetic material is ignited through the use of a percussion cap, a piezoelectric crystal or a battery-supplied electric spark or by encapsulating it in a container that is then exposed to a burning flame. The gas produced upon ignition is employed a propellant such as to inflate life rafts, life vests, emergency evacuation slides, tires, air bags and other inflatable devices. The gas produced upon ignition is alternatively employed to power an engine and many other applications such as a fire suppressant.

Classifications:

International (IPC 8-9): A62C13/00 A62C13/22 A62C13/62
A62C19/00 A62C39/00 A62C99/00 A62D1/00 A62D1/06 B01J7/00
B60R21/26 B60R21/264 B63C9/00 B63C9/08 B65B31/00 C06B45/00
C06B45/10 C06D5/00 C06D5/04 F02B45/00
CPC: C06B43/00 C06D5/04 C06D5/06 Y02P20/129 Y02T10/12
US: 102/530 102/530S 123/24.00RS 123/24R 141/38 141/38P
169/12 169/12S 280/741 280/741S



Family:

Publication number	Publication date	Application number	Application date
AU2007339414 AA	20080710	AU20070339414	20070213
CA2642760 AA	20080813	CA20072642760	20070213
EP1993977 A1	20081126	EP20070861234	20070213
EP1993977 A4	20100120	EP20070861234	20070213
JP2009526649 T2	20090723	JP20080555332T	20070213
US2009301601 AA	20091210	US20070279005	20070213
WO08082427 A1	20080710	WO2007US03971	20070213

Priority:

US20060773382P 20060213 US20060855987P 20061101 US20060859058P 20061115
WO2007US03971 20070213 US20070279005 20070213

Probable Assignee: HALKEY ROBERTS CORP

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 855199 (US3427978 A)

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Title: ELECTRO-HYDRAULIC TRANSDUCER

Abstract: ABSTRACT OF THE DISCLOSURE

An electro-osmotic closed system is provided comprising a container having two chambers completely **separated** by a porous diaphragm having pores permitting flow between the chambers with pore openings not larger than .10 to 10.0 microns. The system is completely filled with a purified, non-aqueous liquid having a **hydrocarbon** portion and a polar group and having a dielectric constant between 5 and 100. **Electrodes** are provided in said liquid on opposite sides of the diaphragm and these are chemically inert to the liquid when subjected to an electrical potential. An electrical conductor leads from each **electrode** to a point outside of the container. A small amount of a redox material is added to the nonaqueous liquid so that when an electrical potential of opposite polarity is applied to the two **electrodes**, the oxidation occurring at the anode substantially exacting balances the reduction occurring at the cathode so that the composition of the ionizing liquid remains in operational stable condition over a period of a number of hours during the continuous application of an electrical potential of 200 volts and higher to the **electrodes**. In one application of the invention, an electrical potential between 200 and 1500 volts is applied to the **electrodes** causing an electro-kinetic effect which tends to cause movement of the ionizing liquid through the pores of the diaphragm. In another application of the invention, means is provided for applying a pressure between the two liquid filled chambers whereby to produce an electrical potential between the two **electrodes**. This application is a continuation-in-part of our copending application Ser. No. 393,834, filed Sept. 2, 1964, now abandoned.

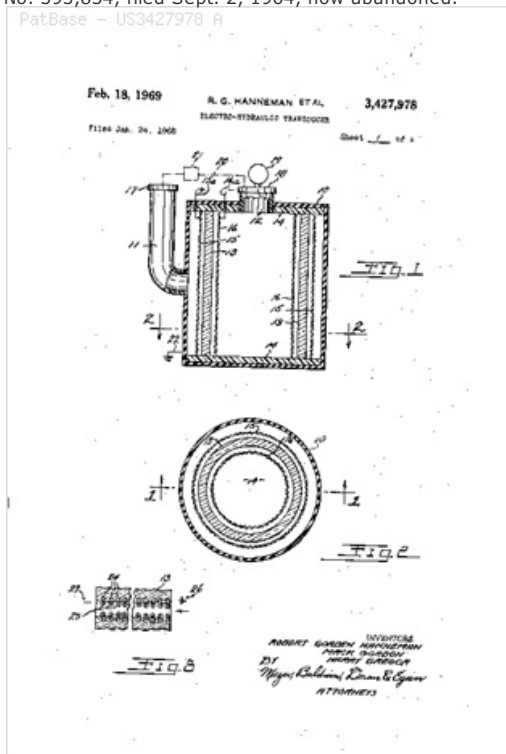
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International (IPC 1-7): B01D17/06 B01K3/10 F15B5/00 F15C1/04 F15C3/00 F15D1/08 F16C33/10 F16N7/30 G01P1/10 G06D1/02 H01G9/02 H02N4/20

CPC: B01D61/56 F02B3/06 G01P1/10

US: 103/1 204/296 310/300 361/434 417/48

**Family:**

Publication number	Publication date	Application number	Application date
DE1553058 A1	19700226	DE19651553058	19650901
FR1446109 A	19660715	FR19650030186	19650902
GB1122586 A	19680807	GB19650036638	19650826
US3427978 A	19690218	US19680700149	19680124

Priority:

US19640393834 19640902 FR19650030186 19650902 US19680700149 19680124

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Inventor(s): HARRY GREGOR ; MACK GORDON ; ROBERT GORDEN HANNEMAN

3) Family number: 30128525 (US2002182101 AA)

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Title: PROCESS AND DEVICE FOR PLASMA SURFACE TREATMENT

Abstract: In the present invention, a process for plasma treatment of an object's surface to be treated comprises the creation of a plasma, the application of the plasma to the surface to be treated, and the excitation of the surface to be treated, such that it undulates. The energy for excitation of the surface may come from the process creating the plasma, from an external source, or from a combination of these two sources. The vibration of the surface to be treated preferably takes place while the plasma is being applied to the surface to be treated, but depending on the treatment to carry out, it may also take place just prior to and/or just after the application phase.

Classifications:

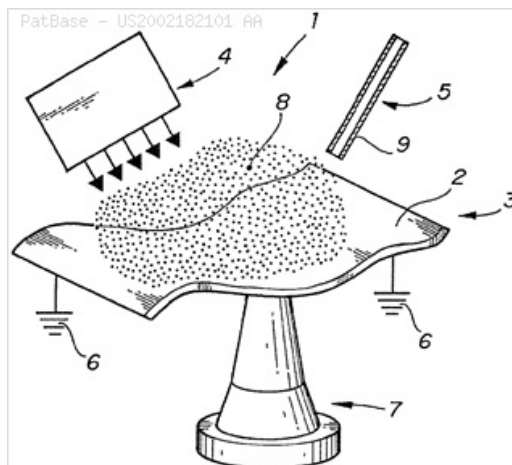
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International (IPC 1-7): A61L A61L0/00 A61L2/00 A61L9/00 A62B7/08 B01J19/08 B01J19/12 B01J2/00 B01J2/16 B06B1/00 B08B7/00 B65D23/02 B65D23/08 B65D25/34 C23C16/00 H01J1/00 H01J37/32 H01L21/304 H01L21/3065 H05F3/00 H05H1/24 H05H1/30

CPC: B01J2/006 H01J37/32321 H01J37/3244 H01J37/32825

US: 118/723 118/723.00RS 118/723E 118/723MP 118/723R 204/164 216/2 216/2S 216/67 216/67S 422/121 422/121S 422/123 422/123S 422/128 422/128S 422/186.04 422/186.040S 422/186.05

422/186.050S 422/22 422/22S 422/28 422/28S 422/32 422/32S
422/4 422/4P 427/212 427/215 427/535 427/540 427/560 427/569
427/569P 427/600 118/723.0MP



Family:

Publication number	Publication date	Application number	Application date
AT373314 E	20070915	AT20020708589T	20020326
AT301496 E	20050815	AT20020762661T	20020902
AU2002242923 AA	20021008	AU20020242923	20020326
BRPI0208242 A	20040413	BR2002PI08242	20020326
CN100437883 C	20081126	CN20028007383	20020326
CN1511333 A	20040707	CN20028007383	20020326
DE60205493 D1	20050915	DE20026005493T	20020902
DE60205493 T2	20060601	DE20026005493T	20020902
DE60222391 D1	20071025	DE20026022391T	20020326
DE60222391 T2	20080605	DE20026022391T	20020326
EP1374276 A2	20040102	EP20020708589	20020326
EP1374276 B1	20070912	EP20020708589	20020326
EP1420876 A2	20040526	EP20020762661	20020902
EP1420876 B1	20050810	EP20020762661	20020902
ES2294112 T3	20080401	ES20020708589T	20020326
ES2247370 T3	20060301	ES20020762661T	20020902
IN01223KN2003 A	20071109	IN2003KN01223	20030924
IN226715 B	20081226	IN2003KN01223	20030924
JP2004527077 T2	20040902	JP20020575023T	20020326
JP2005503250 T2	20050203	JP20030522692T	20020902
MXPA03008615 A1	20050307	MX2003PA08615	20020326
RU2003131340 A	20050227	RU20030131340	20020326
RU2283667 C2	20060920	RU20030131340	20020326
US2002182101 AA	20021205	US20020080495	20020222
US2003165636 AA	20030904	US20030397674	20030326
US7288293 BB	20071030	US20030397674	20030326
US2004238345 AA	20041202	US20040486888	20040212
US7172790 BB	20070206	US20040486888	20040212
WO02076511 A2	20021003	WO2002IB01001	20020326
WO02076511 A3	20030417	WO2002IB01001	20020326
WO03018185 A2	20030306	WO2002IB03551	20020902
WO03018185 A3	20030918	WO2002IB03551	20020902

Priority:

EP20010810318	20010327	EP20011810318	20010327	EP20010120974	20010831
EP20011120974	20010831	EP20010810915	20010920	EP20011810915	20010920
US20020080495	20020222	WO2002IB01001	20020326	EP20020708589	20020326
WO2002IB03551	20020902	EP20020762661	20020902	US20030397674	20030326

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

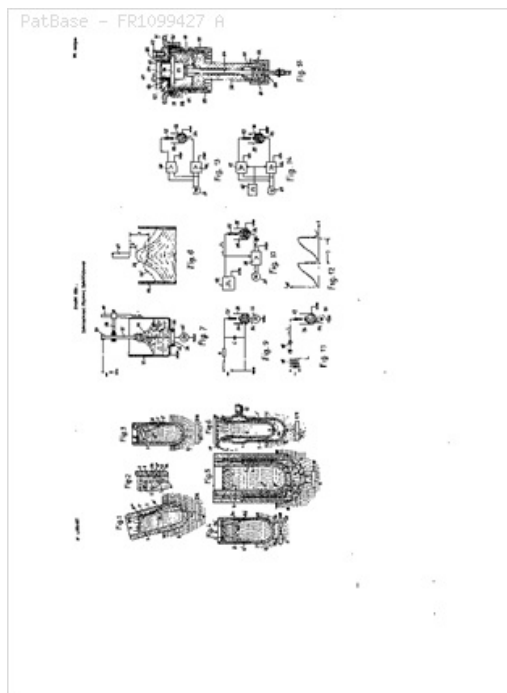
Abstract: Source: FR1099427 A **Machine translation:** [Source: Claim 1] 1. As the transmitter Sonic 5 used a piezoelectric resonator in the form of a plate of quartz with a cross-X. This quartz plate had an almost elliptical shape and a radiating surface of about 2a cm². It was powered by a generator to crts self-excited at equilibrium, whose frequency is elevait mounting to 750 kHz. The generator was manipulated in the form of pulses, case or the report of pulses (ratio between the duration of the pulse and the duration of elevait pause) is a1/3 and power of Pulse 2 kVA. Sonic energy supplied by the resonator in a water bath 4 serving as a medium transmitter was in pulse tip of about 250 W. Using a hub in liege desired shape- read, a portion of this rassemblee energy was on a section of about 1 cm², such that at that location is obtained a sonic intensity of 400 to 500 W/cm². In the vicinity of the burst product it forms a strong fog and a few droplets of water insulated were projected up to 2 m in height. For the preparation of the dispersion colloid use soot, previously scope to red during an extended time, in order to remove any residue **hydrocarbon** that could be there. Thereafter soot was mixed with distilled water and it is dispersed in a field ultra-sonic low intensity. The dispersion obtained is a dark black in green with a red shade-brunatre and incident light by transparency. The specific weight of the dispersion is from about 1.0.n g/cm³ to 200. This dispersion is then diluted with distilled water in the ratio 1: 5. The liquid obtained is then introduced into the container 1 and the container is immersed in the burst of the liquid 4 such that the axis of the container makes an angle determined with the sonic field gradient in the burst. In the treatment by the sonic **waves** which follows, the particles too large the suspension is decreased up that are happening the conditions for conversion into the crystal structure instead of the two sonic 6' and 6 Contact 7 radiation". In this way it occurs at a meeting place a sequence of particles in crystals, which is perceptible acoustically by knocking acute. In the field of liquid forms a current intermittent sonic that conveys the particles successively to the place of treatment, so that they are not a little submitted to the process of sequencing. By applying the method in question is obtained firstly much more rapidly than by methods in use up here a degree of dispersion to the coloring of the liquid high recognizable. After a sonic irradiation of a few minutes, the microscopic examination of the liquid 2 present a large number of crystals which partially, in the form of small curved 10-3 mm diameter, are just decelables to the human eye. The review of the crystals formed reveals that they are resistant to acids, alkalis and they have a light yellow fluorescence ultra-violet, they have an extraordinarily high hardness, a very high combustion temperature and power, and that very high coolant as regards the density also they correspond to the diamonds, since they are sinking in the tetrabromoacetylene. Crystals of this kind can be used for example for the manufacture of abrasives value. In the same way we can also, with the apparatus shown in figure 5, to the formation of crystals and between acidulaires crystals are obtained with 10 other- mm diameter and 0.5 mm long. The variants of the method and apparatus described by means of figures 7 to 15 leading to the analognes results, but they make possible a significant increase in performance. This higher efficiency could be of mainly to the fact that the effects are not limited, as in the variants of the method and apparatus of FIGS. 1-6, a thin surface layers, but on the contrary occur within a larger volume., [0003] The invention relates to a method for treating particles, distributed in a liquid, by means of mechanical vibrations, this method has the following features, pre used sepi. particularly or in combination: a. Is exerted on the particles, in combination with a mechanical variation of the genus sonic acting on the liquid and impart the particles which are distributed a vibratory motion a predetermined direction essentially, a force which is directed at least a component additional parallel to the direction of the vibratory motion mentioned, but which differs with respect to the spatial distribution of the active forms of this vibratory motion, such as neighboring particles, among which one are of preponderante manner under the influence of the vibratory motion of the liquid, the other on the contrary are of preponderante manner under the influence of the action of additional force, are moved one relative to the other with great energy; b. The additional force on the particles is also due to vibration of the genus Sonic, in the sense that a thin layer of liquid, solid body, is driven by two trains approaching a **wave** of the genus sonic forming between them an angle or small being oriented parallel with respect to one another, one of them so preponderante attacker to one of the faces of the layer and the other, propagating into the solid substance, attacking so preponderante the other face of the layer, whereby neighboring particles in the layer of liquid which, depending on their position in the layer, are subjected more thoroughly to the influence of one or the other of these two trains, are moved relative to each **wave** Other with great energy; c. the second series of **waves** is generated in the liquid same; d. The liquid is introduced between two solid walls has reduced distance from one another and in that it is formed in this way, a mechanical vibration of a thin layer of the genus sonic being generated in each of the two walls; e. The two trains of **waves** of the genus sonic drift of a single series of **waves** by split of the latter and may be engendres by transmitters distinct sonic; i. The additional force is exerted by an alternating electric field, for example, including a component directed at least is parallel to the direction of the vibratory motion mentioned; g. The AC electric field at the same frequency as the vibration of the genus sonic; h. The electrical field acts on the surface of the liquid in treatment through a gaseous space ionized; i. The electric field is a field that is continuous between an **electrode** establishes disposed outwardly from the liquid in treatment and the top of a burst of liquid generated by the vibration of the genus sonic, the voltage of the **electrode** being chosen so that the intermittent arcing occurs; j. The alternating electric field is generated between an **electrode** disposed outside of the liquid in treatment and the top of a burst of liquid generated by the vibration of the genus sonic; k. It operates with a formation of intermittent arc between the **electrode** and the top of the burst; l. The liquid is passed into a DC current to the place of treatment; m. The fluid to be treated by vibrations of the genus sonic is put under a static pressure with a view to avoiding a formation of cavitation; n. The vibrations of the genus sonic are produced discontinuously in the form of pulses; o. The alternating electric field is strongly manipulated in the form of pulses, preferably with a high pulse synchroniquement, in the form of pulses, the vibration of the genus sonic;..p. The method is used for the production of fine dispersions by submitting a coarse dispersion treatment, the brisees particles being by the kinetic energy of collision; q. The method is used for the destruction of microorganisms, by subjecting the treatment a liquid containing these organizations, high intensity-micro driving vibrations leading to the inhibition of the vital functions of micro-organisms; r. The method is used for triggering and execution of a process of crystallization by dispersing finely the substance has a liquid and the binding to crystallize in the crystallization by means of kinetic energy of the collisions of particles; s. There are treated a dispersion of carbon to generate carbon crystallizes, in particular diamonds artificial; the invention also relates to a device suitable for the implementation of the method specified above, this device having the following features, used **separately** or in combination t. Eomprend it a container containing the liquid to be treated, with a bottom a curved surface and being immersed in a bath of liquid in which there is a sonic transmitter or ultra-sonic, which emits radiation against the surface of the bottom of the pient reci-, the container is disposed above the sonic transmitter or ultra-sonic in a biased position such that the radiation penetrating liquid to be processed sonic comes into abutment against the side wall of the container and acts in this spot on a thin layer of liquid together with the sonic radiation conduct in the sidewall; u. It includes a container containing the liquid to be treated, in which the walls are subjected to the vibrations of a first emitter sonic or ultrasonic and by a second sonic transmitter or ultra-sonic which is located in the liquid to be treated and which is oriented such that it directed against a sidewall of the container a sonic radiation that acts, together with the sonic radiation generated in the side wall of the container, on a thin layer of liquid; v. Eomprend it two solid body preferably cylindrical, nested one in the other, -that determine them a cavity filled capillary liquid to be treated, and at least one transmitter sonic or ultra-sonic that sets the two walls of the cavity sonic vibrations or ultrasonic distinct capillary throughout the layer of liquid contained in this space; w hair. Two hollow cylindrical containers are emhoites the one into the other, one of them being provided with an input device and other of an output device for the fluid to be treated, the inner container-having in the bottom an opening that allows the passage of liquid from one container to another x. It includes a container for the fluid to be treated in the lower portion which is disposed a transmitter sonic generating an outpouring of liquid, and in the top **electrode** which penetrates a in tension such that its end is vi-a-vis the solnmet of burst;..y. In the circuit of the abovementioned **electrode** is established a resistance to positive temperature coefficient; z. It is resorted to a pulse generator which supplies the **electrode** and simultaneously manipulates strongly, in the form of pulses, the generator powering the transmitter sonic; aa. A common alternating current generator powers, preferably via **separate** amplicateurs, the **electrode** and the sonic transmitter; bb. A device is provided for manipulation high pulse common two amplifiers, in the input circuits which is an ac generator output and the circuits of which are respectively connected to the electrode and sonic to the transmitter. The invention aims more particularly, certain modes of application, as well as some embodiments, said improvements; and it aims more particularly still, as novel industrial products, the devices of the type in question, with application of said pechonnements or suitable for the implementation of said methods, the etahissement elements and special devices at their own as well as the facilities including similar devices.

Classifications:

International (IPC 8-9): A23L3/26 A23L3/30 B01D9/00 B01J19/10

International (IPC 1-7): B01D9/02

CPC: A23L3/30 B01D9/005 B01J19/10



Family:

Publication number	Publication date	Application number	Application date
BE521380 A	00000000		00000000
FR1099427 A	19550905		19530711
LU32263 A	00000000		00000000

Probable Assignee: INTERNAT PHYSICAL ESTABLISHMEN

Assignee(s): (std): INTERNAT PHYSICAL ESTABLISHMEN

Assignee(s): INT PHYSICAL ESTABLISHMEN ; INTERNATIONAL PHYSICAL ESTABLISHMENT

5) Family number: 54958187 (EP2653527 A1)

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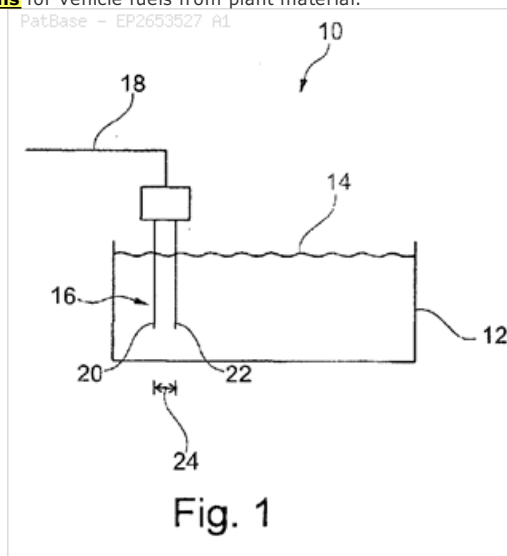
Title: EXTRACTION OF OIL BY PULSE DISCHARGES

Abstract: The system (10) comprises a receiving device (12) with a volume for receiving a liquid mixture (14), which has oil-bearing plant portions and a carrier liquid. The oil-bearing plant portions have cellular membranes that enclose areas with oil. An **electrode** pair (16) is provided in the receiving volume, where the **electrodes** (20,22) are arranged at a distance (24) from each other. A voltage supply device (18) is provided for supplying a voltage impulse to the **electrodes**. A spark is generated between the **electrodes**, such that a local vaporization of the carrier liquid is carried out. An independent claim is included for a method for extraction of oil for obtaining **hydrocarbons** for vehicle fuels from plant material.

Classifications:

International (IPC 8-9): B01D11/04 C10G3/00 C10L1/18

CPC: C10G2300/1014 C10G3/00 Y02P30/20



Family:

Publication number	Publication date	Application number	Application date
DE102012007500 A1	20131017	DE201210007500	20120417
EP2653527 A1	20131023	EP20130001813	20130409

Priority:

DE201210007500 20120417

Probable Assignee: EADS DEUTSCHLAND GMBH

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Inventor(s): (std): HECKENBERGER ULRIKE ; LENCZOWSKI BLANKA ; STEINWANDEL JUERGEN
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

6) Family number: 44269023 (US2010029709 AA) © PatBase

Title: NOVEL COMPOUNDS USEFUL FOR THE TREATMENT OF DEGENERATIVE AND INFLAMMATORY DISEASES

Abstract: A novel [1,2,4]triazolo[1,5-a]pyridine compound is disclosed that has a formula represented by the following: This compound may be prepared as a pharmaceutical composition, and may be used for the prevention and treatment of a variety of conditions in mammals including humans, including by way of non-limiting example, diseases involving cartilage degradation, bone and/or joint degradation, for example osteoarthritis; and/or conditions involving inflammation or immune responses, such as Crohn's disease, rheumatoid arthritis, psoriasis, allergic airways disease (e.g. asthma, rhinitis), juvenile idiopathic arthritis, colitis, inflammatory bowel diseases, endotoxin-driven disease states (e.g. complications after bypass surgery or chronic endotoxin states contributing to e.g. chronic cardiac failure), diseases involving impairment of cartilage turnover (e.g. diseases involving the anabolic stimulation of chondrocytes), congenital cartilage malformations, diseases associated with hypersecretion of IL6 and transplantation rejection (e.g. organ transplant rejection) and proliferative diseases.

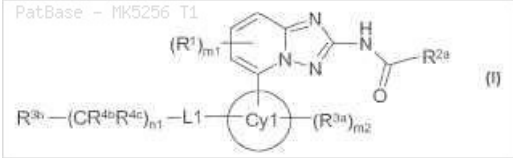
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A61K45/06 A61P A61P1/00 A61P1/04 A61P11/00 A61P11/02
A61P11/06 A61P17/00 A61P17/06 A61P19/00 A61P19/02 A61P19/04
A61P19/08 A61P19/10 A61P29/00 A61P35/00 A61P37/00 A61P37/02
A61P37/06 A61P37/08 A61P39/00 A61P41/00 A61P43/00 A61P9/00 A61P9/04 C07D C07D213/57 C07D249/00 C07D249/18 C07D295/02 C07D401/00 C07D401/12 C07D401/14 C07D417/10 C07D471/00 C07D471/04 C07D519/00 C471213/00 C471249/00 C4714/

International (IPC 1-7): A61K31/4192 A61K31/4196 A61K31/437 A61P1/12 A61P11/02 A61P11/06 A61P17/06 A61P19/02 A61P29/00 A61P35/00 A61P37/00 A61P37/06 C07D471/04

CPC: A61K31/437 A61K31/444 A61K31/4545 A61K31/4725 A61K31/496 A61K31/497 A61K31/4995 A61K31/501 A61K31/506 A61K31/5377 A61K31/5386 A61K31/541 A61K31/551 A61P1/00 A61P1/04 A61P1/12 A61P11/00 A61P11/02 A61P11/06 A61P17/06 A61P19/00 A61P19/02 A61P19/04 A61P19/08 A61P19/10 A61P29/00 A61P35/00 A61P37/00 A61P37/06 A61P37/08 A61P39/00 A61P41/00 A61P43/00 A61P9/00 A61P9/04 C07D471/04 A61K45/06 A61P37/02

US: 1/1 514/210.18 514/210.180P 514/210.21 514/218 514/228.5 514/228.500S 514/230.5 514/230.500S 514/233.2 514/233.200S 514/252.04 514/253.04 514/253.040S 514/255.05 514/275 514/303 514/303S 544/105 544/105S 544/127 544/127S 544/362 544/362S 544/58.2 544/58.200S 546/119 546/119S



Family:

Publication number	Publication date	Application number	Application date
AR072875 AA	20100929	AR2009P102793	20090722
AR077221 AA	20110810	AR2010P102236	20100624
AU2009273143 AA	20100128	AU20090273143	20090724
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AU2009273144 AA	20100128	AU20090273144	20090724
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AU2010264635 AA	20111222	AU20100264635	20100625
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BRPI0916862 A2	20160210	BR2009PI16862	20090724
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CN102459261 A	20120516	CN201080028413	20100625
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CO6491039 A2	20120731	CO20120005375	20120116
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CR20110673 A	20120209	CR20110000673	20111214
CY1113945 T1	20160727	CY20131100335T	20130424
CY1115569 T1	20170104	CY20141100572T	20140729
CY1115695 T1	20170125	CY20141100915T	20141104
CY1119711 T1	20180627	CY20171100784T	20170724
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IL216618 A0	20120229	IL20100216618	20100625
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Priority:

US20080135920P	20080725	US20080135920	20080725	US20090220685P	20090626
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US20140507396	20141006	US20160236578	20160815		

Probable Assignee: GALAPAGOS NV

Assignee(s): (std): BLANC JAVIER ; FLETCHER STEPHEN ROBERT ; GALAPAGOS N V ; HEINZ CO H J ; HODGES ALASTAIR JAMES ; JOUANNIGOT NOLWENN ; MENET CHRISTEL JEANNE MARIE ; SABA AND CO ; SMITS KOEN KURT ; VAN ROMPAEY LUC JULIAAN CORINA

Assignee(s): BIOFOCUS DPI ; BIOFOCUS DPI LTD ; GALAPAGOS NVBE ; GALAPAGOS SASU ; GILEAD SCIENCES INC ; H J HEINZ COMPANY ; HJ HEINZ CO

Inventor(s): (std): ALASTAIR JAMES HODGES ; BLANC JAVIER ; CHRISTEL JEANNE MARIE MENET ; CORINA ROMPAEY LUC JULIAAN VAN ; FLETCHER STEPHEN ROBER ; FLETCHER STEPHEN ROBERT ; HODGES ALASTAIR JAMES ; JAMES HODGES ALASTAIR ; JAVIER BLANC ; JOUANNIGOT NOLWENN ; KOEN KURT SMITS ; KURT SMITS KOEN ; LUC JULIAAN CORINA VAN ROMPAEY ; MARIE MENET CHRISTEL JEANNE ; MENET CHRISTEL JEANNE MARIE ; MENET CRISTEL JEANNE MARIE ; NOLWENN BLANC ; NOLWENN JOUANNIGOT ; ROBERT FLETCHER STEPHEN ; ROMPAEY LUC JULIAAN CORINA VAN ; SMITS KOEN KURT ; STEPHEN ROBERT FLETCHER ; VAN ROMPAEY LUC JULIAAN CORINA

Inventor(s): MENET CHRISTEL JEANNE MARIE BLANC JAVIER

Agent(s): ARENT FOX LLP; CARPINTERO MARIO; DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; HOFFMANN EITLE PATENT U RECHTSANWALTE PARTMBB; KLAUBER AND JACKSON; KLAUBER AND JACKSON LLC; MARKS AND CLERK; MAURICIO PATINO BONNET; NICHOL MARIA; NICHOL MARIA ZENAROSA; NORTON ROSE CANADA SENCRL SRL LLP; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; NUEKHET SERRA CORAL; OGILVY RENAULT LLP SENCRL SRL; PEREZ ELIANA; REINHOLD COHN AND PARTNERS; Sagittarius IP; SARGENT; SULEIMAN I AL AMMAR LAW OFFICE; TEUTEN ANDREW ET AL; TEUTEN ANDREW JOHN; ZHONGZI IP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS OF COMBINING A SERIES OF MORE EFFICIENT AIRCRAFT ENGINES INTO A UNIT, OR MODULAR UNITS

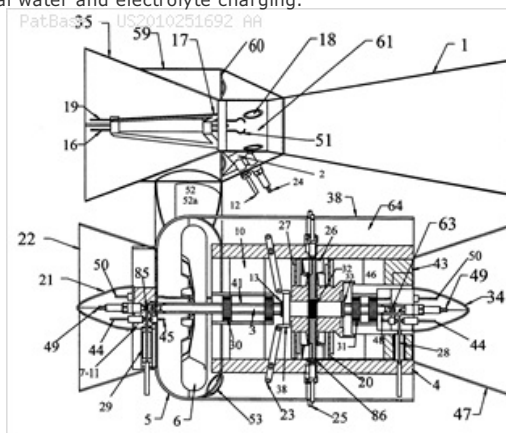
Abstract: The present invention generally relates to units of engines and more particularly to units containing a unique combined-cycle (combustion-detonation) "counter-rotation, anti-gyration, gyroscopic," turbine fan-jet/free-piston engine configuration for induced air supercharging and boosting the performance of novel Ramjet engines or Ramjet engine configurations by improving internal air-stream dynamics. These dynamics are the result of co-operative air stream intermixing through convergent, supercharge-attenuated, inducted, compressed, tuned, pre-heated ambient air. Achieved through the varying of the geometric structural form and the utilization of unique engines and air induction and propulsion conformations, aided with supplemental air, fuel, oxygen and optional water and electrolyte charging.

Classifications:

International (IPC 8-9): F02C7/36 F02K3/00 F02K7/08 F02K7/10 F02K7/16

CPC: F02K5/026 F02K7/16 F05D2220/10

US: 60/224 60/226.1 60/226.100P 60/39.15 60/767 60/767S



Family:

Publication number	Publication date	Application number	Application date
US2010251692 AA	20101007	US20070702047	20070205
US7937945 BB	20110510	US20070702047	20070205
US8453428 BA	20130604	US20110102355	20110506

Priority:

US20060854625P 20061027

US20070702047 20070205

US20110102355 20110506

Probable Assignee:

KINDE SR RONALD AUGUST

Assignee(s): (std):

KINDE SR RONALD AUGUST

Inventor(s): (std):

KINDE SR RONALD AUGUST

Agent(s):

YOUNG BASILE

Title: EXHAUST GAS CLEANING DEVICE FOR INTERNAL COMBUSTION ENGINES

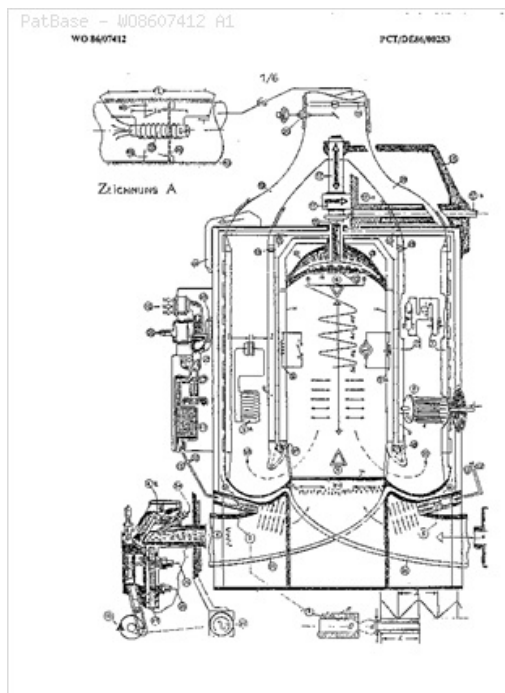
Abstract: The elimination of noxious gases is effected by additive exchange processes on elementary particles and electric charges of exhaust gas particles in a treatment process controlled by microprocessors, by the phasing of converted motor explosion waves + extra-subjectively produced ultrasonic waves + induced electrodynamic alternating fields in exhaust states with the effect of collision ionization and inductively coupled total plasma with charge neutralization; during total noxious gas transformation into non-poisonous natural material this leads to a reduction in the number of non-uniform exhaust gas processes and of varying efficiencies. The postcombustion of hydrocarbons and carbon monoxide presents no problem. The physical/energy process should above all lead to an extremely thorough elimination of NO-particles. The additive reactor process takes place after the motor in an annexed device, mainly consisting of a multi-stage reactor, designed for harmonic forces, US excitation, electromagnetic, electromechanical- and microelectronic components, whose system brings about a specific synergetic and dynamic elimination of noxious gases. This is due to the fact that combustion chemical energy potential differences of the energy carriers fed to the mechanical motor system are cancelled by positive entropy maximization in the exhaust gas with the aid of purely physical action quantities, without affecting proven criteria in the case of power machines with a rotating output shaft, with the free choice of fuel and without an increased consumption in the latter.

Classifications:

International (IPC 8-9): B01J19/12 F01N3/00 F01N3/08 F02B1/00 F02B1/04

International (IPC 1-7): F01N3/00 F01N3/08 F01N3/10 F01N5/04 F01N9/00 F02B75/10

CPC: B01J19/12 F01N3/00 F01N3/0892 F02B1/04 Y02T10/12



Family:

Publication number	Publication date	Application number	Application date
AT68240 E	19911015	AT19860903252T	19860616
DE3521462 A1	19861218	DE19853521462	19850614
DE3521462 C2	19931021	DE19853521462	19850614
DE3681897 D1	19911114	DE19863681897T	19860616
EP0227711 A1	19870708	EP19860903252	19860616
EP0227711 B1	19911009	EP19860903252	19860616
WO8607412 A1	19861218	WO1986DE00253	19860616

Priority:

DE19853521462 19850614 WO1986DE00253 19860616 EP19860903252 19860616
DE19863681897T 19860616

Probable Assignee: BRITZ GUENTER J 5480 REMAGEN DE

Assignee(s): (std): BRITZ GUENTER J ; BRITZ GUNTER J

Assignee(s): BRITZ GUENTER J 5480 REMAGEN DE

Inventor(s): (std): BRITZ GUENTER J ; BRITZ GUNTER J

Inventor(s): J BRITZ GUENTER

Designated states: AT BE BR CH DE FR GB IT JP LI LU NL SE US

9) Family number: 447604 (US3458417 A)

© PatBase

Title: PREPARATION OF CARBON PARTICLES ELECTROHYDRAULICALLY

Abstract: ABSTRACT OF THE DISCLOSURE

A process is disclosed for making pigments of carbon and carbonaceous material from a liquid which is composed of a thermally decomposable organic material which may contain water. A capacitive spark discharge of an energy level of several hundred joules or more between spaced **electrodes** submerged in the liquid decomposes the liquid organic material to produce the carbon particles while the steep, high energy **shock wave** which is also produced by the discharge breaks down the particles to produce the suspension. The suspensoid is useful in printing inks and the like.

Classifications:

International (IPC 8-9): B01J19/08 C01B31/00 C09D11/02

International (IPC 1-7): C01B31/00 C01B31/02 C07C3/24 C09D11/02

CPC: B01J19/088 B02C2019/183 C01B32/00 C09D11/037

US: 204/168 204/173

Family:

Publication number	Publication date	Application number	Application date
DE1667519 A1	19710616	DE19671667519	19670113
FR1514421 A	19680223	FR19670092264	19670124
GB1162104 A	19690820	GB19660054783	19661207
NL6701097 A	19670725	NL19670001097	19670124
US3458417 A	19690729	US19660522360	19660124

Priority:

US19660522360 19660124

Probable Assignee: GEN ELECTRIC

Assignee(s): (std): GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY

Inventor(s): (std): ALLEN MERTON ; DEIBER JACK

Inventor(s): JACK DEIBER ; MERTON ALLEN

Title: Pulsed in situ exothermic **shock wave** and retorting process for **hydrocarbon** recovery and detoxification of selected wastes

Abstract: An active combustion zone is established in situ within a permeable **hydrocarbon** formation. The permeable formation is periodically charged with a combustible gas, and is thereafter subjected to a high pressure pulse produced by detonation of the combustible gas within an injection well. The periodic pressure pulses drive the combustible gas into the in situ combustion zone. Combustion is sustained by injection of an oxidant. The injection of oxidant is terminated periodically, and the injection well along with the surrounding formation is pressurized and saturated with the combustible gas mixture. The combustible gas mixture is displaced through the permeable formation in advance of the combustion flame front in response to a high pressure pulse produced by detonation of the pressurized combustible gas within the injection well. In the preferred embodiment, the combustible injection gas is a mixture of hydrogen gas and chlorine gas. As the hydrogen/chlorine gas mixture undergoes combustion, a large volume of high pressure, high temperature hydrogen chloride gas is produced, together with an aqueous solution of hydrochloric acid. The hydrochloric acid is forced into the surrounding permeable formation, and reacts with the carbonaceous materials to **separate** nitrogenous, sulphurous and arsenic compounds from the liquid oil product, by precipitation during distillation.

Classifications:

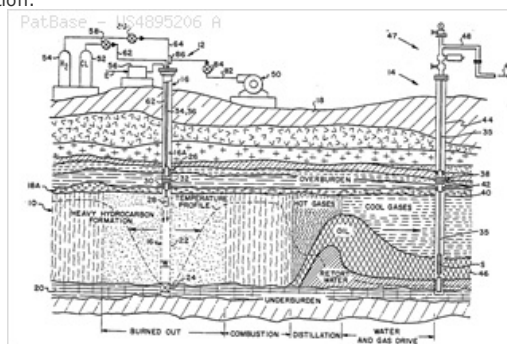
International (IPC 8-9): C09K8/60 E21B43/16 E21B43/247

International (IPC 1-7): E21B43/00 E21B43/16 E21B43/243

E21B43/263 E21B43/27

CPC: C09K8/60 E21B43/247

US: 166/259 166/260 166/270 166/270.1 166/271 166/299 166/300 166/307 166/63 166/65.1



Family:

Publication number	Publication date	Application number	Application date
CA2008826 AA	19900916	CA19902008826	19900129
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US4945984 A	19900807	US19890393375	19890814

Priority:

US19890324398 19890316

US19890393375 19890814

CA19902008826 19900129

Probable Assignee:

PRICE ERNEST H

Assignee(s): (std):

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Title: METHOD AND SYSTEM FOR REUSING MATERIALS AND/OR PRODUCTS BY PULSED POWER

Abstract: The invention relates to a method for reusing materials and/or products by pulsed power according to which a series of electrical discharges are generated between at least two **electrodes** in a reactor containing an ambient liquid as well as the materials and/or products to be reused, characterised in that the energy of said electric discharges, the voltage between the **electrodes**, the switching time and the frequency of the discharges are selected such that said discharges generate electric arcs that pass through the materials and/or products to be reused, and mechanical **shock waves** that propagate across the materials and/or products to be treated in the reactor. The result is fragmentation, pulverisation, dispersion and **separation** of the elements that make up the materials and/or products to be reused. The invention also relates to it device for implementing said method.

Classifications:

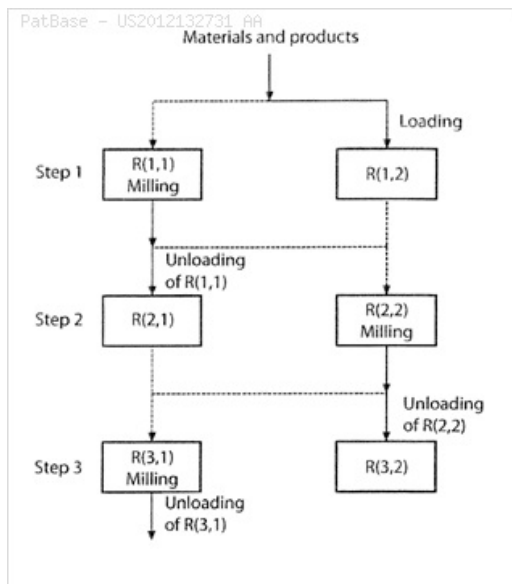
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AU2010212876 AA	20110901	AU20100212876	20100211
AU2010212876 BB	20150430	AU20100212876	20100211
AU2010212878 AA	20110901	AU20100212878	20100211
AU2010212878 BB	20150528	AU20100212878	20100211
CA2752216 AA	20110810	CA20102752216	20100211
CA2752216 C	20171024	CA20102752216	20100211
CA2752217 AA	20100819	CA20102752217	20100211
CA2752217 C	20180508	CA20102752217	20100211
DE602010024884 D1	20150709	DE201060024884T	20100211
EP2396116 A1	20111221	EP20100703294	20100211
EP2396116 B1	20150527	EP20100703294	20100211
EP2396117 A1	20111221	EP20100703873	20100211
EP2396117 B1	20180425	EP20100703873	20100211
EP2396117 B8	20180606	EP20100703873	20100211
ES2546056 T3	20150918	ES20100703294T	20100211
ES2680902 T3	20180911	ES20100703873T	20100211
FR2942149 A1	20100820	FR20090050945	20090213
FR2942149 B1	20120706	FR20090050945	20090213
JP2012517891 T2	20120809	JP20110549568T	20100211
JP2012517892 T2	20120809	JP20110549570T	20100211
JP5734875 B2	20150617	JP20110549570T	20100211
US2012132731 AA	20120531	US20100201197	20100211
US9120101 BB	20150901	US20100201197	20100211
US2012132732 AA	20120531	US20100201200	20100211
US8746598 BB	20140610	US20100201200	20100211
WO10092134 A1	20100819	WO2010EP51750	20100211
WO10092136 A1	20100819	WO2010EP51752	20100211
WO10092136 A8	20101021	WO2010EP51752	20100211
ZA201105909 A	20120328	ZA20110005909	20110812

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Title: SYSTEM FOR UNDERGROUND COAL MINING (Machine translation)

Abstract: Source: RU2007126030 A **Machine translation:** (Claim 1) 1. System for underground coal mining, comprising a casing with a lid and spigot located in the rock, is placed inside the tube located in the air in coal, placed in it detonation **wave** or electric compressor cylinders and cooling jackets turning into the tapered portion and the nozzle cap with the intake valves, springs and limiters, electric pulse generator is connected to the **electrodes** combined nozzle and nozzle-detonators and an electrical current transportation system and pumping electrically conducting fluid and fuel placed in it with pumps and pipes pressurized inert gas that passes into the nozzle, held together with a tube of compressed air and a shaft placed in the elongated cylinder with pipe air and inert gas, a rotor located on the lid of an elongated cylinder with universal shaft, sealed with him wedges shaft contains earring connects to the swivel hook that is connected to the traction rope placed on derrick crown block pulleys and winches, tower mounted on wheels with traction motors for movement on rails, pipe casing is connected to the gas purification and **separation** smolokondensatsii connected to the drum cooling and power plants, characterized in that it is equipped with a detonation **wave** or **wave** electric compressor with cylinders and cooling jackets evenly spaced around the circumference, on the one hand turning into the conical part of the nozzle and the Hub of **shock waves**, and the other placed in the covers air intake valves with springs and stops, the cylinders fitted with combined nozzles placed in series with each other, for the injection of a mixture of **hydrocarbon** vapors and fumes conducting liquid and positioned adjacent to them-injectors detonators injection jets conducting liquid jets with a combined fuel injectors supplied or water injection nozzles and pipes, within which are set screws, **electrodes** placed in cylindrical channels made of electrically insulating material, communicating with nozzles directed at an angle to each other.

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RU2007126030 A	20090120	RU20070126030	20070709

Priority:

RU20070126030 20070709

Probable Assignee: ATAMONOV ALEXANDER SERGEEVICH

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Title: PROCEDURE AND DEVICE FOR THE PRODUCTION OF OBJECTS OF CHOCKS MATERIALS (Machine translation)

Abstract: Source: DD140121 A2 **Machine translation:** [Source: claim 1] ¶ P B-\$2 d / 191 129 invention entitled: 1 processes for the production of goods ' from faserver-strengthened materials, in particular from layers or supervisory tragsschichten from £ a server tuerkten plastics and on their materials of even of different chemical context composition and/or density, where the 11 materials in the required composition, form, quantity and unit of time the various stages of manufacture and before - directions led to and there or, processes where with hardener, accelerator, and/or Akti - vatoren or sensitizers or Thixotropiermitteln or similar mixed materials and/or the ski nights on stationary or moving or transporting or machined surfaces of materials, cores, or manufacturing position form or be brought into this and the forming and/or soaking and wetting, especially of reinforcement materials with the preferably from unsuitable saturated polyesters or epoxy resin existing binders and their bubble-free compression and direction through this kinetic energy is periodically transferred preferably performed in form of mechanical vibrations, with simultaneous or subsequent forming or strengthening, preferably by power, particularly through appropriate electromagnetic **waves**, and in which the mechanical vibrations transmitted by elastically deformable thin layers on the materials, in particular for the production of replace Shen or UltraschallSchwingungen and an air bubble-free intimate bond in the materials, in and / or between the layers and the orientation of the tools sreeja fkomponenten in plastic, after Pafouf 43 percent * 4) t marked by the fact that depressurized an open preferably lockable single or multipart trained, put or already-warmed manufacture form a core or a schichtender to form body with cold or warmed riesel-or bulk-capable, such as powder, and/or haecksel - and / o de granu, schnitzel - and/or flocken-and/or needle - lat - or dough-shaped and /. or liquid, if necessary-cure Office and/or suitable thermoplastics or such hot-melt adhesive or elastomers, such as in the still unvetetzten State as a monomer (E.g. through direct polymerisation of Kaprolaktam polyamide or vulcanization of natural rubber or Buna (itohgummi) to elastic vulcanizates or the like in situ), strengthening Mare Memorial go, preferably but mixed with particularly corrugated Verstaerkungsmaterialcurzfaser and / or "whiskers or already with the Verstaerkungsmateri-alien related and/or self bonding plastics referred to or elastomers dosed filled or that a part or the entire internal and/or external put or heated surface of the mentioned form of production or the core or form body to be coated with called the riesel - or bulk-capable or shaped dough strengthening mate rialosen or reinforced these tools 191 129 or preforms, and/or semi-finished products from the materials or layers or plates w-men / ten Office thermoplastics and/or elastomers and / or the Polymerien and/or weight polymers and/or significant later materials, z, B0 Metal where the respective ; application purpose or load of required series follow evenly or depending on the load case of different thickness coated and then with smaller stens a serve as core or counter form and with at least a unkompressiblen bulk-enabled fixed and / or liquid, if necessary "magnetically impressionable or mag-electromagnetic insbeso ferromagnetic, multiple unverbrauch-bar usable medium of equipped higher specific gravity than the mentioned riesel-or" bulk-capable or liquid Werkstoffe-for the respective production to filling high-strength, from flexible temperature and across the called materials chemically stable and resistant, preferably in the volume vergroesserbarem, in shape and size customizable open or be lockable press container covered the to be created or to be coated Formkoefper or the corresponding cavity and will be charged ", right after the production form and/or the core and/or the form body to be coated or Rehaelter partially or completely with a lid or one, if necessary, the Pressbe-liquids shaping Counterform, Ric" referred to on Entlueftungsoeffnun-gen locked 1 and the pressure tank with the, If necessary, filled already heated medium and the medium and the pressure container under constant, however the size of control - adjustable starting pressure is used or pre-tensioned and before, while or after the forth - position form, etc., and/or his or her surface, the medium or the pressure tank in mechanically or hydraulically - or electro hydraulic or magnetic or dergl, created and in frequency, amplitude and active time control or controllable, if necessary z, B, from bottom to top using a vibration or hiking field conveyor, by created on the medium of outside experienced and/or in the medium, on the materials and/or layers nacheinan-. the Teildruecke in the form of printing, in particular, exerted to completed wetting, compression and shaping. at 19t 129 in particular. Flusssigkeitsdruckimpulsen or **shock waves** or ultra solos all vibrations (in particular. 1 el power s sound) and/or through directly or through an intermediate layer or Kaerrner to the fluid-coupled vibrational or Ultraschallueber - trager in simultaneous or, further warming by form, core or the like surface and/or press container wall or of the medium in particular. under simultaneous printer booster up to the press - or deformation pressure plastifi-zier - or erweichbaren materials or objects causes identified or softens and/or warms the liquid materials, and it shaped the educated classes to form bodies, hollow bodies and containers or coatings, vented and compressed and partially or completely polymerized and solidified or be hardened, then betaend the medium, replaced by cold medium and then from the pre beta container transported; or pumped and the press box from or from the cooled if necessary shape, ; the countries or the / /. coated form body or container is taken away after corresponding opening of the form, etc., 2. process according to claim 1, characterised in that the on or in the form, the core or the coating form body fitted • polymerizable materials, insues. Binders, such as unsaturated polyester first partially offset by short-term temporary exposure to mechanical, in particular. by UltraschallSchwingungen through exploitation, of the thixotropic and/or of the Ultraschalldepolymerisationseffek - tes in its

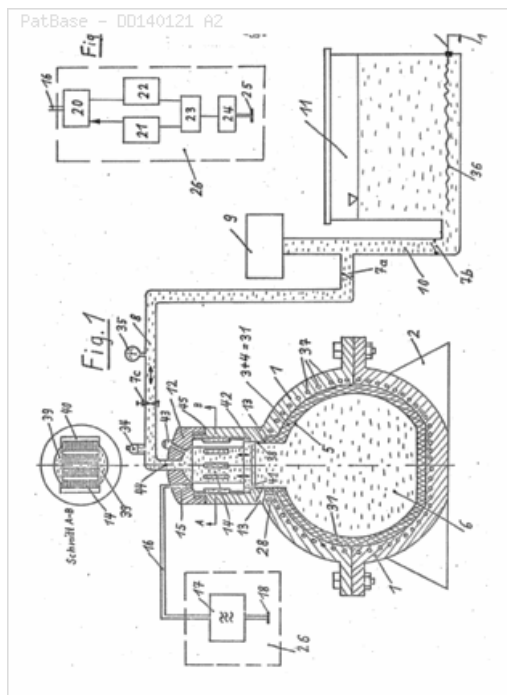
viscosity reduced or uninstalled polymerized. be and while or after through targeted exposure to currency pressure generated by the referred vibration as a result of the associated ultrasonic capillary effect in a matter of seconds in the capillaries and capillary columns of form, etc. installed on or in the making - reinforcing materials are pressed and thereby reinforcing materials intimately and completely wet and while or after that, networks reinforcing materials in this way or Preserved laminates by pressure acting on its surface and/or significant further mechanical or ultrasonic vibrations and/or a>-191 129 **shock** compressed pulses, while of the ver strengthening sinateri-alien the excess resin or Binder is removed and under the influence of heat, and on the right erlialtung of the pressure there or then - at least maintained until the Gelation of binder - «, the vibration of sb ehandlung interrupted and solidified materials or polymerized or cured 3, process according to claims 1 and 2 are marked this way, that on the medium, in particular» liquid exerted pressure first up to the dress at first pressure is increased and there - after under another continuous or dense - and/or thick layer or load case dependent pressure increase on the bursting pressure of production form the ««, the final layer thickness of materials or» materials and / or items of corresponding Iressenddruck is installed and before or at the same time pressed by this or at least a different vibration transformer on the media, in particular» on the fluid called Druckinpul-se or **shock waves** and/or TJltraschallimpulsc - such removal practiced and in the course of their pressure or, in their. Effect, controls, that the impulses or "Big impulses from the start (resonance frequency) in the direction of zun end pressure, reduce and if necessary amplitude-dependent pre-train way also reduced the pulse frequency, Ric, is increased, according to which the pressure and/or the stimulation effect either maintain a definable time and / oder.kontinuierlich or -rupt is reduced down to normal pressure, 4» procedure" according to claim 1 to 3, characterised by the fact that the inner or outer surface of production form, of the nucleus or to be coated form of body-to-first in the fiber/resin spraying or up or insertion of dry reinforcing materials reinforcing material preform or pouring the liquid Binder, in particular. «by unsaturated polyester - or epoxy resins and/or modified resins zc 3» with liquid or flowable Thioplasten modified epoxy resins or aufschaeumbaren, z, B Ed, materials aufschaeumbaren by heat and/or vorpolymeri-(and *-1 * MTZ? ized, in particular riesel - or bulk-capable or surface-shaped fiber reinforced materials, s, • UC prepreps, stratifies and will be then, ggfa after applying another called layers or objects of press tank up brought and the further procedural steps performed), curing bzw0 curing particular, by experience warming of the medium and/or assign temperature through a high BWR liquid such as E. 01, will be performed. "" 5, process according to claims 1 to 4, characterized that the mentioned materials or objects in their original form before their coating and/or after its loading stratification and their processing for molded articles or coatings first electrically or magnetically afford continued be made, z "B. by Beschichten1 with magnetic and/or electrically conductive or impressionable materials, z" B. thanks to spray from materials magnetic or magneti-sierbaren or other electrically conductive materials or particles, if necessary with binders, or by iron compounds, e.g. 3 iron hydroxide, which is deposited by precipitation with an alkaline reagent and after drying and heat under a duktionsmittel, CO G. magnet i' gaseous re and / ue.dor i: j_ - sen is uebergefuehrt, or by steaming with iron connection applications, such as ferric chloride, or etc, if necessary then.The production form installed and demy there depending on load case using electric or magnetic fields - tet or rectified and/or kept in the wall of form of ten and last heated and are exposed to the mentioned pulses or **shock waves**, possibly the Verstaerkungsmateri-alien made of non-metallic materials, such as from glass, electrostatic forces, e.g. 3, **electrodes**, are exposed by charging their surface with electrical particles by spray. 6 process according to claims 1 to 5, characterised in that instead of or in addition to the materials or any part of these materials, z, the plastic and/or the natural or synthetic polymers or weight stuff polymeren.in of called form or as a preform or half - percent 9 or dergl» construction materials, such as e.g. be sand, gravel, plaster or also lime, chalk - or cement - or Betonmoer - tel «««, if necessary stahTbewehrt in still, malleable form or shavings of wood and/or metal or the like due to the schaeunbare materials, e.g. 3 for the production of Schaumbe-ton or for the production of foam, in particular» of polyurethane foam, or case materials as a body of form of and/or coating material or part thereof or as half - stuff used» 7» process according to claim 1 to 6 «, characterised by the fact that the particular» uniform distribution of riesel-or «• bulk-capable materials on.» the surface of the form. of kernel or of the body to be coated by the particular * offset into mechanical vibrations, in part, in particular. is carried out fully filled Pxessbehaelter. 8 process according to claims 1 to 7, characterised in that the coating the surface of the body to be coated, the core or the production form with the riesel- or schue11faehigen, possibly heated tools mentes conducted materials by transmission of Dewegungs-or Transportener energy on them in the direction of the respective Oberflaecheenele-. 9, process according to claims 1 to 8, characterised in the Pxessbehaelter pressed a media shows uebergefuehrtes or liquid become one, a low melting by heating from the solid to the liquid state, such as bismuth or its alloys or hard waxes or the like filled and used simultaneously for heat transfer, compression and shaping. 10 process according to claims 1 to 9, characterised in that the Pxessbehaelter first with a gaseous medium, e.g. Bo Luft, blown up or with the mentioned media-fills is and in particular. in the normal atmosphere with the. «Coated reinforcement materials in the required form, E.g. by wrapping with faden-straeng -, tape - or shaped surfaces or dergl» reinforcing materials, also criss-cross or _ie as appropriate and/or by be - y i it? Layering with short fibres or whiskers or Ripon - sen, in particular. as intermediate layers and/or by strei - fen of woven or gestrikten or dergl, manufactured dry or pre hardened reinforcement material preform 11ngen or prepreps, and then formed, under low pressure increase in the preferably already with liquid or dough shaped binders (for pre-preg bindemittelbs) dispenses filled production form, etc. is placed there while maintaining the pressure at compressed air fill the mentioned media in Exchange with the air filled with and pressurized before press set and then the required procedural steps be performed. 11, process according to claims 1 to 10, characterized, that on the surface of the production form, core, the form body to be coated and/or press container as a foreign or an intermediate layer at least one layer of magnetically impressionable and/or magnetic reinforcement materials, z, 3, in the form of a metallbeschich-secondary fiber mat, or from the mentioned plastic and/or body, including 3 in the form of a metal-coated Thermoplastschiebt or-gaze, will be applied. 12 Verfahren.nach dadur claims 1 to 11, *:OKO: UJJGIC ~'1 that the form body and/or the layer of several • shifts ten, plates or preforms made of thermoplastics in the form of gauze as foreign and/or intermediate layers and layers from above VerStaerkungsmaterialien, also in the form of mats, fabrics, knitted or dergl, first as the sandwich preform and then as a body of form of or coating is made. 13 «procedure to manufacture or shaping of bodies or coatings from single - or multilayer flaechenfoermi-r gen objects, ze B'metal plates, sheet metal, wood panels or dergl, ggf with plastic coating of thermosets, Thermo - and/or body, characterised by the fact that ' these items first or in the form of a • core be brought, then one with a unkompressiblen bulk-capable solid or liquid medium», in particular. oil, fluid, z, B, partially filled or m 191 129 filling. AU a flexible, in particular, high-tensile, high-temperature and • medium strength and leak material - the Iressbehaelter on the above. «Objects is placed, production form Ric» ver confined and/or closed on Entlueftungsoeffmmgen, the Iressbehaelter fully constantly filled and press is placed here and/or after that medium, the Iressbehaelter and/or the production» form and/or the core is heated if required and with innovative political oscillations between hull and 200 kHz and beyond ~ in particular exerted from outside on the medium, in particular. «the liquid or generated in this or the Iressbehaelter - form wall or exercised on them - adjustable frequency and amplitude multiplied and thus shaped and / or are connected to each other, Ric» under Zwischenschich-management of binders or adhesives. 14 procedures in particular. According to claim 13, characterised by the fact that before the deformation as foreign and/or intermediate layer at least one layer of fibre-reinforced plastics and/or body, in particular. in-form or as a preform, such as in particular. «consisting of glass fibre reinforced unsaturated polyesters, epoxy resins or with Thioplasten modified ' epoxy resins or dergl», or in the form or the core is placed. 15 process to manufacture and coating of Formkoer-pern or hollow, if necessary according to claim 1 to 14, characterised in that appropriate riesel - or free-flowing, i.e. puJLver, or haecksel - or schnitzel - flock - and/or granulated materials, from thermal and / or thermosets tel - and/or body before processing to form bodies by a heating and/or Buet - at least or transported Wirbeisinterzone and there, if necessary after warming the surface above the softening point, with miewaermten and/or warmed reinforcing materials in the form of short fibers, also wavy or whiskers or dergl, preferably while their transport are coated or vice versa, that is, that the V he strengthening materials known as first with Thermo - and/or thermosets or body, in particular. in the so-called riesel - or schuett-iy I 147 - enabled form,' ggf9 under simultaneous to spray or injection of particular. Binders curable coated and then partially or completely cooled and processed immediately or later ! Formkoerperii or coatings, Daryl, the coatings by Schwere-fields (z0 B'centrifugal force) or in particular. magnetic force fields is carried out or supported. «16 device for implementing the procedure, - production form lockable consisting of a single or multipart trained, a core or one to beschichten-the form body, on which or whose internal and/external surface materials and/or items bring-and / or are distributable according to claim 1 to 15, as a result, indicates that the ggf» locked up on vents and/or lactation valves (13), in particular. with tax, and/or -production form (1) or the core and/or the form body to be coated, equipped (34) control valves and pressure gauges (35) the or, the materials and / or items (3, 4) already, preferably on the upper surface distributed, contains, is an Eohlraum, in which a flexible offeier, faellbarer with a unkompressiblon schuettfaehi-gen solid or liquid medium (6) equipped higher specific gravity than that or at least a component of materials (3, 4) - press tank (5) is arranged, which on the one hand filled with the mentioned medium (6) and preferably via intermediary valves (7) and ' at least a high-pressure hydraulic or **shock** way employees, preferably in its parameters control or controllable and reversible pressure - and/or lactation pump ; (9) communicating with at least a Mediumvorratsbe-of liquids (11) can be connected or associated with this is and / or on the other hand with at least one mechanical. Erzeugenden - or -send ultrasonic vibrations, vibrations, preferably **shock waves** and/or pressure pulses and be on his side or preferably. Medium (6) directly or through one or

more zwischenge-media Chamber or membrane turned on quality wise-transmitting, and/or in the wall of the production form (1), the core or the body to be coated and / COF - u - 11 \ WM * or in communicating pressure or suction pipe (8, 10) or in the large container (5) himself arranged, | ggfo from at least an existing pair of **electrodes** and electro-hydraulic impulse generating and provides load-bearing unit (14) in active contact or Wirkverbindmig, where the donor (14) with at least one vibrational he - producers (26) with Stosstroem - or pulse generator (17), z. «So consisting of converters, Rectifier, unloaders, Scarfs - ter, Energiespeicher or» capacitor, ggf, transformer, and a Uetz and a supply voltage source (18), or zo B, consisting of a switch (20) z, B, in form of a semiconductor diode, the commutator of a program or a pro - gram chaltwerk (21), an energy storage or capacitor - gate (22), a dining section (23), a switch (24) and a smear or a supply voltage source (25) that stands in direct system contact or connection. 17. Institution for the implementation of the process according to claim 1 to 16, characterised by the fact that the transmitting mechanical vibrations sensor (14) preferably in the upper part and the filling aperture (30) of the open Prossbshelters (5) in the preferably immediately below this lower part one preferably the dress tank filling hole (33) and the timer (14) in size and/or shape with through holes (39) for the medium (6) adapted «, in the forward train in the upper part of the form of production (1), the Kerberos server and time nes or the substrate shape body, in particular "in the appropriate wall or into the cover (12) the recess (40) are arranged, the press opening (38) ze B, held by a preferably in items zerleg-baren clamping and/or spreader body or a clamping ring (41) in an open State and is pressed in the wall of form of, the timer (14) with the chen befindli-in the dress reservoir (5) and preferably under overpressure-standing medium (6). directly or through a preferably with the same or a different liquid or gas-shaped medium intermediate membrane filled in contact is and with at least one at the same time the donor (14) fine or ordered on the cylinder (14) vibration generators (26) directly or through electrical, pneumatic, hydraulic or mechanical and by the Porniwandung, etc, or the cover (12) gas tight "guided Pontics. (15) with the electrical, pneumatic, hydraulische, electro-hydraulic or mechanical **separating** impulse or **shock waves** or ultrasonic vibrations vibration generator of (26). the is, that between donor area and dorm -, or Dek, kelwandung an elastically deformable, preferably the donor area in size and dorm * and the vibration amplitude in the thickness customized elements ment (42), preferably according to designed edge or the top bead of the opening (38) of the pressure tank (5) and in the dorm - etc., or Deokelwandung at least, on sizes of pressure equipment adjustable or pre-specified pressure gradient pressure relief valve (34) and / or one or more. adjustable ueberdruck.verschliess bare vent (43), more on the each hoech-sten point in the dorm, etc, the materials and/or items arranged air vents and a lockable with a valve filler (44) for the medium (6) arranged and latter konnunizi-while the unit (14) with the opening (38) of the Pressbe-haelters (5) and/or associated observe any, fits and starts working with a pump (9) a medium tank (11), ' • 18, device for implementing the procedure of claim. 1 to 17, characterised in that the timer (14) UN-indirectly is coupled with a vibration generator (26) or consists of at least one or a number of, or in the height of dorm-, nuclear and/or electrical electronic coils arranged to coating Porm - body.und or Dressbehaelterwandmig, coils, magnetic inductors, electromagnets, vibrators or ultrasonic transmitters (29, 33), also with at least a vibration generator (26) with surge current or, Pulse generator (17) and the Uetz respectively, the excitation source (18 / 25) associated or in connection. «! * 35-191 129 190' facility to the Diirchfuehrung of the process according to claim 1 to 13, characterised by the fact that the giver (14) is a magneto - or elektrostriktiver sound and from a cooled vibration converters with spacer and so - notrode or Sonode or from a transducer, existing as of sound generators, transformers, Schwingerhsalterung and cooling device is created and with an IQ?-power, which formed in order to bias and avoidance of hysteresis losses a DC current is overlaid», will be fed. 20, set up to carry out the process of claim 1 to 19, characterized, that the transfer of the impetus on the called. Medium (6) by a piston that is carrying out an and previous motion acting on the MMium (6) or that on the MEDIUM (6) work-the vibrator, or ultrasonic oscillator, in particular, a • magneto - or elektrostriktiven sound (14) is - in particular, the latter by a RF generator (17) feeds are. 21, set up to carry out the process of claim 1 to 20, characterized that in the dress reservoir (5) or, in its medium (6) in the Mediumvorratscehael - ter (11) and/or in the wall of the production form, etc. (1) and/or the press tank (5) heat - or heating. schlaengensysteme (36) with introduced electric heating conductors or heating duct system (37) for transporting hot gases, vapours or liquids and/or coolant TRANS port brought are with electrical power sources £18) respectively, with border or transport facilities, z, B, slouch, are connected. 22, set up to carry out the process of claim 1 to 21, characterized, that the press container. (5) input, preferably multilayered is built and high-temperature-resistant medium dense plastics flexible, preferably highly stretchable, chemically resistant to the Eormkoerperwerkstueffen (354) and Buellmedien (6) and/or body, 55. B. from polyvinyl alcohol, Ueopren, silicone rubber and / or with metallic or non-metallic ', if necessary with magnetic, or ferromagnetic or mag-Cally impressionable or -elektrisch conductive materials or particles - such as 3 «, metal, carbon, graphite, or like - filled or coated plates and/or body and/or from ggf», loaded with the aforementioned materials or particles coated or from these or from borr basalt, mica, asbestos, glass or in combination existing the fabrics, fabrics, tile or dergl is, if necessary impregnated with hochtemperaturfesten polymers, such as E. Polyphe-nylensulfid and/or are coated «, Ric» the electrically or magnetically conductive pressing containers.. (5) with electrical contacts provided and about this, and preferably one transformer with one. Speise-voltage source (18) for heating purposes connected or by induction using flows through through a high frequency alternating current generator (17) and in the ITaeh of the pressure container (5) arranged reel (33), waermbar is.. Device according to claim 1 to 22, this out-migration records, that the press tank (5) on - or on both sides with shaped surfaces, in particular, flexible, e.g. 3 from electrical trisch leitfaehigen metal or graphite or the like, coated glass fibers or fabrics or existing so and with power contacts heating elements or with Metallenstes. Metal particles is coated or that the press tank (5) out of these fabrics, knitted, Webs or etc. and is impregnated with Thioplasten or Thioplasten consists of, preferably from those by halides with greatly extended, tagged - saettigter **hydrocarbon** chain, such as b. C] 2 H 24 'I' 2 from one with the form body imd / or coating material (3y 4) chemical and/or physical kalisch combinable material, for example, made of PVC or 3>->), 191 129 or ordered from Thiopliste and after the production as so-called lost core or an upper layer • area establishment 25o at the generated Fornkoerper (31), or the layer forward bleibto according to claim 1 to 24, characterized that of Pressbehaeltor (5) for the production of Hohlpro-file, form ser or Querschnittsabnessungen from one of these on custom long bag pipes or dergl, also of different diameters or hose is. "26 device according to claim 1 to 25, characterised by the fact that instead of or in addition to the Entlueftungsoff-voltages (13) a stiffer compared to the pressure of more stable perforated Entlueftungsraum in the form of or arranged in the core or the like is or that" a mounted in the form of (1), if the shape outline adapted, s. B. in shape of a hollow ring (in the production of round shape bodies) applications, the large monthly in the materials (3, 4) and squeezed out during manufacturing air (air, steam or gas bubbles or Eunleer) Entluef-increased to constitutional is provided for ventilation. 27 device according to claim 1 to 26, characterised by the fact that the coating, called surface (4) bulk-capable materials by spray, injection molding and casting facilities, for example. Compressed air jets takes place, which may Baehe the nozzle opening in the towards the nozzle output with a hot gas nozzle are equipped * 28 device according to claim 1 to 27, characterised by the fact that the material in the form of production depending on the application purpose a that be influenced magnetically or magnetic-influence cash material, such as a fibre-reinforced plastic fabric, aluminum or steel or so might be to feed the rear of building materials, in particular. reinforced concrete bestehto 38-... ««191 129 29 "device according to claim 1 up. 28, characterized by ' that on the free surface of on or in the manufacturer - lungsform, etc * the materials and/or Gegenstaende.eine preferably in form and size corresponding to the press container layer from the referred or other press produces container materials, z» B0 is sprayed on or brought up, and the pressure tank replaced» 30, Pormkoerper or layer, characterized by, that this or this one from fibre-reinforced and modified with Thioplasten epoxy resins with or without hardener and / or accelerator and/or sensitizers existing, by exposure to mechanical and/or TJltrschallschwin - conditions, in the area between Bull and 200 kHz, in compacted or by heat and/or pressure molded, formed by electromagnetic **waves**, preferably in the 1R- or range of TJV or high-energy. Broadcasting or by magnetic fields is biased, hardened, or polymerized subject *. To do this, / j page drawing.

Classifications:

International (IPC 8-9): B32B27/04

International (IPC 1-7): B29D3/02 B29J1/02 B32B27/04



Family:

Publication number	Publication date	Application number	Application date
DD140121 A2	19800213	DD19760191129	19760208

Priority:

DD19760191129 19760208

Probable Assignee:

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Assignee(s):

JUNGE KARL H DD

Inventor(s): (std):

JUNGE KARL H

Inventor(s):

JUNGE KARL H DD

14) Family number: 50962987 (WO12053902 A1)

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Title: A SYSTEM AND METHOD FOR COMBINED MULTI-DIMENSIONAL ELECTROMAGNETIC- AND SEISMIC FIELD CHARACTERIZATION, FOR USE IN GEOPHYSICAL SURVEYING

Abstract: Advances in marine electromagnetic sounding systems for subsurface **hydrocarbon** detection have stimulated further research and development. More specifically, for high-resolution characterization of sub-surface structures and electrical resistivities, a novel measurement system and principle is presented herein. High signal-to-noise 3-dimensional characterization of electrical- and seismic- field attributes in water-column is together with online data quality control and operational efficiency the main objective of the presented system.

Classifications:

International (IPC 8-9): G01V1/137 G01V1/20 G01V1/38 G01V11/00 G01V3/08 G01V3/12

CPC: G01V1/20 G01V1/38 G01V11/00 G01V2210/6163 G01V3/12

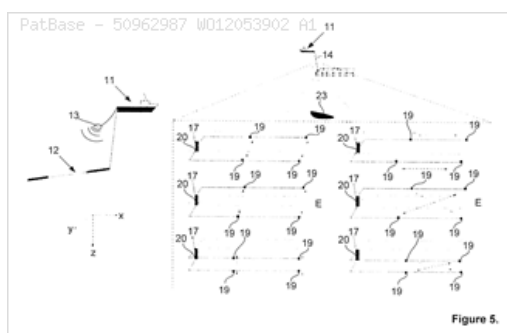


Figure 5.

Family:

Publication number	Publication date	Application number	Application date
NO20101495 A	20120423	NO20100001495	20101022
NO336422 B1	20150817	NO20100001495	20101022
WO12053902 A1	20120426	WO2011NO00302	20111024

Priority:

NO20100001495 20101022

Probable Assignee:

KONGSLI JONAS

Assignee(s): (std):

KONGSLI JONAS

Inventor(s): (std):

KONGSLI JONAS

Agent(s):

CURO AS

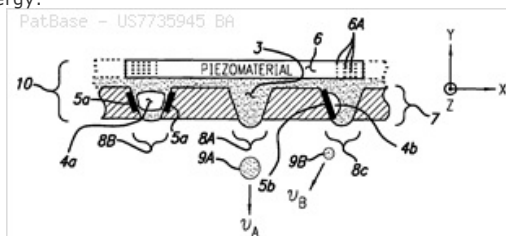
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL

15) Family number: 45340930 (US7735945 BA)

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Title: MICROBUBBLE AND MICRODROPLET SWITCHING, MANIPULATION AND MODULATION OF ACOUSTIC, ELECTROMAGNETIC AND ELECTRICAL **WAVES**, ENERGIES AND POTENTIALS

Abstract: The formation and manipulation of microbubbles, microdroplets and films of (preferably) flowable materials, such as liquids and gases, are used to beneficially control or modulate acoustic-energy propagation, electromagnetic-energy propagation or electrical potential and current application. A droplet, bubble or film causes at least one of reflection, refraction, diffraction, attenuation, sapping, scattering, dissipation, redirection, conversion or blocking of at least one component of the energy due to the droplet, bubble or film causing a propagation discontinuity, disruption or energy-barrier to the energy. The energy comprises at least one of acoustic, electrical, electromagnetic, magnetic, kinetic, mechanical, chemical, RF, thermal, pneumatic, hydraulic or non-visible optical energy.

Classifications:**International (IPC 8-9):** B41J2/015 B41J2/02 B41J2/04 B41J2/045 B41J29/38**CPC:** B41J2/04**US:** 347/14 347/20 347/54 347/6 347/68 347/73**Family:**

Publication number	Publication date	Application number	Application date
US7735945 BA	20100615	US20050035488	20050113

Priority:

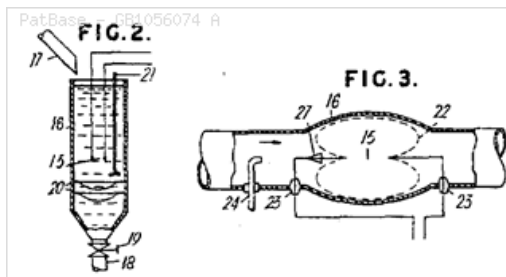
US20040536025P 20040113 US20050035488 20050113

Probable Assignee: SLIWA JR JOHN W**Assignee(s):** (std): SLIWA JR JOHN W ; TOSAYA CAROL A**Inventor(s):** (std): SLIWA JR JOHN W ; TOSAYA CAROL A**16) Family number: 22663899** (GB1056074 A)

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Title: ELECTROHYDRAULIC PROCESSES AND APPARATUS FOR INITIATING CHEMICAL AND PHYSICAL REACTIONS

Abstract: Mechanically bound constituents of differing elasticity coefficients in a solid are selectively **separated** by immersing the solid in a liquid, subjecting it to a series of high-intensity sparks and collecting the **separated** constituents, the sparks being repeated at intervals of less than half the attenuation time. In specific embodiments (a) hematite is comminuted and then **separated** by xanthate floatation, (b) a tin is reduced to particles minus 50 mesh of steel or tin, (c) a slurry of sphalerite in water is treated in the presence of air to give SO₂ and ZnO which was separable from slurry and (d) a slurry of iron oxide and a liquid **hydrocarbon** were treated and the resultant mixture fed to a magnetic **separator** to give magnetite and iron, a high frequency induction coil being used to aid the reaction. In one embodiment of the apparatus of the invention (Fig. 2), material is added at 17 to tank 16 containing **electrodes** 15 and stirrer 21. The tank contains screens 20 to retain material of predetermined size whilst an annular trough may be provided around the upper rim of the trough if float/sink **separation** is used. In another embodiment (Fig. 3) suitable for continuous use, gas is fed through pipe 24 to the solid suspended in the liquid medium. A conical feed deflector 27 may be used while the leads for the discharge are insulated at 23 from vessel 16. The vessel may be cooled by water-coils if required. In another embodiment Fig. 4, (not shown) a high frequency induction coil is provided to heat the vessel, insulation being placed around the vessel and heating coils. A series of reactors or a recycling system may be used if the degree of reaction in a single stage is not satisfactory e.g. in endothermic reactions. ALSO: Mechanically bound constituents of differing elasticity coefficients in a solid are selectively **separated** by immersing the solid in a liquid, subjecting it to a series of high-intensity sparks and collecting the **separated** constituents, the sparks being repeated at intervals of less than half the attenuation time. In Example 3, a slurry of sphalerite in water is treated in the presence of air to give SO₂ and ZnO which was separable from the slurry. In one embodiment of the apparatus of the invention (Fig. 2), material is added at 17 to tank 16 containing **electrodes** 15 and stirrer 21. The tank contains screens 20 to retain material of predetermined size whilst an annular trough may be provided around the upper rim of the trough if float/sink **separation** is used. In another embodiment (Fig. 3) suitable for continuous use, gas is fed through pipe 24 to the solid suspended in the liquid medium. A conical feed deflector 27 may be used while the leads for the discharge are insulated at 23 from vessel 16. The vessel may be cooled by watercoils if required. In another embodiment (Fig. 4, not shown) a high frequency induction coil is provided to heat the vessel, insulation being placed around the vessel and heating coils. A series of reactors or a recycling system may be used if the degree of reaction in a single stage is not satisfactory, e.g. in endothermic reactions.

Classifications:**International (IPC 8-9):** B01J19/08 B01J3/06 B01J3/08 B02C19/00 B02C19/18 B03B1/00 B32B27/00 C01B13/11 C01B13/32 C01G1/06 C01G9/00 C01G9/02 C02F1/00 C02F1/46 C02F1/461 C02F1/48 C02F1/76 C22B1/00 C22B1/02 D21C3/00 D21C3/22 D21F1/36 G10K15/04 G10K15/06**International (IPC 1-7):** B01J19/08 G10K10/00**CPC:** B01J19/088 B01J3/08 B03B1/00 B32B27/00 C01B13/322 C01G1/06 C01G9/02 C02F1/4608 C02F1/48 D21C3/224 G10K15/06**Family:**

Publication number	Publication date	Application number	Application date
AU3272863 A1	19650104	AU19630032728	19630708
AU3272863 B1	19650104	AU19630032728	19630708

BE634654 A	19631118	BE19630634654	19630708
ES289795 A1	19631116	ES19630289795	19630708
FR1370706 A	19640828	FR19630940735	19630708
GB1056074 A	19670125	GB19630026999	19630708
JP48017984 B4	19730602	JP19630035195	19630708
NL295052 A	19650426		00000000

Priority:

US19620208387 19620709

Probable Assignee: ARNOLD THEODORE ERNEST

Assignee(s): (std): ARNOLD THEODORE ERNEST ; THEODORE ERNEST ARNOLD

Inventor(s): (std): ARNOLD THEODORE ERNEST

Inventor(s): THEODORE ERNEST ARNOLD

17) Family number: 29822198 (US4023065 A)

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Title: Method and apparatus for generating and utilizing a compound plasma configuration

Abstract: A method and apparatus for generating and utilizing a compound plasma configuration is disclosed. The plasma configuration includes a central toroidal plasma with electrical currents surrounded by a generally ellipsoidal mantle of ionized particles or electrically conducting matter. The preferred methods of forming this compound plasma configuration include the steps of forming a helical ionized path in a gaseous medium and simultaneously discharging a high potential through the ionized path to produce a helical or heliform current which collapses on itself to produce a toroidal current, or generating a toroidal plasmoid, supplying magnetic energy to the plasmoid, and applying fluid pressure external to the plasmoid. The apparatus of the present invention includes a pressure chamber wherein the compound plasma configuration can be isolated or compressed by fluid or other forms of mechanical or magnetic pressure.

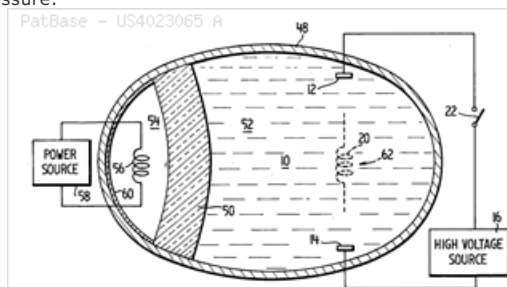
Classifications:

International (IPC 8-9): C10G1/00 C10H17/00 G21B1/00 G21D9/00 H01J7/00 H01J7/24 H05H1/00 H05H1/02 H05H1/04 H05H1/24 H05H1/48 H05H1/54

International (IPC 1-7): C10G1/00 C10H17/00 G21B1/00 G21B1/02 G21D9/00 H01J7/24 H05H1/00 H05H1/02 H05H1/04 H05H1/24

CPC: Y02E30/00 Y02E30/10 Y02E30/122 G21B1/00 H05H1/04 H05H1/48 H05H1/52 H05H1/54 G21B3/008 Y10S376/915

US: 313/161 315/111.2 315/111.21 315/111.41 376/100 376/121 376/128 376/133 376/144 376/146 376/148 376/326 376/915



Family:

Publication number	Publication date	Application number	Application date
AT900579 A	19840215	AT19790009005	19790605
AU197947729 A1	19791213	AU19790047729	19790604
BR7908706 A	19800422	BR19790008706	19790605
CA1162333 A1	19840214	CA19790328502	19790528
DE2636485 A1	19780216	DE19762636485	19760813
DE2967440 D1	19850530	DE19792967440T	19790605
DK50980 A	19800206	DK19800000509	19800206
EP0016037 A1	19801001	EP19790900642	19800114
EP0016037 A4	19801009	EP19790900642	19800114
EP0016037 B1	19850424	EP19790900642	19800114
JP55501066 T2	19801204	JP19790500909T	19790605
US4023065 A	19770510	US19730409060	19731024
US4891180 A	19900102	US19840632690	19840723
US5041760 A	19910820	US19850701808	19850219
US5015432 A	19910514	US19900557796	19900726
WO8000045 A1	19800110	WO1979US00387	19790605

Priority:

US19730409060 19731024

US19780913108 19780606

CA19790328502 19790528

WO1979US00387 19790605

US19810261546 19810507

US19810312902 19811019

US19840632690 19840723

US19850701808 19850219

US19900557796 19900726

Probable Assignee: KOLOC PM

Assignee(s): (std): KOLOC P ; KOLOC P M ; KOLOC PAUL M

Inventor(s): (std): KOLOC P ; KOLOC P M ; KOLOC PAUL M

Inventor(s): M KOLOC PAUL ; PAUL M KOLOC

Agent(s): MEREDITH AND FINLAYSON; SPRUSON AND FERGUSON

Designated states: AT BR CH DE DK FR GB JP LU SE SU

18) Family number: 31030215 (US2004099050 AA)

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Title: MACHINE FLUID SENSOR AND METHOD

Abstract: A method for analyzing a fluid contained within a machine, comprising the steps of providing a machine including a passage for containing a fluid; placing a sensor including a mechanical resonator in the passage; operating the resonator to have a portion thereof translate through the fluid; and monitoring the response of the resonator to the fluid in the passage. A preferred sensor includes a tuning fork resonator.

Classifications:

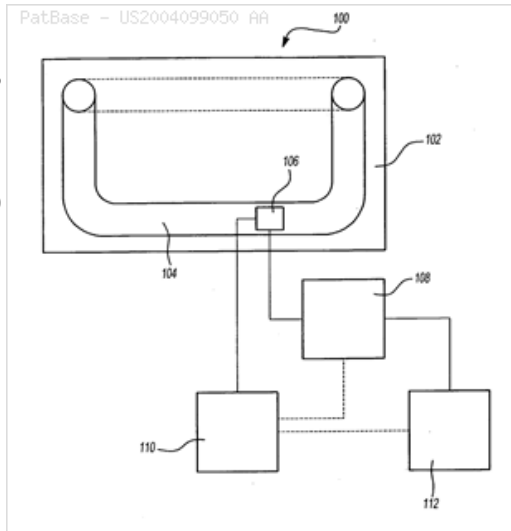
International (IPC 8-9): F02D45/00 F25B41/04 F25B49/00 G01B9/02

G01F23/00 G01F23/22 G01F23/296 G01L7/00 G01N11/00 G01N11/10
G01N11/16 G01N19/02 G01N24/00 G01N27/00 G01N29/00
G01N29/02 G01N29/03 G01N29/036 G01N29/22 G01N29/30
G01N29/34 G01N29/36 G01N29/44 G01N3/56 G01N31/00 G01N33/26
G01N33/28 G01N33/30 G01N33/487 G01N35/00 G01N35/08
G01N9/00 G01N9/10 G01R27/00 G06F19/00 H03H3/02 H04R17/00
H04R31/00

International (IPC 1-7): F25B49/00 G01F23/296 G01L7/00
G01N11/00 G01N11/10 G01N11/16 G01N19/02 G01N24/00
G01N27/00 G01N29/00 G01N29/02 G01N3/56 G01N31/00 G01N33/20
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CPC: C09D5/008 G01F23/2967 G01F23/2968 G01N11/16
G01N2291/02836 G01N2291/02872 G01N2291/0427 G01N29/036
G01N29/222 G01N9/002 G01N33/28 F02D2200/0611 F02D2250/11
F02D41/021 G01F23/2966 G01N2291/014 G01N2291/0226
G01N2291/02416 G01N2291/02818 G01N2291/0422 G01N2291/0423
G01N2291/0426 G01N29/022 G01N29/30 G01N29/348
G01N2009/006 G01N2291/0253 G01N2291/0254 G01N2291/0256
G01N2291/101 G01N29/223 G01N29/228 G01N29/343
G01N2035/00237 G01N2291/0224 G01N2291/0255 G01N35/085
G01N29/34 G01N29/36 G01N33/30 Y10T29/42 Y10T29/49005
Y10T29/4908

US: 123/350 29/25.35 29/253.5 29/594 29/609.1 310/319 310/370
324/682 324/683 324/698 324/722 331/154 331/156 331/158
333/186 333/187 333/200 356/478 62/125 62/129 62/131 62/225
702/25 702/50 702/50P 702/52 702/54 702/57 73/10 73/24.01
73/24.06 73/31.06 73/32A 73/53.01 73/53.010 73/53.05 73/54.01 73/54.010 73/54.41 73/570 73/570P 73/61.45 73/61.450P
73/61.49 73/64.42 73/64.53 73/64.530 73/64.530P 73/64.530S 73/32 A



Family:

Publication number	Publication date	Application number	Application date
AT546720 E	20120315	AT20040757919T	20040319
AT395585 E	20080515	AT20040757931T	20040319
AT401565 E	20080815	AT20040757933T	20040319
AU2003277429 AA	20040504	AU20030277429	20031017
AU2003282936 AA	20040504	AU20030282936	20031017
AU2003282936 AH	20040504	AU20030282936	20031017
CA2499298 AA	20050316	CA20032499298	20031017
DE602004013753 D1	20080626	DE200460013753T	20040319
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DE602004036624 D1	20120419	DE200460036624T	20040319
EP1554570 A2	20050720	EP20030774870	20031017
EP1552273 A1	20050713	EP20030809124	20031017
EP1644717 A2	20060412	EP20040757917	20040319
EP1664731 A1	20060607	EP20040757919	20040319
EP1664731 B1	20120222	EP20040757919	20040319
EP1613945 A1	20060111	EP20040757931	20040319
EP1613945 B1	20080514	EP20040757931	20040319
EP1558911 A2	20050803	EP20040757933	20040319
EP1558911 B1	20080716	EP20040757933	20040319
JP2006520906 T2	20060914	JP20060507406T	20040319
US2004107055 AA	20040603	US20030394543	20030321
US6873916 BB	20050329	US20030394543	20030321
US2004099050 AA	20040527	US20030452264	20030602
US7043969 BB	20060516	US20030452264	20030602
US2007052970 AA	20070308	US20040550075	20040319
US7721590 BB	20100525	US20040550075	20040319
US2004250622 AA	20041216	US20040804379	20040319
US2004244487 AA	20041209	US20040804446	20040319
US7210332 BB	20070501	US20040804446	20040319
US2005145019 AA	20050707	US20040951252	20040927
US7350367 BB	20080401	US20040951252	20040927
US2005149276 AA	20050707	US20050059130	20050215
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US2005209796 AA	20050922	US20050122892	20050504
US7158897 BB	20070102	US20050122892	20050504
US2006218996 AA	20061005	US20060433265	20060512
US7254990 BB	20070814	US20060433265	20060512
US2007272209 AA	20071129	US20070837415	20070810
US2009064693 AA	20090312	US20080059801	20080331
US2010218353 AA	20100902	US20100783397	20100519
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WO04036191 A1	20040429	WO2003US32982	20031017
WO04036191 B1	20040708	WO2003US32982	20031017
WO04036207 A2	20040429	WO2003US32983	20031017
WO04036207 A3	20040902	WO2003US32983	20031017
WO04086027 A2	20041007	WO2004US08526	20040319
WO04086027 A3	20050609	WO2004US08526	20040319
WO04086002 A1	20041007	WO2004US08531	20040319
WO04086003 A1	20041007	WO2004US08552	20040319
WO04086020 A2	20041007	WO2004US08555	20040319
WO04086020 A3	20050324	WO2004US08555	20040319

Priority:

US20020419404P 20021018 US20030456517P 20030321 US20030394543 20030321
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EP20040757919 20040319 WO2004US08526 20040319 US20040804446 20040319
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US20100783397 20100519

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

19) Family number: 3411328 (US4917785 A)

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Title: Liquid processing system involving high-energy discharge

Abstract: A method and apparatus are disclosed for efficient endothermic processing of liquids and the precipitation of dissolved elements and chemical compounds. Improvements over prior systems include system layout, components and modes of operation of the system. Applications of the system include destruction of toxic wastes and sewage treatment, precipitation of chemical compounds and elements including metals from solution (brine, sea water, industrial waste), sterilization and water purification, catalytic formation of chemical compounds, and processing of **hydrocarbons**.

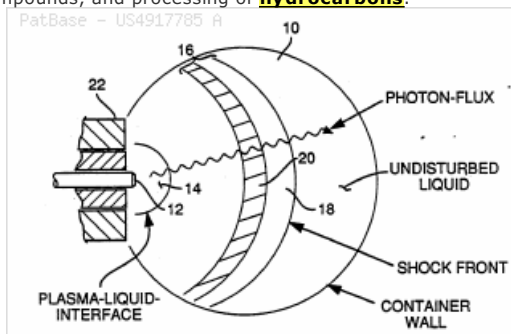
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International (IPC 1-7): B01D13/02 B01J19/08 B01J3/08 C02F1/463 H05B31/06

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US: 200/237 204/152 204/157.15 204/158.2 204/158.21 204/164 204/165 204/168 204/172 204/223 204/225 204/307 204/308 204/571 204/649 204/650 204/660 204/663 204/668 205/742 210/243 210/702 210/717 210/748 210/748.01 210/748.06 314/34 315/112 422/186.21 422/186.28 422/907 588/204 588/304 588/316 588/405 588/406 588/410 588/412 588/414 588/415 588/900



Family:

Publication number	Publication date	Application number	Application date
US4917785 A	19900417	US19870078655	19870728
US4957606 A	19900918	US19880239184	19880831
US5026484 A	19910625	US19900502875	19900402
US5037524 A	19910806	US19900503037	19900402

Priority:

US19870078655 19870728 US19880239184 19880831 US19900502875 19900402
US19900503037 19900402

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Inventor(s): (std): JUVAN CHRISTIAN H A

20) Family number: 53189910 (US2014243292 AA)

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Title: SUBSTITUTED 2-(CHROMAN-6-YLOXYL)-THIAZOLES AND THEIR USE AS PHARMACEUTICALS

Abstract: The present invention relates to substituted 2-(chroman-6-yloxy)-thiazoles of the formula I, in which Ar, R2, R3 and R4 are as defined in the claims. The compounds of the formula I are inhibitors of the sodium-calcium exchanger (NCX), especially of the sodium-calcium exchanger of subtype 1 (NCX1), and are suitable for the treatment of diverse disorders in which intracellular calcium homeostasis is disturbed, such as arrhythmias, heart failure and stroke. The invention furthermore relates to processes for the preparation of the compounds of the formula I, their use as pharmaceuticals, and pharmaceutical compositions comprising them.

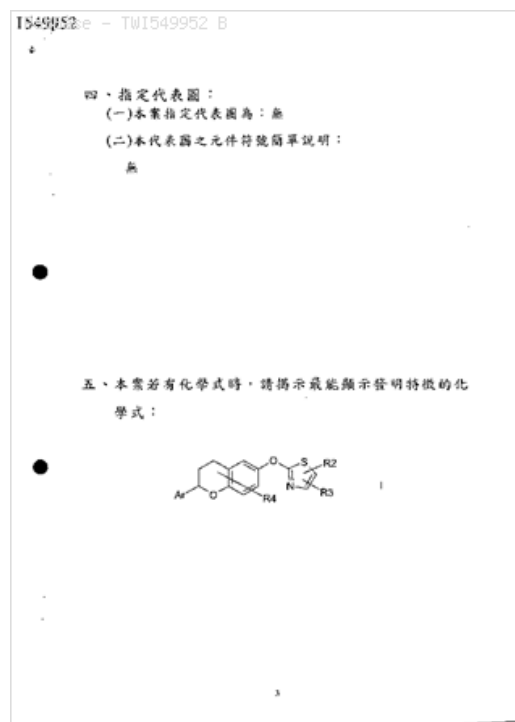
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International (ipc 1-7): A61K31/427 A61P9/06 A61P9/10 C07D417/12 C07D417/14 C07D471/04 C07D487/04

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US: 514/233.5 514/254.02 514/255.05 514/256 514/337 514/369 514/92 544/131 544/333 544/369 544/405 546/269.7 548/119 548/186 548/188



Family:

Publication number	Publication date	Application number	Application date
AR087822 AA	20140416	AR2012P103328	20120910
BR112014005518 A2	20170321	BR20141105518	20120910
CO6930365 A2	20140428	CO20140075065	20140408
CR20140130 A	20140512	CR20140000130	20140318
CY1115953 T1	20170125	CY20151100076T	20150123
CY1118141 T1	20170628	CY20161100582T	20160628
DE602011010914 D1	20141211	DE201160010914T	20110912
DE602012016324 D1	20160512	DE201260016324T	20120910
DK2567958 T3	20150202	DK20110306128T	20110912
DK2755970 T3	20160718	DK20120756214T	20120910
EA027998 B1	20170929	EA20140090618	20120910
EA201490618 A1	20140730	EA20140090618	20120910
ECSP14013309 A	20140531	EC2014SP13309	20140411
EP2567958 A1	20130313	EP20110306128	20110912
EP2567958 B1	20141029	EP20110306128	20110912
EP2755970 A1	20140723	EP20120756214	20120910
EP2755970 B1	20160330	EP20120756214	20120910
ES2528143 T3	20150204	ES20110306128T	20110912
ES2578184 T3	20160721	ES20120756214T	20120910
GC8282 A	20180711	GC2012P022219	20120910
GT201400044 A	20151119	GT20140000044	20140307
HK1182107 A1	20131122	HK20130109436	20130813
HK1182107 B	20150306	HK20130109436	20130813
HR20150025 T1	20150213	HR20150000025	20150109
HR20160687 T1	20160715	HR20160000687	20160616
HU029233 T2	20170228	HU20120756214T	20120910
JP2014531429 T2	20141127	JP20140529013T	20120910
JP5941986 B2	20160629	JP20140529013T	20120910
MX2014002673 A1	20140414	MX20140002673	20120910
MX343176 B	20161027	MX20140002673	20120910
NI201400017 A	20141010	NI20140000017	20140303
NZ622127 A	20160331	NZ20120622127	20120910
PE11212014 A1	20140915	PE20140000332	20120910
PE20141121 A1	20140915	PE20140000332	20120910
PL2567958 T3	20150430	PL20110306128T	20110912
PL2755970 T3	20161031	PL20120756214T	20120910
PT2567958 T	20150114	PT20110306128T	20110912
PT2755970 T	20160707	PT20120756214T	20120910
RS53748 B1	20150630	RS20150000022	20110912
RS54851 B1	20161031	RS20160000442	20120910
SI2567958 T1	20150130	SI20110030350T	20110912
SI2755970 T1	20160729	SI20120030609	20120910
TN2014000106 A1	20150701	TN20140000106	20140311
TW201326161 A	20130701	TW20120133072	20120911
TWI549952 B	20160921	TW20120133072	20120911

UA114407 C2	20170612	UA20140003780	20120910
US2014243292 AA	20140828	US20140204220	20140311
UY34320 A1	20130430	UY20120034320	20120912
VN20602 A1	20190325	VN20140001171	20140411
WO13037724 A1	20130321	WO2012EP67622	20120910

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EP20110306128 20110912 WO2012EP67622 20120910 EP20120756214 20120910

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