Search history

Search 1: [SP]: Un mecanismo basculante de bombeo que comprende: - un primer contrapeso (1) y un segundo contrapeso (2) localizado al lado del primer contrapeso (1); - un elemento de trasmisión (1) que tiene dos extremos longitudinales, cada extremo longitudinal se conecta a un contrapeso (1, 2); - un actuador (10) conectado al elemento de trasmisión; y - una primera bomba (5a) que incluye un primer elemento de compresión acoplado a uno de los contrapesos (1,2). (Results 1)

Search 2: [SP]: mecanismo basculante de bombeo the tripper mechanism of pumping un mecanismo basculante de bombeo que comprende: un primer contrapeso (1) y un segundo contrapeso (2) localizado al lado del primer contrapeso (1), un elemento de trasmision (1) que tiene dos extremos longitudinales, cada extremo longitudinal se conecta a un contrapeso (1, 2), un actuador (10) conectado al elemento de trasmision y una primera bomba (5a) que incluye un primer elemento de compresion acoplado a uno de los contrapesos (1,2). inicialmente el primer contrapeso (2) y el segundo contrapeso (3) se encuentran en una posicion la cual puede ser, una posicion neutral, una primera posicion o una segunda posicion. cuando el actuador (10) es activado, este mueve el elemento de trasmision (1) y a su vez, el elemento de transmision empieza a mover al primer contrapeso (2) y al segundo contrapeso (3), alternandolos entre la posicion neutral, la primera posicion o la segunda posicion y permite el bombeo de la bomba (5). pumping a tilting mechanism comprising: a first counterweight (1) and a second counterweight (2) located at the side of the first counterweight (1), a transmission element (1) having two longitudinal ends, each longitudinal end is connected to a counterweight (1, 2), an actuator (10) connected to the transmission element and a first pump (5a) including a first compression element coupled to one of the counterweights (1.2). initially the first counterweight (2) and the second counterweight (3) are in a position which may be, a neutral position, a first position or a second position. when the actuator (10) is activated, this moves the transmission element (1) and in turn, the transmission element starts to move to the first counterweight (2) and the second counterweight (3), alternandolos between the neutral position, the first position or the second position and allows pumping of the pump (5). (Results 1)

Search 3: fn=(73613283) (Results 1)

Search 4: fn=(73613283) (Results 1)

Search 5: fn=(73613283) (Results 1)

Search 6: SFT=(tilt* and pump* and mechanism and counterweight* and pump*) and CPC=(C12M) (Results 4)

Search 7: SFT=(gravity* and force and pump* and counterweight*) and CPC=(C12M) (Results 6)

Search 8: SFT=(tilt* and pump* and mechanism and counterweight*) (Results 2120)

Search 9: SFT=(gravity* and force and pump* and counterweight*) (Results 3375)

1) Family number: 240000 (US3226308A)

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Title: ELECTROCHEMICAL TREATING METHOD AND APPARATUS

Priority: US19610117457 19610615 FR19620898355 19620522

Family:

Publication number	Publication date	Application number	Application date
DE1421971 A1	19690327	DE19621421971	19620614
DE1421971 B2	19721228	DE19621421971	19620614
DE1421971 C3	19730802	DE1962C027244	19620614
FR1323992 A	19630412	FR19620898355	19620522
GB1003012 A	19650902	GB19620019636	19620522
US3226308 A	19651228	US19610117457	19610615

Probable Assignee: IMP CLEVITE INC A CORP OF PA

Assignee(s):(std)**:** CLEVITE CORP

Assignee(s): IMP CLEVITE INC ; IMP CLEVITE INC A CORP OF PA

Inventor(s):(std)**:** HARRY POCHAPSKY ; KRUPER WAYNE ; KRUPER WAYNE A ; POCHAPSKY HARRY

International class (IPC 8-9): C25D5/08 C25D7/10 (Advanced/Invention); C25D5/00 C25D7/10 (Core/Invention)

International class (IPC 1-7): C23B5/56 C25D5/08 C25D7/10

CPC: C25D5/08 C25D7/10

European class: C25D5/08 C25D7/10

US class: 204/198 204/225 204/280 205/131 205/137 205/176 205/181

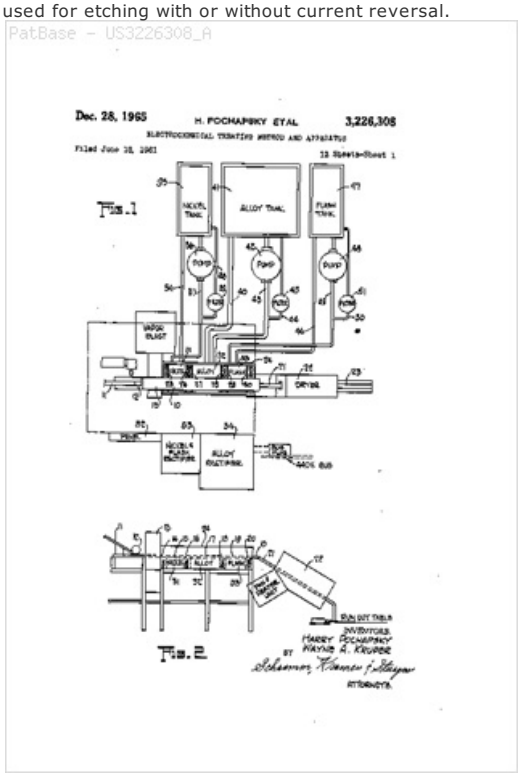
Classification Explorer

Cited documents: US3079308 A, US3007854 A, US2971810 A, US2944947 A, US2944545 A, US2869266 A, US2761831 A, US2699424 A, US2500206 A, US1798391 A, US1396919 A,

Forward Citations: WO9731138, US7285202, US6342146, US6086742, US5985106, US5393395, US5364523, US4441976, US2007063521, US2004065556, GB2241708, GB2241708, FR2140310, EP1801267, EP1666641, EP0882145, AT409142,

Abstract:
Semi-annular work-pieces are treated electro chemically on one surface (e.g. etching or plated half bearing shells internally), by aligning end-to-end a plurality of the shells to form a semi-annular column which moves longitudinally and continuously through a

zone of spaced members 60 which form a chamber with the shells, which chamber contains an anode 191 extending into the chamber and spaced at a pre-determined distance from the surface of the shells, and introducing electrolyte with turbulence preferably generated by admitting electrolyte at each end of the chamber, to form impinging jets. The electrolyte is then withdrawn at the centre. Preferably the full treatment consist in cleaning the steel backed bronze-coated shells, applying a flash coat of nickel, copper, or cobalt to prevent diffusion of the heavier electro-plate of tin/lead alloy thereon and finally a flash coat is applied on both surfaces. The anode 191 is of lead/tin alloy and is of arcuate shape carried on a cradle 197, having a deep groove and rollers 201, on which the anode is controllably fed forward through jaws 193, 194. The dimensions of the lips and their spacing A, B, C, D are determined with rate of anode feed and other parameters to control the thickness of the plating. An electric current is illustrated controlling the movements, and also the plating current. Two anodes are preferably used to give a plating of 0.000030-0.000070 inch. Preferably a low pH electrolyte is used, and is circulated at high speed using a C.D. of up to 1500 A.S.F. A non-corrodible anode may be used with metal-containing plating baths for the flash coats, and an anode of this type is used for etching with or without current reversal.



2) Family number: 10985000 (US5879430A)

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Title:	METHOD AND APPARATUS FOR AGING STEEL-MAKING SLAG
Priority:	JP19940307713 19941212 JP19950279263 19951026 JP19950279269 19951026 US19950570334 19951211 US19980190962 19981112

Family:

Publication number	Publication date	Application number	Application date
EP0718251 A2	19960626	EP19950308999	19951211
EP0718251 A3	19971015	EP19950308999	19951211
JP2667799 B2	19971027	JP19950279263	19951026
JP2667800 B2	19971027	JP19950279269	19951026
JP2873178 B2	19990324	JP19940307713	19941212
JP8165151 A2	19960625	JP19940307713	19941212
JP9118549 A2	19970506	JP19950279269	19951026
JP9118550 A2	19970506	JP19950279263	19951026
US5879430 A	19990309	US19950570334	19951211
US6053010 A	20000425	US19980190962	19981112

Probable Assignee:	KAWASAKI JUKOGYO KK
Assignee(s):(std)**:**	KAWASAKI HEAVY IND LTD ; SUMITOMO METAL IND
Assignee(s):	SUMITOMO METAL INDUSTRIES LTD ; SUMITOMO METAL IND LTD ; KAWASAKI JUKOGYO KABUSHIKI KAISHA ; KAWASAKI JUKOGYO KK ; SUMITOMO KINZOKU KOGYO KK
Inventor(s):(std)**:**	KINUKAWA YOSHITAKA ; TERAMAE KAZUNARI ; SUEZAWA YOSUKE ; KINUGAWA YOSHITAKA ; KOMAI KEIICHI ; KOIDE HIROSHI ; MORISHITA SHIGERU
Designated states:	DE FR GB IT
International class (IPC 8-9):	B01J3/00 B01J3/04 B01J8/00 C04B2/06 C04B5/00 C21C7/00 C22B7/04 F27D15/00 (Advanced/Invention); C21C7/00 F27D15/00 (Core/Invention)
International class (IPC 1-7):	C03B5/18 C04B2/04 C04B5/00 C21C7/00 C22B1/00 F27D15/00
CPC:	B01J3/002 B01J3/04 B01J8/003 B01J8/0035 C04B2/063 C04B5/00 Y02P10/212 C22B7/04
European class:	B01J3/00B B01J3/04 B01J8/00F6 B01J8/00F8 C04B2/06D C04B5/00 C21B3/04 C22B7/04
US class:	204/82 264/82 422/162 422/232 422/239 422/242 65/19 75/751
JP class F-Term:	4G012 4G012/JD02 4G012/JE01 4G012/JE06 4G012/JF01 4G012/JF03 4G112 4G112/JD02 4G112/JE01 4G112/JE06 4G112/JF01 4G112/JF03 4K063 4K063/AA01 4K063/AA05 4K063/BA06 4K063/CA01

4K063/CA02 4K063/CA06 4K063/HA40 4K013 4K013/AA00 4K013/CD00 4K013/CF01 4K013/CF11 4K013/FA00 4K013/FA01 4K013/FA02 4K013/FA03 4K013/FA04 4K013/FA05 4K013/BA00 4K013/FA11

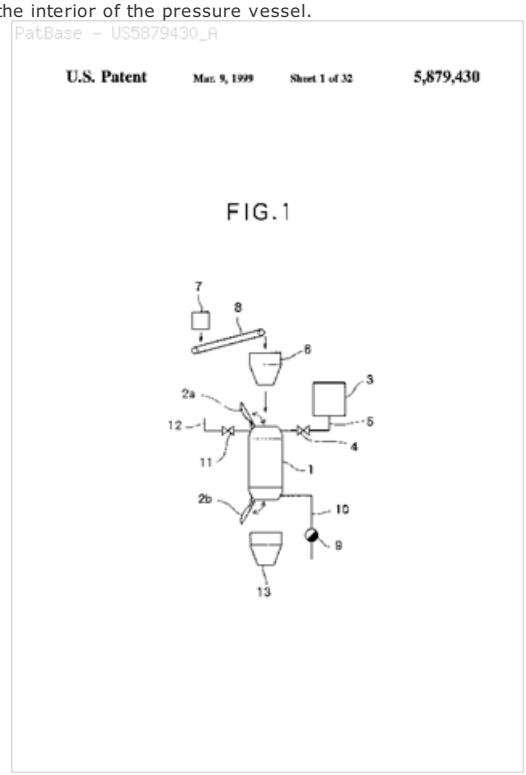
JP class F-Index: C04B5/00/C F27D15/00/B F27D15/00/C C21C7/00/J

Classification Explorer

Cited documents: US4211552 A, US3895088 A, US3239200 A, US2260710 A, US1058158 A, JP63260842 A2, JP63201043 A2, JP6317712 A2, JP6316712 A2, JP6206743 A2, JP6127984 A2, JP61101441 A2, JP6092697 A2, JP6092696 A2, JP5238786 A2, JP5085785 A2, JP5017182 A2, JP4202034 A2, JP4202033 A2, JP3159938 A2,

Forward Citations: US9700864, US2015202582, US2005092133, US2003177864, TWI649296, TWI403700, TWI374866, KR20190034652, KR101527454, JP6551907, JP6551906, JP6143009, JP6143008, JP6032013, JP5673435, JP5479887, JP5384446, JP4765535, JP2017114717, JP2017114710, JP2015193508, JP2015193506, JP2014133782, JP2013040073, JP2012041234, JP2009531164, JP2007106631, CN103343219,

Abstract:
A method for aging steel-making slag comprising the steps of charging normal temperature steel-making slag crushed to the extent that the slag having a grain diameter of 25 mm or less which constitutes 80 percent or more of the total amount into a pressure vessel which can be closed tight enough to seal a pressure substantially higher than atmosphere. The pressure vessel is closed and pressureized steam is supplied into the said vessel for heating the said pressure vessel and slag to raise the temperature and the pressure in the said pressure vessel while discharging condensed hot water. The interior of the vessel is kept under a condition saturated by steam and pressurized up to 2 to 10 kg/cm2G for 1 to 5 hours. The pressure in the pressure vessel is reduced to be equalized with atmosphere. The steel-making slag is then discharged from the vessel. Apparatus is provided for carrying out the above process and includes a pressure vessel having an opening lid for charging and discharging steel-making slag. A steam generating apparatus connected via a pipe having a valve to upward of the pressure vessel. A pipe having a steam trap connected at the lower position of the pressure vessel so as to discharge hot water. A pipe having a valve connected to the upper portion of the pressure vessel and open to the atmosphere so as to reduce the pressure in the interior of the pressure vessel.



3) Family number: 228000 (DE1451934A1)

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Title: VERBRENNUNGSMOTOR IN STAENDIGEM DYNAMISCHEM GLEICHGEWICHT COMBUSTION ENGINE constantly DYNAMIC BALANCE (Machine translation)

Priority: RO19650049229 19650211

Family:

Publication number	Publication date	Application number	Application date
DE1451934 A1	19690130	DE19651451934	19650802
SE338207 B	19710830	SE19690002880	19650902

Probable Assignee: MINI IND CONSTRUCTILLOR

Assignee(s):(std)**:** MINI IND CONSTRUCTILLOR

Assignee(s): MINISTERUL IND CONSTRUCTIILOR DE MASINI ; MINISTERUL INDUSTRIEI CONSTRUCTIILOR DES MASINI

Inventor(s):(std)**:** BADESCU M ; MARIUS ANGELO DIPL ING PAUL ; MITSU ALEXANDRU DIPL ING BADES ; PAUL A ; PAUL ANA DIPL ING ; PAUL M

Inventor(s): MITSU ALEXANDRU DIPL ING BADESCU

International class (IPC 8-9): F02B25/12 (Advanced/Invention); F02B75/02 (Advanced/Non-invention); F02B25/00 (Core/Invention); F02B75/02 (Core/Non-invention)

International class (IPC 1-7): F02B19/08 F02B25/26

CPC: F02B25/12 F02B2075/025

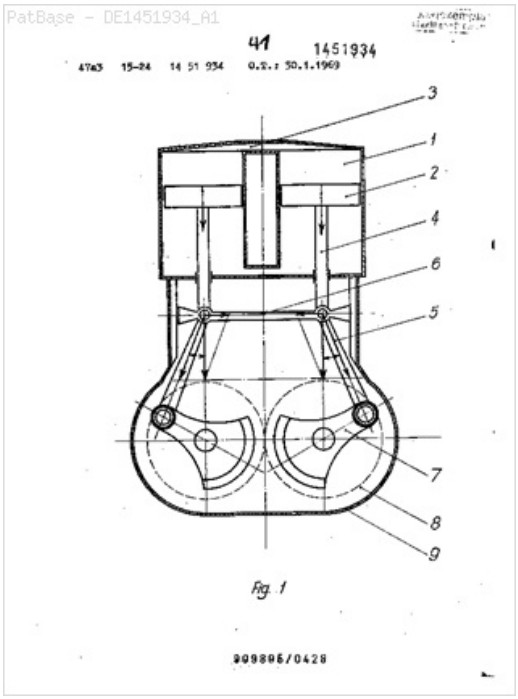
European class: F02B25/12 R02B75/02S2

Classification Explorer

Forward Citations: WO13078490, AT511600, AT511600,

Abstract:
Source: DE1451934A1 [DE] (Claim 1) 1. Verbrennungsmotor in staendigem dynamischen Gleichgewicht, dadurch gekennzeichnet, dass die Hin- und Herbewegung der Kolben unter dem Einfluss von zwei gleich grossen, von der gemeinsamen Verbrennungskammer erzeugten Kraeften erfolgt, und in Drehbewegung mittels eines Mechanismus umwandelt wird, der aus den am Oberkopf der Pleuelstangen (5) gelen kig gebundene Stangen (4) besteht, aus den Verbindungs laschen (6), von den Puffern oder von Rollen, tangent an die Fuehrungsbahn gefuehrt,und den Kurbelwellen (7), ent gegengesetzt synchronisiert, mittels der End-Zahnraeder (8) (Fig. 1). s

Machine translation: (claim 1) 1 Internal combustion engine in constant equilibrium, characterized in that the reciprocating motion of the piston under the influence of two equal, takes place from the common combustion chamber forces generated, and is converted to rotary motion by means of a mechanism consisting of the on the upper head of the connecting rods (5) kig gels bonded rods (4), consists of the connecting lugs (6), from the buffers or rollers, led tangent to the Fuehrungsbahn, and the crankshafts (7), synchronized to set appropriate, by means of the end gears (8) (Fig. 1). s



4) Family number: 1131001 (US3874515A)

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Title: Counterweight jack mechanisms for cranes and the like

Priority: US19730360726 19730516

Family:

Publication number	Publication date	Application number	Application date
CA980757 A1	19751230	CA19730182188	19730928
DE2406614 A1	19741128	DE19742406614	19740212
FR2229640 A1	19741213	FR19740000372	19740104
IT994735 A	19751020	IT19730053272	19731022
JP50015216 A2	19750218	JP19740050367	19740508
JP57033277 B4	19820716	JP19740050367	19740508
US3874515 A	19750401	US19730360726	19730516

Probable Assignee: FMC CORP

Assignee(s):(std)**:** FMC CORP

Assignee(s): FMC CORP US ; LEIGH THEODORE M ; F M C CORP

Inventor(s):(std)**:** LEIGH THEODORE MORTIMER ; LEIGH THEODORE M

Inventor(s): MORTIMER LEIGH THEODORE

International class (IPC 8-9): B60S9/12 B66C23/62 B66C23/72 B66C23/78 B66C23/80 (Advanced/Invention); B60S9/00 B66C23/00 (Core/Invention)

International class (IPC 1-7): B60P3/28 B60S9/00 B66C23/26 B66C23/62 B66C23/72 B66C23/74 B66C23/78

CPC: B66C23/78 B66C23/80

European class: B66C23/78 B66C23/80

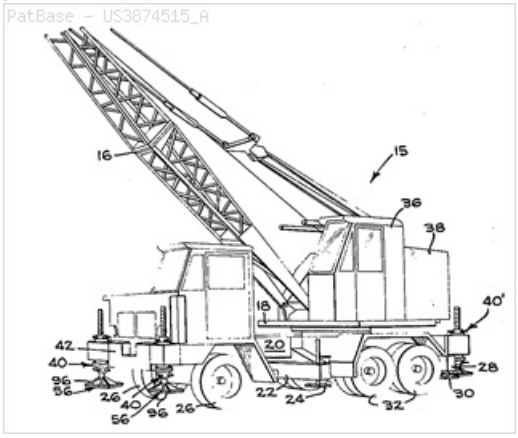
US class: 212/195 212/288 212/304 212/49

Classification Explorer

Cited documents: US3239169 A, US3227287 A, US2683576 A, US1727801 A, US1393360 A, US1350992 A,

Forward Citations: WO8604884, WO8101986, WO12084402, WO11059906, WO10077185, US8965636, US8577557, US8265833, US4723667, US4492540, US2011112727, US10336589, US10183848, US10179722, JP63060232, FR2560833, FR2390369, DE4231147, CN103402906, CN102837807, CH667448,

Abstract:
Resilient, adjustable jack mechanisms work in cooperation with front and/or rear end counterweights on the carrier frame of a mobile crane to improve the crane's stability. At least one jack mechanism is attached to the carrier frame adjacent each counterweight. Resilient means using preloaded springs or a precharged hydropneumatic accumulator in the jack mechanism are disclosed. When a load is lifted over the front end of the crane, the front of the carrier frame deflects downwardly and the resilient means in the front jack mechanism transfers the weight of the front counterweight directly to ground while the rear of the carrier frame deflects upwardly and the resilient means in the rear jack mechanism reacts to lift the ground contacting float clear of the ground so the rear counterweight is then effective to counterbalance some of the lifting moment. When a load is lifted over the rear end, the opposite actions take place so the crane's stability is improved in both modes of operation.



5) Family number: 17121001 (US5193405A)

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Title: UNDERWATER MOBILE TYPE INSPECTION SYSTEM

Priority: JP19900058755U 19900605

Family:

Publication number	Publication date	Application number	Application date
DE69101586 D1	19940511	DE19916001586	19910603
DE69101586 T2	19940721	DE19916001586T	19910603
EP0461506 A1	19911218	EP19910109037	19910603
EP0461506 B1	19940406	EP19910109037	19910603
JP2535550 Y2	19970514	JP19900058755U	19900605
JP4019787 U1	19920219	JP19900058755U	19900605
US5193405 A	19930316	US19910709300	19910531

Probable Assignee: MITSUBISHI HEAVY IND LTD

Assignee(s):(std)**:** MITSUBISHI HEAVY IND LTD ; MITSUBISHI MOTORS CORP

Assignee(s): MITSUBISHI JIDOSHA KOGYO K K TOKIO TOKYO JP ; MITSUBISHI JIDOSHA KOGYO K K TOKIO TOKYO ; MITSUBISHI JIDOSHA KOGYO K K ; MITSUBISHI JUKOGYO KK ; MITSUBISHI JUKOGYO KABUSHIKI KAISHA

Inventor(s):(std)**:** OOMICHI TAKEO ; HUKAGAWA YUKIO ; SAWARAGI KAZUTO ; AIZAWA KYOICHI ; TACHIBANA KIYOSHI ; NAKAYAMA JUNJI ; AOYAMA TOMIO ; YOSHIOKA KYOICHI ; IDEO MITSUSHI ; AOYAMA TOMIO C O KOBE SHIPYARD ; IDEO MITSUSHI C O KOBE SHIPYAR ; YOSHIOKA KYOICHI C O KOBE SHIP ; NAKAYAMA JUNJI C O KOBE SHIPYA ; OOMICHI TAKEO C O TAKASAGO TEC ; AIZAWA KYOICHI C O KOBE SHIPYA ; TACHIBANA KIYOSHI C O KOBE SHI ; HUKAGAWA YUKIO C O TAKASAGO TE ; SAWARAGI KAZUTO C O KOBE SHIPY

Inventor(s): HUKAGAWA YUKIO C O TAKASAGO TECHNICAL... ; SAWARAGI KAZUTO C O KOBE SHIPYARD AND ENGINE... ; NAKAYAMA JUNJI C O KOBE SHIPYARD AND ENGINE... ; YOSHIOKA KYOICHI C O KOBE SHIPYARD AND ENG... ; IDEO MITSUSHI C O KOBE SHIPYARD AND ENGINE... ; AIZAWA KYOICHI C O KOBE SHIPYARD AND... ; TACHIBANA KIYOSHI C O KOBE SHIPYARD AND ENG... ; AOYAMA TOMIO C O KOBE SHIPYARD AND ENGINE... ; OOMICHI TAKEO C O TAKASAGO TECHNICAL INSTITUTE...

Designated states: DE FR GB

International class (IPC 8-9): B08B9/08 B25J13/00 G01N29/04 G01N29/26 G21C17/003 (Advanced/Invention)

International class (IPC 1-7): B08B9/08 B25J13/00 B25J5/00 B63C11/52 B63C7/22 G01M19/00 G01N29/10 G01N29/26 G01S5/16 G21C17/00 G21C17/003

CPC: B25J5/00 B25J9/04 B25J19/0008 B63C7/22 B63C11/52 G01N2291/044 G01S5/16 G21C17/01 G21C17/013

European class: B25J19/00D B25J5/00 B25J9/04 B63C11/52 B63C7/22 G01S5/16 G21C17/01 G21C17/013 S01N291/044

US class: 73/865.8

JP class F-Term: 2G047 2G047/AB07 2G047/AC02 2G047/BB06 2G047/BC07 2G047/BC18 2G047/DB14 2G047/EA08 2G047/EA09 2G047/EA10 2G047/EA15 2G047/EA16 2G047/EA20 2G047/GA03 2G047/GA07 2G047/GJ02 2G047/GJ07 2G075 2G075/AA01 2G075/BA16 2G075/CA04 2G075/CA10 2G075/CA46 2G075/DA02 2G075/DA16 2G075/EA05 2G075/FA03 2G075/FA11 2G075/FA13 2G075/FA16 2G075/FB02 2G075/FB07 2G075/FB08 2G075/FB09 2G075/FC14 2G075/FC15 2G075/FC16 2G075/FC18 2G075/GA02 2G075/GA03 2G075/GA15 2G075/GA19 2G075/GA21 2G075/GA37 2G076 2G080 3B116 3B116/AA33 3B116/AB51 3B116/BA02 3B116/BA13 3B116/BA35 3B116/BB71 3B116/CD41 3C007 3C007/AS14 3C007/AS15 3C007/AS27 3C007/AS28 3C007/BS12 3C007/CS08 3C007/CT05 3C007/CY22 3C007/HS27 3C007/KS18 3C007/KS36 3C007/KV11 3C007/KX19 3C007/WA16 3C007/WA19 3C007/WA25 3C007/WA27 3C707

3C707/AS14 3C707/AS15 3C707/AS27 3C707/AS28 3C707/BS12 3C707/CS08 3C707/CT05 3C707/CY22 3C707/HS27 3C707/KS18 3C707/KS36 3C707/KV11 3C707/KX19 3C707/WA16 3C707/WA19 3C707/WA25 3C707/WA27 3F059 3F059/AA11 3F059/AA12 3F059/AA18 3F059/AA19 3F059/BA03 3F059/BB07 3F059/DA08 3F059/DC08 3F059/DD01 3F059/DD04 3F059/DD11 3F059/DD18 3F059/DE01 3F059/FB11 3F059/GA00 3F060 3F060/AA00 3F060/AA09 3F060/BA00 3F060/CA12 3F060/CA17 3F060/CA24 3F060/EA00 3F060/EB13 3F060/EC13 3F060/FA00 3F060/GA01 3F060/GA05 3F060/GA13 3F060/GA16 3F060/GB12 3F060/GB21 3F060/GD02 3F060/GD07 3F060/GD11 3F060/GD14 3F060/HA11 3F060/HA22

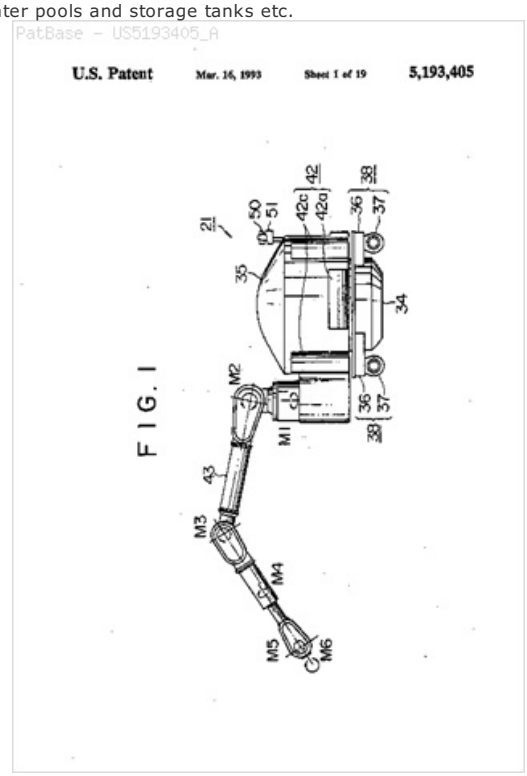
JP class F-Index: B08B9/08 B25J13/00/Z B25J5/00/A B25J5/00/D B25J5/00/E B25J5/00/Z G01N29/04 G01N29/10/507 G01N29/22 G01N29/26/501 G01N29/265 G01N29/28 G21C17/00/E G21C17/003 G21C19/02/J G21C19/02/050 G21F9/28/501/B

Classification Explorer

Cited documents: US4964059 A, US4502407 A, US4345658 A, US3883105 A, US3780571 A, JP64027864 A2, JP63195072 A2, JP62028181 A2, JP59152080 A2, JP58129255 A2, JP52105297 U1, FR2636038 A1, DE2003003 A1,

Forward Citations: WO19169173, WO18013899, WO16058973, WO15114078, WO15039459, WO13099104, WO13038550, WO12150364, US9779842, US9646727, US9058905, US8964351, US8640558, US8371025, US8325872, US8214081, US8054459, US7480041, US7267019, US7198001, US7131345, US7040008, US7017432, US7009698, US6064708, US5861564, US5852984, US5773721, US2016155523, US2014060197, US2013266109, US2013061696, US2013033594, US2010232562, US2010192368, US2007252972, US2007125190, US2005087362, US2004221666, US2004160600, US10037827, KR101858839, JP9015376, JP8179079, JP5288467, JP5286457, JP3767376, JP3563493, JP3453884, JP2017504496, JP2013099104, JP2010137800, JP2002168991, JP2001157881, JP11014784, JP10167053, GB2533735, FR3049381, FR3027150, FR2837415, FR2729881, ES2396259, EP3023994, EP3023994, EP2555202, EP2555202, EP2555202, EP2069112, EP2069112, EP1468905, EP1024351, EP1024351, EP0878805, EP0787646, EP0787646, DE29703255, DE10317191, CN107618049, CN107571291, CN107153219, CN107153219, CN106475993, CN106217355, CN105675285, CN105675285, CN105197209, CN104590516, CN101979223,

Abstract:
A underwater mobile type inspection system is disclosed wherein said system comprises a multi-articulated manipulator with a probe attached at its tip end thereof. A pivot base supports the proximal end of the manipulator for free rotation and is provided with a propulsion device. An anchoring base is attached to the bottom of said pivot base via a pivot driving mechanism. An adhesion device and a mobile vehicle device are provided, both of which are mounted on the outer periphery of said anchoring base. The inspection system may be applicable to a defect finding operation, other inspecting procedures, cleaning and recovery operations of foreign materials in large-sized vessels, such as nuclear reactor pressure vessels, water pools and storage tanks etc.



6) Family number: 29679001 (US2299692A)

© PatBase

Title: PUMPING APPARATUS

Priority: US19400336331 19400521

Family:

Publication number	Publication date	Application number	Application date
US2299692 A	19421020	US19400336331	19400521

Probable Assignee: GOEHRING EDWARD E

Assignee(s):(std)**:** GOEHRING EDWARD E

Inventor(s):(std)**:** GOEHRING EDWARD E

International class (IPC 8-9): F04B47/00 (Advanced/Invention); F04B47/00 (Core/Invention)

International class (IPC 1-7): F04B47/00

CPC: F04B47/00 Y10S417/904

European class: F04B47/00

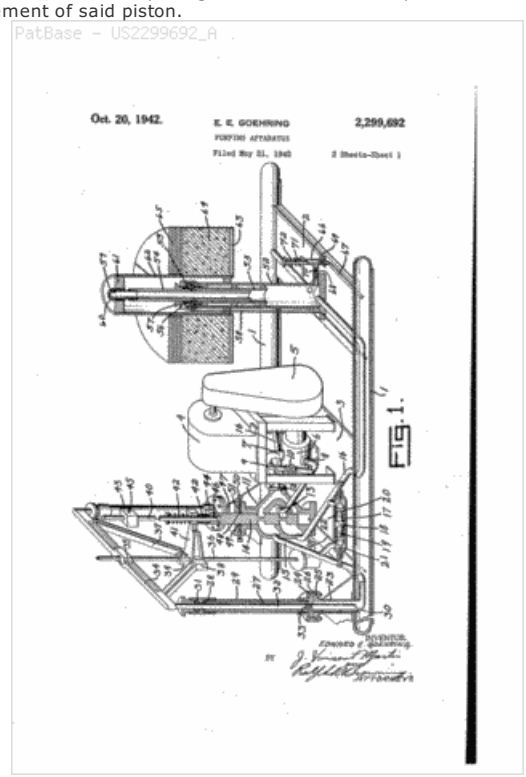
US class: 417/904 60/371 60/374 91/189R

Classification Explorer

Forward Citations: US8562308, US8083499, US5827051, US5743716, US2943642, US2704998, US2654221, US2628564, US2582564, US2560441, US2555426, US2452087,

Abstract:

1. In a pumping apparatus, a pair of chambers _each having an inlet port remote from its upper end, a gravity depressed plunger operable in each chamber, a pump plunger connected to one of said first mentioned plungers to be operated thereby, a unidirectional pump, means for connecting said pump to said chambers to receive liquid from one chamber and force it into the other, a liquid transmission medium in said chambers, pump and connecting means, means carried by one of said plungers for reversing the connections between said chambers and said pump when said plunger reaches each end of its stroke, a cylinder having one end connected to each of said chambers, a piston slidably mounted within said cylinder, a choke opening on each side of said piston. and means closing said choke opening on movement of said piston to check movement of said piston.



7) Family number: 62971002 (WO16128006A1)

© PatBase

Title: MAINTENANCE MEMBER FOR A WIND TURBINE AND METHOD FOR USING IT

Priority: DK20150000087 20150213 WO2016DK50043 20160212

Family:

Publication number	Publication date	Application number	Application date
DK178578 B1	20160711	DK20150000087	20150213
DK201500087 A1	20160711	DK20150000087	20150213
EP3256718 A1	20171220	EP20160705026	20160212
WO16128006 A1	20160818	WO2016DK50043	20160212

Probable Assignee: GULLOV INNOVATION APS

Assignee(s):(std)**:** GULLOV INNOVATION APS

Assignee(s): GULLOEV INNOVATION APS

Inventor(s):(std)**:** CHRISTENSEN JAN GULLOV ; GULLOV CHRISTENSEN JAN

Inventor(s): CHRISTENSEN JAN GULLOEV

Agent(s): ROTTENBERG ANNABELL SIMONE; TROPA APS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 IR 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): F03D1/00 (Advanced/Invention); F03D1/00 (Advanced/Non-invention)

CPC: Y02E10/72 F03D80/50

Classification Explorer

Cited documents: WO10151145 A1, WO10098814 A1, US2012057979 AA, US2010084864 AA, US2007243063 AA, US2006159550 AA, KR20130076037 A, GB2483677 A1,

Abstract:

A wind turbine (2) comprising at least one rotor blade (8) is disclosed. The wind turbine (2) comprises at least one maintenance member (14) configured to be arranged in a first configuration in which the wind turbine (2) is in power generating mode and in a second configuration in which the wind turbine (2) is in maintenance mode.

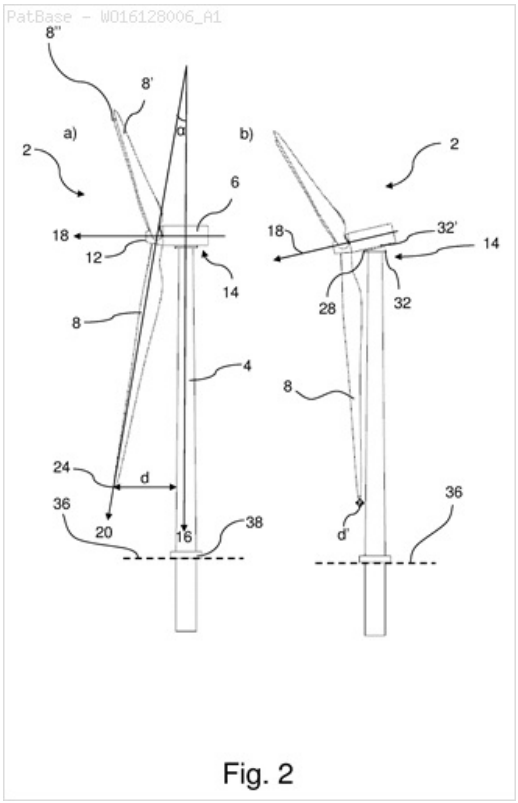


Fig. 2

8) Family number: 20112002 (GB724515A)

© PatBase

Title:	Improvements in machines for packing articles into containers
Priority:	GB19510000012 19510101

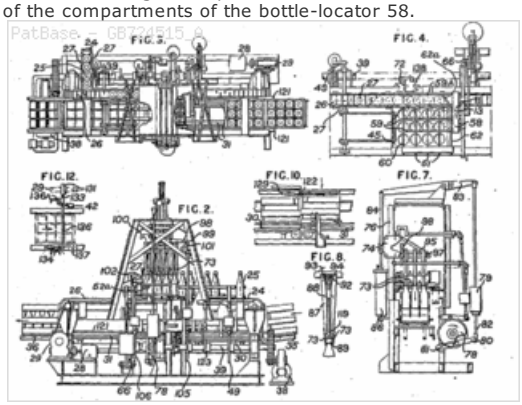
Family:

Publication number	Publication date	Application number	Application date
GB724515 A	19550223	GB19510000012	19510101

Probable Assignee:	HAYBAR LTD
Assignee(s):(std)**:**	HAYBAR LTD
Assignee(s):	HAYBAR LIMITED
Inventor(s):(std)**:**	HAYCOCK GEORGE WALLACE
International class (IPC 8-9):	B65B21/18 (Advanced/Invention); B65B21/00 (Core/Invention)
International class (IPC 1-7):	B65B21/18
CPC:	B65B21/18
European class:	B65B21/18
Classification Explorer	
Forward Citations:	US4720959, GB2182627, GB2182627, DE1116143,

Abstract:
724,515. Packaging-machines. HAYBAR, Ltd. March 26, 1952 [Jan. 1, 1951], No. 12/51. Class 94 (1). [Also in Group XXX] In a machine for packaging bottles in copartmented cases, e.g. cases having compartments which receive twelve bottles arranged in four rows of three or three rows of four, the bottles 25 are fed into the machine by a transverse endless conveyer 24, Figs. 2 and 3, and pass between curved guide rails 27 on to a longitudinally-arranged endless conveyer 26 driven through reduction gearing 29 by an electric motor 28. The empty cases pass down an inclined roller-way 35 and between guide rails 121, on to an endless conveyer 30 which, together with a second endless conveyer 31 arranged at a slightly higher level, is driven from the motor 28, each case being arrested by a cam-operated stop as it passes on to the conveyer 31. After a group of bottles has been inserted into a stationary case, the stop is retracted and the filled case is fed by the conveyer 31 to a roller-way 36. The bottles are transferred from the conveyer 26 to a slidable apertured supporting plate 45, Fig. 4, by a transversely-movable bottle locator 58 which comprises pairs of longitudinal fingers 59, 59A, co-operating with fixed guides 60, 61 and 62 and is movable in steps in the direction of arrow B, through linkage operated by a cam 66 on a main cam shaft 39 driven by an electric motor 38. The guide 60 forms an extension of one of the guide rails 27 and the guide 62 has a curved extension 62A which arrests the bottles on the conveyer and assists their transfer to the plate 45, which during the transfer operation is located in the position shown with its twelve apertures out of alignment with the spaces between the guides. Prior to each step of movement of the locator, a row of four bottles is fed by the conveyer into the passage defined by an adjacent pair of fingers, the subsequent movement of the locator displacing the row transversely into the spaces between the guides. At the end of the second step, three rows of four bottles are positioned as shown in the locator, and at the end of the third step the twelve bottles are supported by the plate 45. The outer pair of fingers is formed with a stop 72 which arrests the movement of the bottles on the conveyer until the locator returns to its original position. The necks of the bottles on the plate are arranged to be engaged by twelve grippers 73, Figs. 2 and 7 suspended from a crosshead 74 which is movable vertically in guides 76 by a cam 78 on the shaft 39 operating through a counterweighted linkage 79-84, the descent of the crosshead being cushioned by a

dashpot 86. Each gripper comprises a pair of blades 73, Fig. 8, with inturned toes 89 extending from arms 87 pivoted at 88 to the crosshead. The upper ends of the arms carry rollers 92 which are urged into engagement with a cam 94 by a spring 93. The cams for one row of three grippers are formed on one of four similar parallel cam shafts 95 having crank arms 97 coupled to a longitudinally-displaceable horizontal rod 98 having a roller 99 at one end and a hook 100 at the other end. After twelve bottles have been assembled on the plate, a cam 105 on the shaft 39 operates through linkage to move a striker 101 into engagement with roller 99, whereby the grippers are allowed to close on to the bottle necks. The cam 78 then causes a slight upward movement of the crosshead to lift the bottles clear of the plate 45, which is then moved to the right by linkage operated by a cam 49 on the shaft to align the apertures therein with the bottles. The crosshead then descends to lower the bottles into the stationary case on the conveyer 31 and a cam 106 then operates through linkage to move a striker 102 into engagement with the hook 100, thus opening the grippers to allow the bottles to drop on to the case bottom. Buffers 119 extend downwardly from the crosshead between the arms of the grippers, so that if the movement of one or more of the bottles into the case is obstructed, the descent of the crosshead is arrested before the striker 102 registers with the hook 100 and the bottles are not released. The stop 122, Fig. 10, which arrests' each case, is secured to a transverse rocking shaft 129 operated through a counterweighted linkage by a cam 123 on the shaft 39, the arrangement being such that the front wall of a case on the conveyer 30 can pass under the lowered stop, but the rear wall of the case is engaged and retained by the stop as the case passes on to the conveyer 31 at a higher level. The side of each stationary case is engaged by a roller 137, Fig. 12, on a lever 134 coupled to a tranverse rod 136 carrying a tongue 133 adapted to enter a notch in a wheel 131 on the cam shaft 39, an arm 136A on the rod being engaged by a spring-actuated self-opening switch 42 in the circuit of the motor 38, so that in the absence of a case the switch is allowed to open. and stop the motor. A starwheel 138, Fig. 4, actuated by the incoming bottles, is associated with the conveyer 26, as described in Specification 724,514 and is arranged to open a further switch in the circuit of the motor 38 if less than the requisite number of bottles are fed to any one of the compartments of the bottle-locator 58.



9) Family number: 21724002 (US2379255A)

© PatBase

Title:	VIBRATION DAMPER
Priority:	19410526 US19410413215 19411001

Family:

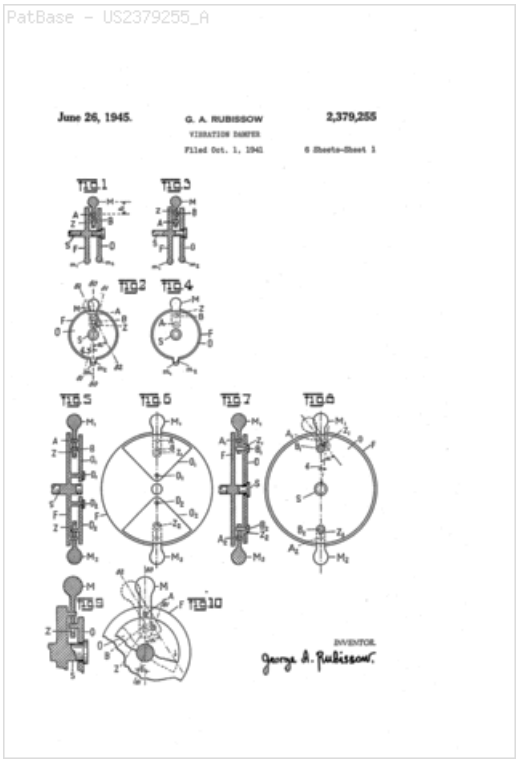
Publication number	Publication date	Application number	Application date
US2379255 A	19450626	US19410413215	19411001

Probable Assignee:	RUBISSOW GEORGE A
Assignee(s):(std)**:**	RUBISSOW GEORGE A
Inventor(s):(std)**:**	RUBISSOW GEORGE A
International class (IPC 8-9):	F16F15/14 (Advanced/Invention); F16F15/10 (Core/Invention)
International class (IPC 1-7):	F16F15/14
CPC:	F16F15/145 B21B2203/44 F16F15/14 Y10T74/213
European class:	F16F15/14 F16F15/14B3 L21B203/44
US class:	74/574.3

Classification Explorer

Forward Citations:	US9080637, US6348000, US6089121, US5884735, US4867284, US4739679, US2426130, US2013014609, US10415563, FR2777621, EP2140143, EP2140143, EP2140143, DE19808731, DE19808731,

Abstract:
1. In a vibration damper the combination with a rotatable element of a pair of cenhdtugal Dendulums pivotally mounted thereon on oppo- . _ a,a1o,aes 7 site sides of the axis o! rotation, an inertia member coaxial with the rotatable element, connec~ tions between said pendulums and opposite sides of the inertia member arnnsed to apply a turnlnz moment to the Inertia member as the pendulums swing about their own axes in the same rotatlve dlrectlom _



10) Family number: 12443004 (US5501303A)

© PatBase

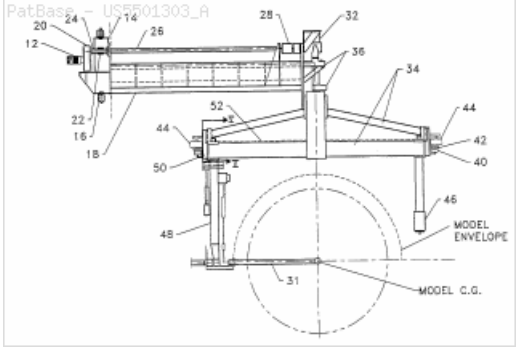
Title:	Single acting translational/rotational brake
Priority:	US19930064324 19930512 US19950505054 19950721

Family:

Publication number	Publication date	Application number	Application date
US5501303 A	19960326	US19950505054	19950721

Probable Assignee:	US ARMY
Assignee(s):(std)**:**	US ARMY
Assignee(s):	THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ADMINISTRATOR OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Inventor(s):(std)**:**	ALLRED JOHNNY W ; FLECK JR VINCENT J
International class (IPC 8-9):	G01M9/06 (Advanced/Invention); G01M9/00 (Core/Invention)
International class (IPC 1-7):	F16D63/00 F16F9/00
CPC:	G01M9/062
European class:	G01M9/06B
US class:	188/382 188/67 188/70B
Classification Explorer	
Cited documents:	US5074387 A, US4901824 A, US4838391 A, US4077498 A, US3822768 A, US3073424 A, US3033320 A, US2955680 A, US2727845 A, US2086538 A, US2065382 A, US2041935 A, US1928630 A, DE1178725 B,

Abstract:
A brake system is provided that applies braking forces on surfaces in both the translational and rotational directions using a single acting self-contained actuator that travels with the translational mechanism. The brake engages a mechanical lock and creates a frictional force on the translational structure preventing translation while simultaneously creating a frictional torque that prevents rotation of the vertical support. The system may include serrations on the braking surfaces to provide increased braking forces.



11) Family number: 43656004 (CO4840520A) © PatBase

Title: MOTOCICLETA MOTORCYCLE (Machine translation)

Priority: CO19980052674 19980914

Family:

Publication number	Publication date	Application number	Application date
CO4840520 A1	19990927	CO19980052674	19980914

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s):(std)**:** HONDA MOTOR CO LTD

Assignee(s): HONDA GIKEN KOGYO KABUSHIKI KAISHA ; HONDA GIKEN KOGYO KK

Inventor(s):(std)**:** KAORU WACHIGAI ; TAKUSHI MATSUTO

Inventor(s): WACHIGAI KAORU ; MATSUTO TAKUSHI

Agent(s): HUMBERTO RUBIO CAMACHO

International class (IPC 8-9): B62K11/04 B62M7/02 (Advanced/Invention); B62K11/00 B62M7/00 (Core/Invention)

International class (IPC 1-7): B62K11/04 B62M7/02

Classification Explorer

Abstract:
Source: CO4840520A [ES] 1.- Una motocicleta en la que se han previsto un motor de combustion y un motor electrico como unidad de potencia, y una salida del motor de combustion y una salida del motor electrico se transmiten a una rueda motriz mediante un eje de transmision y un eje de motor electrico, respectivamente, caracterizada porque dicho eje de transmision y dicho eje de motor electrico estan dispuestos coaxialmente en serie en la direccion longitudinal de una carroceria del vehiculo y en paralelo a un cigueenal del motor de combustion. Una motocicleta segun la reivindicacion 1, caracterizada porque dicho eje de transmision soporta un embrague unidireccional y un eje de embrague que soporta un embrague unidireccional para un motor de arranque, y se ha previsto un embrague centrifugo integralmente con dicho eje de transmision. Una motocicleta segun la reivindicacion 1, caracterizada porque dicha unidad de potencia esta montada de forma oscilante, junto con una rueda trasera, en un bastidor principal. **Machine translation:** 1. A motorcycle in which are provided a combustion engine and an electric motor as power unit, and an output of the combustion engine and electric motor output is transmitted to a drive wheel via a drive shaft and electric motor shaft, respectively, wherein said drive shaft and said electric motor shaft are coaxially arranged in series in the longitudinal direction of a vehicle body and parallel to a cigueenal combustion engine. A motorcycle according to claim 1, wherein said drive shaft supports a one-way clutch and a clutch shaft that supports a one-way clutch for a starter, and a centrifugal clutch is provided integrally with said transmission shaft. A motorcycle according to claim 1, wherein said power unit is swingably mounted, together with a rear wheel, on a main frame.

12) Family number: 73507004 (WO19051313A1) © PatBase

Title: SELF-REGULATING VACUUM STILL

Priority: US20170699988 20170908

Family:

Publication number	Publication date	Application number	Application date
WO19051313 A1	20190314	WO2018US50084	20180907

Probable Assignee: NORTHRUP INC

Assignee(s):(std)**:** NORTHRUP INC

Inventor(s):(std)**:** NORTHRUP ROBERT

Inventor(s): NORTHRUP ROBERT P

Agent(s): HANDLEY MARK W

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ 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 IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): C02F1/04 (Advanced/Invention)

CPC: C02F1/04 B01D1/00 B01D1/0035 B01D3/04 B01D3/103

Classification Explorer

Cited documents: US6391162 BA, US4639293 A, US4235677 A, US2490659 A, US2007131534 AA, CN204434315 U, CN201737726 U,

Abstract:
A self-regulating vacuum still (8) has a fluid reservoir (10), a boiler (28), a vapor separator (46), a condenser (33), and a condensate reservoir (58). The boiler (28) receives fluid from the fluid reservoir (10) in liquid form and heats the fluid to generate fluid vapor, preferably using evacuated solar tubes (44). The vapor separator (46) receives the fluid vapor from the boiler (28) and separates entrained moisture. Preferably a packing (50) is provided by structured wire mesh which is disposed in a vapor outlet (49) from the vapor separator (46). The condenser (33) receives the fluid vapor from the vapor separator (46), and cools the fluid vapor to a condensate. The condenser (3) has a collection section (34), a condensate section (35) and an outlet (16) which is proximate to the collection section (34) and the condensate section (35). An airlock (20) is connected to the outlet (16) for venting air and fluid vapor from the condenser (33) when a preselected pressure is exceeded. A condensate reservoir (58) is connected to the condenser (33) for receiving condensate.

PatBase - WO19051313_A1

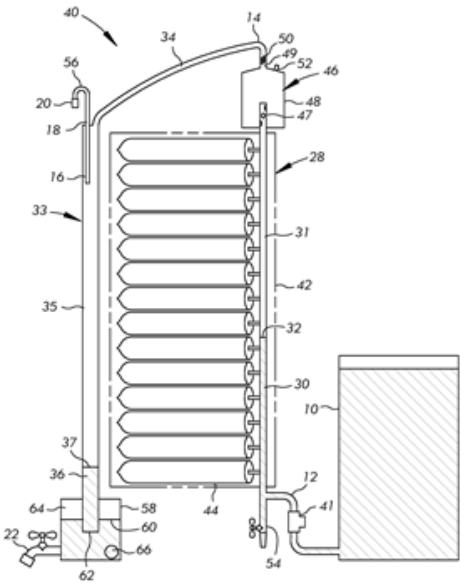


FIG. 4

13) Family number: 61720004 (EP2987763A1)

© PatBase

Title: METHOD FOR MONITORING OVERLOAD IN AN INDUSTRIAL TRUCK PROCEDE DE SURVEILLANCE DE SURCHARGE POUR UN CHARIOT DE MANUTENTION

Priority: DE201410112063 20140822 DE201410114114 20140929

Family:

Publication number	Publication date	Application number	Application date
DE102014114114 A1	20160225	DE201410114114	20140929
EP2987763 A1	20160224	EP20150179005	20150730

Probable Assignee: LINDE MATERIAL HANDLING GMBH

Assignee(s):(std)**:** LINDE MATERIAL HANDLING GMBH

Inventor(s):(std)**:** FRANCOIS YVES JOCELYN

Agent(s): GEIRHOS JOHANN

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

International class (IPC 8-9): B66F17/00 B66F9/075 B66F9/22 G01G19/08 (Advanced/Invention)

CPC: G01G19/083 B66F17/003

Classification Explorer

Cited documents: US5666295 A, JP3755235 B2, JP2005335892 A2, JP2000034100 A2,

Abstract:
Source: EP2987763A1 [DE] Bei einem Verfahren zur ueberwachung auf ueberlast bei einem Flurfoerderzeug mit einem Hubmast sowie einer an dem Hubmast hoehenbeweglich gefuehrten Lastaufnahmevorrichtung, insbesondere einer Lastgabel, mit mindestens einem Hydraulikzylinder zum Anheben der Lastaufnahmevorrichtung, mit Drucksensormitteln zur Erfassung eines Lastdrucks (2,4,8), mit einer Bedienvorrichtung zum Eingeben von Steuerbefehlen zum Anheben/Senken der Lastaufnahmevorrichtung und mit einer Steuerung, wobei die Steuerung anhand des Lastdrucks (2,4,8) bei einem Steuerbefehl zum Anheben erfasst, ob ein Wert entsprechend einer maximalen Last erreicht ist, fuehrt bei einem Steuerbefehl zum Anheben der Lastaufnahmevorrichtung und einem Lastdruck (4,8) entsprechend einer maximalen Last die Steuerung fuer einen Mindestzeitraum (5) Druckmittel zu und stoppt anschliessend die Zufuhr von Druckmittel, sowie erkennt nach dem Stopp der Druckmittelzufuhr beim Auftreten mindestens eines deutlichen Druckabfalls (9) eine tatsaechliche Hubbewegung und das Aufliegen einer Last. **Machine translation:** In a method for Monitoring of overload in a Flurfoerderzeug with a mast and one on the mast height-movably guided load lifting device, in particular a fork, with at least one hydraulic cylinder for lifting the load lifting device, with pressure sensor means for detecting a load pressure (2.4, 8), with an operating device for inputting control commands for lifting / lowering the load pick-up device and with a control, wherein the control based on the load pressure (2,4,8) at a control command detected for raising whether a value is reached corresponding to a maximum load, leads to a control command for raising the load lifting device and a load pressure (4.8) corresponding to a maximum load, the control for a minimum period (5) pressure medium to and then stops the supply of pressure medium, and detects after the stop of the supply of pressure medium at least occurrence of a significant pressure drop (9) s actual lifting movement and the resting load.

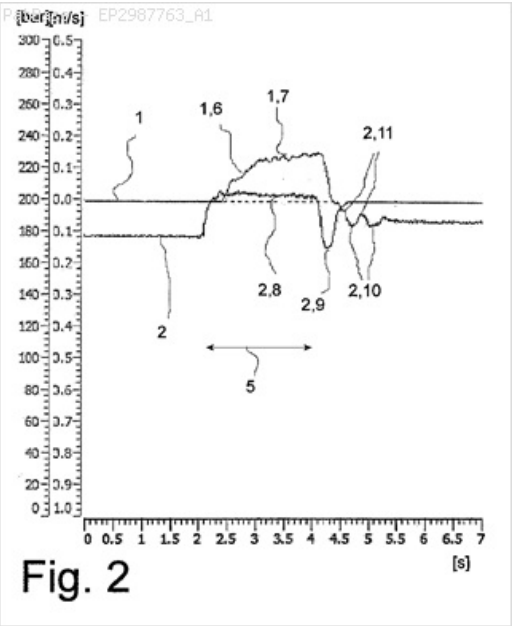


Fig. 2

14) Family number: 57225005 (US2014231093A)

© PatBase

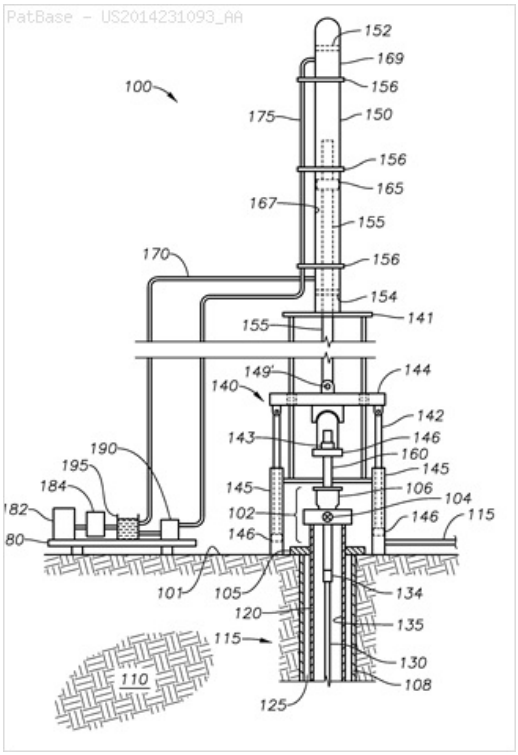
Title:	HYDRAULIC OIL WELL PUMPING SYSTEM, AND METHOD FOR DELIVERING GAS FROM A WELL
Priority:	US20130766664P 20130219 US20140183947 20140219

Family:

Publication number	Publication date	Application number	Application date
US2014231093 AA	20140821	US20140183947	20140219

Probable Assignee:	HOELL R LEE
Assignee(s):(std)**:**	HOELL R LEE
Inventor(s):(std)**:**	HOELL R LEE
International class (IPC 8-9):	E21B43/12 (Advanced/Invention)
CPC:	E21B43/121 E21B43/126
US class:	166/105 166/372
Classification Explorer	
Cited documents:	US4530646 A,
Forward Citations:	US2017074079, US10436529, US10428627, US10352138, US10344573, US10167865, US10167857, US10087924, US10072487, EP3128123, EP3128122,

Abstract:
A hydraulic oil well pumping system is provided. The system uses a pump to exert hydraulic pressure against a reciprocating lift piston over a wellbore. The lift piston is operatively connected to a rod string and downhole pump for pumping oil from a wellbore. Thus, oil is pumped from the wellbore as the rod string and downhole pump move between upper and lower rod positions. In addition, the system includes at least one compressor cylinder having a compressor piston that reciprocates with the lift piston in order to compress produced gas at the surface. A method for compressing gas while pumping oil from a wellbore using such a system is also provided herein.



15) Family number: 67375005 (WO17187387A1)

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Title:	HYDRODYNAMIC THRUST, GRAVITY AND SUCTION MOTOR MOTEUR HYDRODYNAMIQUE DE POUSSEE, GRAVITE ET ASPIRATION MOTOR HI
Priority:	WO2016CO00005 20160427 WO2016CO00009 20161109

Family:

Publication number	Publication date	Application number	Application date
WO17186193 A1	20171102	WO2016CO00005	20160427
WO17186194 A1	20171102	WO2016CO00009	20161109
WO17187387 A1	20171102	WO2017IB52452	20170427

Probable Assignee:	M C C SYSTEM Q S A S
Assignee(s):(std)**:**	M C C SYSTEM Q S A S ; QUEVEDO BONILLA CARLOS ANDRES
Assignee(s):	MCC SYSTEM Q SAS
Inventor(s):(std)**:**	QUEVEDO BONILLA CARLOS ANDRES
Agent(s):	OLARTE CARLOS R
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ 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 IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC 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 PA PE PG PH PL PT QA RO RS RU RW SA 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
International class (IPC 8-9):	F03B17/00 F03B17/02 F03B17/04 F03C1/00 F03C1/007 F04B9/00 F04B9/10 F04B9/109 (Advanced/Invention)
CPC:	F03B17/00 F03B17/02 F03B17/04 F03C1/00 F03C1/007 F04B9/00 F04B9/10 F04B9/109
Classification Explorer	
Cited documents:	WO14193206 A1, WO13045755 A1, WO11031515 A2, WO06071916 A1, US4267695 A, US4207741 A, US2012169066 AA, US2010319339 AA, US2009293472 AA, JP6280736 A2, JP57097077 A2, JP10246172, GB191311516 A, CN203374440 U, CN102797649 A, CN102705152 A,

Abstract:
The invention relates to a hydrodynamic thrust and gravity motor in the form of a machine designed to operate in continuous mode since it requires no external energy source for operation (fossil fuels, renewable energy, energy sources or reliefs). The hydrodynamic thrust and gravity motor is intended for large- or small-scale industrial energy generation, said motor using the movement of fluids inside the system in order to generate mechanical energy that is converted into electrical energy.

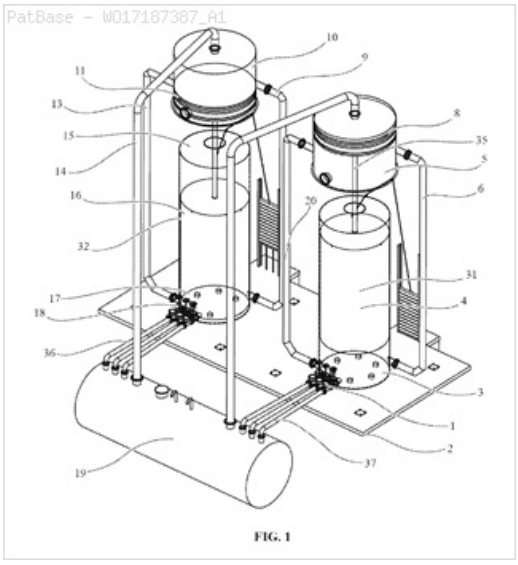

FIG. 1

16) Family number: 23362005 (US2003152475A)

© PatBase

Title: TWIN SCREW ROTORS AND DISPLACEMENT MACHINES CONTAINING THE SAME

Priority: CH20000000014 20000725 CH20000001472 20000725 JP20020514266 20010706 WO2001CH00421 20010706 EP20010944852 20010706 WO2001CH00421 20030124

Family:

Publication number	Publication date	Application number	Application date
AT483110 E	20101015	AT20010944852T	20010706
AU2001267247 AA	20020205	AU20010267247	20010706
AU2001267247 BB	20050707	AU20010267247	20010706
AU200167247 A1	20020205	AU20010067247	20010706
AU200167247 A5	20020205	AU20010067247D	20010706
BRPI0112776 A	20030708	BR2001PI12776	20010706
CA2417051 AA	20030123	CA20012417051	20010706
CA2417051 C	20080916	CA20012417051	20010706
CH694339 A	20041130	CH20000001472	20000725
CH694339 A9	20050315	CH20000001472	20000725
CN1242172 C	20060215	CN20018013448	20010706
CN1444700 A	20030924	CN20018013448	20010706
CY1110996 T1	20150611	CY20101101166T	20101217
CZ20024019 A3	20030514	CZ20020004019	20010706
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DK1303702 T3	20110124	DK20010944852T	20010706
EP1303702 A1	20030423	EP20010944852	20010706
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ES2353460 T3	20110302	ES20010944852T	20010706
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HK1058814 A1	20060825	HK20040101631	20040304
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HK1058814 B	20060825	HK20040101631	20040304
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JP2004504546 T2	20040212	JP20020514266T	20010706
JP2008196505 A2	20080828	JP20080132867	20080521
JP4162485 B2	20081008	JP20020514266	20010706
JP4677469 B2	20110427	JP20080132867	20080521
KR100737321 B1	20070709	KR20037001047	20010706
KR20030026988 A	20030403	KR20037001047	20010706
NO20030357 A	20030123	NO20030000357	20030123
NO20030357 A0	20030123	NO20030000357	20030123
NO20030357 L	20030123	NO20030000357	20030123
PL202364 B1	20090630	PL20010362974	20010706
PL362974 A1	20041102	PL20010362974	20010706
PT1303702 T	20101223	PT20010944852T	20010706
TW587128 B	20040511	TW20010117924	20010723
US2003152475 AA	20030814	US20020297891	20021211
US6702558 BB	20040309	US20020297891	20021211
WO0208609 A1	20020131	WO2001CH00421	20010706

Probable Assignee: ATELIERS BUSCH SA

Assignee(s):(std)**:** ATELIER BUSCH SA ; ATELIERS BUSCH A SA ; BUSCH ATEL SA ; BECHER ULRICH ; ATELIERS BUSCH SA

Assignee(s):	BECHER ULRICH F ; ATELIERS BUSCH S A A ; ATELIERS BUSCH S A ; ATELIERS BUSCH RUE DES MOISSONS ZONE INDUSTRIEL SA ; ATELIERS BUSCH RUE DES MOISSONS ZONE INDUSTRIELLE 2906 CHEVENEZ SA
Inventor(s):(std):	BECHER ULRICH ; BECHER ULRICH F ; BECHER U ; ULRICH BECHER ; BECHER ULRICH I ; U BECHER
Agent(s):	PHILLIPS ORMONDE FITZPATRICK; ROBIC; BOVARD AG; CHINA PATENT AGENT HK LTD 22 F GREAT EAGLE CENTRE 23 HARBOUR ROAD; CHINA PATENT AGENT HK LTD
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 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 PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
International class (IPC 8-9):	F04C F04C18/00 F04C18/08 F04C18/16 F04C25/02 F04C29/00 (Advanced/Invention); F04C18/08 (Advanced/Non-invention); F04C18/08 F04C18/16 F04C25/00 F04C29/00 (Core/Invention)
International class (IPC 1-7):	F01C1/16 F04C F04C018/08 F04C018/16 F04C18/00 F04C18/08 F04C18/16 F04C25/02 F04C29/00
CPC:	F04C18/16 F04C18/084 F04C2230/605
European class:	F04C18/08B2 F04C18/16 R04C230/605
US class:	418/201.1 418/201.100P 418/201.3 418/201.300S 418/9 418/9S
JP class F-Term:	3H005 3H029 3H029/AA03 3H029/AA17 3H029/AB01 3H029/AB06 3H029/BB21 3H029/BB42 3H029/BB43 3H029/CC05 3H129 3H129/AA03 3H129/AA17 3H129/AB01 3H129/AB06 3H129/BB21 3H129/BB42 3H129/BB43 3H129/CC05 3H029/BB24 3H029/BB31 3H029/CC16 3H129/BB24 3H129/BB31 3H129/CC16
JP class F-Index:	F04C18/16/A F04C18/16/B F04C18/16/C F04C25/02/M F04C29/00/D
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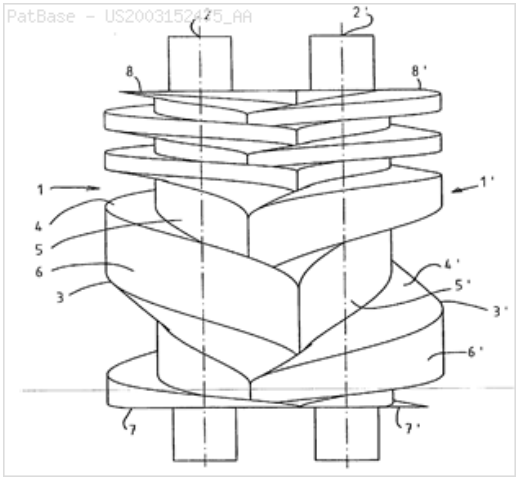
Forward Citations:	WO19137852, WO17075555, WO14026440, WO06087038, US8827669, US8764424, US8748151, US8328542, US7753040, US7625191, US2010296958, US2010166591, US2009314269, US2008240967, US2008190392, KR20160146109, KR101712164, JP2013525690, EP1875076, EP1722104, EP1722104, EP1722104, DE102011118050, DE102005022470, DE102005022470, CN108350881, CN106089708, CN105917100, CN105697373, CN105697373, CN105485014, CN105485014, CN104696223, CN104696223, CN104454523, CN103982428, CN103062057, CN102937094, AU2005327862,

Abstract:
The twin screw rotors for axis-parallel installation in displacement machines for compressible media have asymmetrical transverse profiles and numbers of wraps that are greater than or equal to2. Depending upon the wrapping angle (alpha), the pitch (L) varies, which pitch increases in a first subdivision (T1) from the suction-side screw end, reaches a maximal value (Lmax) after one wrap, decreases in a second subdivision (T2) until a minimal value (Lmin), and is constant in a third subdivision (T3). The pitch course in the first subdivision (T1) is preferably mirror-symmetrical to that in the second subdivision (T2), within the subdivisions T1 to T2, it is point-symmetrical to the mean values in almost all cases. Compact screw rotors, completely free of imbalance, can thereby be achieved with compression rates of 1.0... 10.0, also without profile variation. Such rotors offer the best prerequisites for reduction in energy requirements, temperature, construction size, costs, as well as for free selection of working materials in applications in chemistry, pharmacy, packaging, and semiconductor technology.



17) Family number: 45026005 (US2011048081A)

Title:	BALANCE RING SYSTEM ON TWO PLANES FOR A SPIN ROTARY MACHINE
Priority:	MX20090002329 20090227

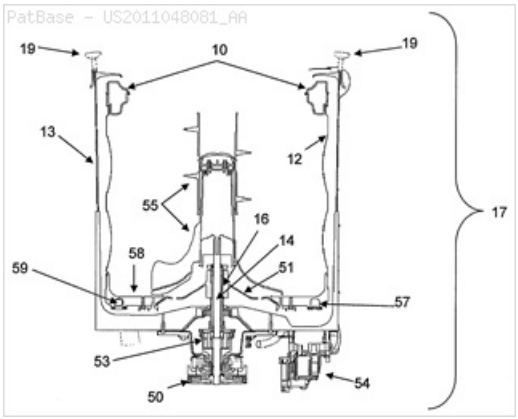
Family:

Publication number	Publication date	Application number	Application date
BRPI1002211 A2	20110705	BR2010PI02211	20100224
CA2693639 AA	20100827	CA20102693639	20100218
MX2009002329 A1	20100323	MX20090002329	20090227
US2011048081 AA	20110303	US20100712331	20100225

Probable Assignee:	MABE DE CV SA

Assignee(s):(std):	MABE S A DE C V ; MABE SA DE CV ; SALINAS ALFONSO THOMPSON ; SANCHEZ CLAUDIO CESAR ZENTENO ; URBIOLA SOTO LEONARDO ; BERTA MARTIN ORTEGA ; MABE DE CV SA
Inventor(s):(std):	URBIOLA SOTO LEONARDO ; THOMPSON SALINAS ALFONSO ; ORTEGA BRENA MARTIN ; ZENTENO SANCHEZ CLAUDIO CESAR ; BERTA MARTIN ORTEGA ; MARTIN ORTEGA BRENA ; SALINAS ALFONSO THOMSON ; BRENA MARTIN ORTEGA ; SALINAS ALFONSO THOMPSON ; SOTO LEONARDO URBIOLA ; SANCHEZ CLAUDIO CESAR ZENTENO
Inventor(s):	ALFONSO THOMPSON SALINAS ; LEONARDO URBIOLA SOTO ; CLAUDIO CESAR ZENTENO SANCHEZ ; ALFONSO THOMSON SALINAS
International class (IPC 8-9):	D06F23/00 D06F37/00 D06F37/20 D06F37/24 D06F39/00 F16F15/14 F16F15/173 (Advanced/Invention); D06F21/00 D06F23/00 D06F37/00 D06F37/20 D06F39/00 F16F15/10 F16F15/16 (Core/Invention)
CPC:	D06F37/245 D06F23/04 D06F37/12
European class:	D06F23/04 D06F37/12 D06F37/24B
US class:	68/212 68/212P
Classification Explorer	
Cited documents:	US5761933 A, US4044626 A,
Forward Citations:	WO17186035, US9518352, US2018274158, US10358759, RU2701039, CN106480656, CN106480652,

Abstract:
A textile washing machine has a rotary basket balanced in at least one of its two planes, where optionally a first balance ring is structurally formed at the lower part of the basket or bottom of basket in order to balance the lower plane of the rotary basket and/or optionally, a second balance ring structured at the upper part of the basket. The first balance ring comprises: a channel or track that forms an integral part with the bottom of basket, a viscous drag fluid lodged in the track, a plurality of spheres lodged in the channel or track, immerse in the viscous drag fluid, and a lid that seals hermetically against the track. The lid comprises at least one radial rib in order to provide the bottom of basket with a structural reinforcement so that the bottom of basket does not weaken due to the presence of the track or channel. The second balance ring includes: a base with a first wall and a second wall, a cover that closes the base and with the same walls of the base, a working fluid lodged in the base, at least a curved blade lodged in the base where the blade covers from the first wall of the base and leaves a clearing between the blade and second wall, allowing the working fluid to have a vertical component; and at least a straight blade lodged in the base and alternated with the at least one aforementioned curved blade.



18) Family number: 4396005 (US4455115A)

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Title:	HYDRAULIC SHEET STACKING AND WEIGHING SYSTEM
Priority:	US19820401876 19820726

Family:

Publication number	Publication date	Application number	Application date
US4455115 A	19840619	US19820401876	19820726

Probable Assignee:	CHAMPION INT CORP
Assignee(s):(std):	CHAMPION INT CORP
Assignee(s):	CHAMPION INT ; CHAMPION INT A CORP OF NY CORP
Inventor(s):(std):	ALGER RICHARD N ; HALL JOHN A
International class (IPC 8-9):	B65H31/16 (Advanced/Invention); B65H31/04 (Core/Invention)
International class (IPC 1-7):	B65H31/08
CPC:	Y10S414/103 B65H31/16
European class:	B65H31/16
US class:	177/147 187/20 187/251 271/217 414/21 414/924 414/98 73/862.54 73/862.541
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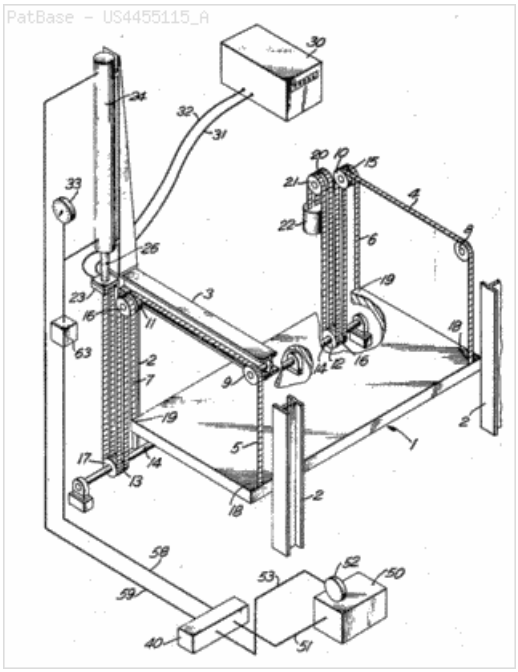
Cited documents:	US4137977 A, US4058178 A, US3905595 A, US3605837 A, US3583614 A, US3477712 A, US3104141 A, US3028980 A, DE2749912 A1, AU142746 A1,
Forward Citations:	WO8701685, US7975807, US7717237, US7465139, US6296247, US6295922, US5790933, US5288062, US5215299, US5201509, US5191920, US5035562, US4995772, US4927131, US4921385, US4917198, US4861016, US4674938, US2008190706, US2007246303, US2006244201, US2006131082, EP0548801,

Abstract:
A mechanism for stacking and weighing sheets fed from a semi-continuous sheet cutter. The mechanism includes a hydraulic cylinder operatively connected to a stacking table so that as sheets are deposited onto the stacking table, the table is lowered by indexing the hydraulic cylinder. This continues until a full stack of sheets, having a predetermined number of sheets determined by weight, by

height of the stack or by sheet count has been stacked on the table. The hydraulic cylinder comprises a hydraulic fluid reservoir, an electrically driven hydraulic pump, a four-way, three position hydraulic spool valve, a hydraulic cylinder and back pressure safety valve. A load cell connected between the hydraulic cylinder and the rest of the mechanism is connected to a scale device which will weigh the stack of sheets.



19) Family number: 11241006 (US5545019A)

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Title:	Scroll compressor drive having a brake
Priority:	US19920970485 19921102 WO1993US06307 19930702 US19950401174 19950309 US19950436180 19950509 US19960643799 19960507

Family:

Publication number	Publication date	Application number	Application date
DE69324278 D1	19990506	DE19936024278	19930702
DE69324278 T2	19990708	DE19936024278T	19930702
EP0746685 A1	19961211	EP19930916940	19930702
EP0746685 A4	19951023	EP19930916940	19930702
EP0746685 B1	19990331	EP19930916940	19930702
JP3165153 B2	20010514	JP19940511032T	19930702
JP8502803 T2	19960326	JP19940511032T	19930702
KR100269086 B1	20001101	KR19950701740	19950502
KR19950704595 A	19951120	KR19950701740	19930702
KR950704595 A	19951120	KR19950701740	19950502
TW268995 B	19960121	TW19930109497	19931111
US5545019 A	19960813	US19950401174	19950309
US5580229 A	19961203	US19950436180	19950509
US6264445 BA	20010724	US19960643799	19960507
WO9410425 A1	19940511	WO1993US06307	19930702

Probable Assignee:	COPELAND CORP
Assignee(s):(std)**:**	ANDERSON GARY J ; BECK NORMAN G ; COPELAND CORP
Assignee(s):	COPELAND CORP SIDNEY OHIO US ; EMERSON CLIMATE TECHNOLOGIES INC
Inventor(s):(std)**:**	BECK NORMAN G ; ANDERSON GARY J ; TUCKER RICHARD S ; ANDERSON GARY ; BECK NORMAN
Designated states:	AT BE CH DE DK ES FR GB GR IE IT JP KR LU MC NL PT SE US
International class (IPC 8-9):	F01C1/10 F04C18/02 F04C2/04 F04C28/06 F04C28/28 F04D29/54 G06F1/20 H05K7/20 (Advanced/Invention); F04C23/00 (Advanced/Non-invention); F04D29/40 G06F1/20 H05K7/20 (Core/Invention)
International class (IPC 1-7):	F01C1/02 F01C1/04 F01C1/10 F04C18/02 F04C29/10
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European class:	F04C18/02B2 F04C28/06 F04C29/10K R04C23/00D R04C270/72 R05B270/1097
US class:	188/82.1 418/55.1 418/55.4 418/55.5 418/55.6 418/57
JP class F-Term:	3G113 3H029 3H029/AA02 3H029/AA14 3H029/AB03 3H029/BB01 3H029/BB21 3H029/BB24 3H029/BB31 3H029/BB32 3H029/BB33 3H029/BB49 3H029/BB50 3H029/BB55 3H029/CC01 3H029/CC04 3H029/CC05 3H029/CC07 3H029/CC08 3H029/CC09 3H029/CC16 3H029/CC18 3H029/CC22 3H029/CC30 3H029/CC38 3H029/CC45 3H029/CC61 3H039 3H039/AA03 3H039/AA04 3H039/AA12 3H039/BB01 3H039/BB02 3H039/BB07 3H039/BB08 3H039/BB11 3H039/BB21 3H039/BB23 3H039/BB25 3H039/CC02 3H039/CC09 3H039/CC12 3H039/CC13 3H039/CC14 3H039/CC19 3H039/CC20 3H039/CC26 3H039/CC32 3H039/CC33 3H039/CC34 3H039/CC35 3H039/CC39 3H039/CC43 3H039/CC44 3H129 3H129/AA02 3H129/AA14 3H129/AA33 3H129/AB03 3H129/BB01 3H129/BB21 3H129/BB24 3H129/BB31 3H129/BB32 3H129/BB33

3H129/BB49 3H129/BB50 3H129/BB55 3H129/CC01 3H129/CC04 3H129/CC05 3H129/CC07 3H129/CC08 3H129/CC09 3H129/CC16 3H129/CC18 3H129/CC22 3H129/CC30 3H129/CC38 3H129/CC45 3H129/CC61

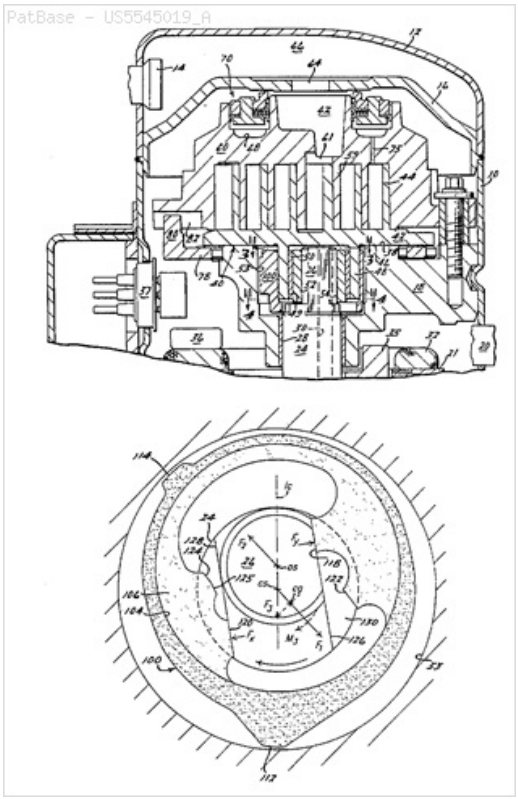
JP class F-Index: F01C1/10/Z F04C18/02/311/A F04C18/02/311/M F04C28/06/C F04C28/28/B

Classification Explorer

Cited documents: US5496157 A, US5346376 A, US5156539 A, US5129798 A, US5108274 A, US5102316 A, US4877382 A, US4867282 A, US4840545 A, US4522574 A, US4415318 A, EP0422829 A1, EP0143526 A2,

Forward Citations: WO12117600, USRE37837, US9879673, US9732752, US9188124, US8186981, US7686599, US7322806, US7290990, US7247009, US7029251, US6984115, US6669456, US6634874, US6544017, US6422842, US6398530, US6386847, US6374621, US6220839, US6217302, US6179592, US6179591, US6126423, US6106251, US5772415, US2017167769, US2015316055, US2015078945, US2009246057, US2009155110, US2007154337, US2007077160, US2005265880, US2005220650, US2005019194, US2003194330, US10215175, US10156236, US10101070, KR101207458, KR101012052, JP4041195, JP2012057637, JP2009235991, JP10141252, GB2349918, EP2105612, EP2105612, EP1286051, EP1286051, EP1181454, EP1181454, EP0843777, EP0843777, EP0840011, EP0718500, DE19910458, DE19910458, CN105782035, CN105782035, CN103382938, CN103382938,

Abstract:
Disclosed are several embodiments of a stopping device operable between the drive shaft and/or orbiting scroll of a scroll compressor and a fixed wall forming part of the compressor, for the purposes of automatically engaging the wall upon reverse operation of the compressor to thereby quickly stop such reverse operation. Damage to the compressor in the event of powered reverse is also prevented, either by permitting the machine to run free or by quickly stopping it. Also disclosed are several ways to facilitate start-up with weak motors.



20) Family number: 29413006 (US3915116A)

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Title: COMPACT BREADING MACHINE

Priority: DE1950S017483 19500711 US19740459567 19740410 GB19740030134 19740708 US19750544523 19750127 US19750544323 19750127 US19750640235 19751212

Family:

Publication number	Publication date	Application number	Application date
BE817925 A	19750122	BE19740146797	19740722
BE834392 A4	19760412	BE19750160846	19751010
BE834392 R	19760412	BE19750160846	19751010
CA1012824 A1	19770628	CA19740201571	19740604
CH614350 A	19791130	CH19750004579	19750410
DE2434140 A1	19751023	DE19742434140	19740716
DE2434140 B2	19790927	DE19742434140	19740716
DE2434140 C3	19800612	DE19742434140	19740716
DE2545573 A1	19760729	DE19752545573	19751010
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FR2282812 B1	19780811	FR19740026741	19740801
FR2298280 A2	19760820	FR19750030942	19751009
FR2298280 B2	19810612	FR19750030942	19751009
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NL162542 C	19800616	NL19740010306	19740731
NL7410306 A	19751014	NL19740010306	19740731
NL7511950 A	19760729	NL19750011950	19751010
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US3915116 A	19751028	US19740459567	19740410
US3967583 A	19760706	US19750544323	19750127
US4016299 A	19770405	US19750640235	19751212

Probable Assignee: STEIN SAM ASS

Assignee(s):(std)**:** SAM STEIN ASSOCIATES INC ; SAM STEIN ASSOCIATES INC SANDUSKY OHIO VER ST V A ; STEIN SAM ASS ; SAM STEIN ASSOCIATES INC TE SANDUSKY OHIO VER ST V ; STEIN S ASSOCIATES INC ; STEIN ASS INC S ; SIEMENS AG

Assignee(s): SAM STEIN ASSOCIATES INC TE SANDUSKY OHIO VER ST V AM ; SIEMENS AND HALSKE AG ; SIEMENS AND HALSKE AKTIENGESELLSCHAFT ; STEIN ASSOCIATES INC SAM ; SAM STEIN ASSOCIATES INC SANDUSKY OHIO VER ST V AM ; SAM STEIN ASSOCIATES INC SANDUSKY OHIO V ST A ; BOOTH RAYMOND E ; SAM STEIN ASSOCIATES

Inventor(s):(std)**:** BOOTH R E ; RAYMOND EGBERT BOOTH ; KATZ DR PHIL NAT HELMUT ; BOOTH RAYMOND EGBERT ; BOOTH RAYMOND E

Inventor(s): BOOTH RAYMOND EGBERT HURON OHIO VSTA ; EGBERT BOOTH RAYMOND ; BOOTH RAYMOND EGBERT HURON OHIO V ST A

International class (IPC 8-9): A21C9/04 A23G3/20 A23G3/26 A23P1/00 A23P1/08 G10H5/16 H01J21/14 H01J31/02 (Advanced/Invention); A21C9/00 A23G3/02 A23P1/00 A23P1/08 G10H5/00 H01J21/00 H01J31/00 (Core/Invention)

International class (IPC 1-7): A21C9/04 A22C17/00 A23G3/00 A23G3/20 A23L1/00 A23L1/176 A23L1/31 A23L1/325 A23P1/00 A47J37/00 A47J37/04 B05C B65B C07C69/52 G10H5/00

CPC: G10H5/16 H01J21/14 H01J31/02 H01J2893/0029 A23P20/12 A23G3/26 A21C9/04 A23G3/2076

European class: A21C9/04 A23G3/20G A23G3/26 A23P1/08B2 G10H5/16 H01J21/14 H01J31/02 T01J893/00F1

US class: 118/16 118/21 118/26 118/426 426/293

JP class F-Term: 4B031 4B031/CA09 4B031/CA18 4B031/CB08 4B031/CB09 4B031/CL20 4B048 4B048/PE11 4B048/PN04 4B048/PN08 4B048/PN12 4B048/PN14 4B048/PN20 4B048/PN25 4B048/PN27 4B048/PN28

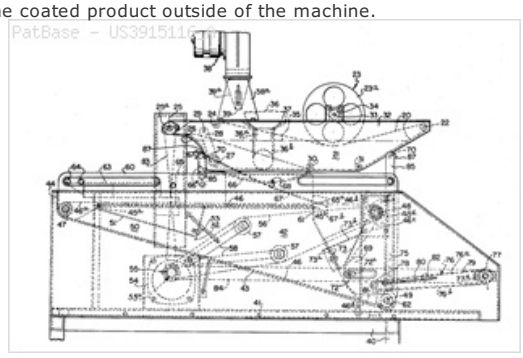
JP class F-Index: A21C9/04 A23P1/00 A23P1/08 A23P20/12

Classification Explorer

Cited documents: US3881029 A, US3839987 A, US3759218 A, US3738313 A, US3097967 A, US3045640 A, US2855893 A, US2731942 A, US2551849 A, US1957961 A, US1673686 A,

Forward Citations: WO09017776, WO05023025, WO05023025, WO0176396, US9687018, US9521862, US8960119, US8794430, US8443752, US8234997, US8096259, US8065974, US7975644, US7934464, US7650836, US7614360, US7296531, US7231885, US7011038, US6510810, US6472579, US6444162, US6269739, US6244170, US6183792, US5924356, US5463938, US4798283, US4496084, US4214548, US4177753, US2013247780, US2013001049, US2010183784, US2010050934, US2010050933, US2010047411, US2010043651, US2009038542, US2008196665, US2008196657, US2008020109, US2007264397, US2006156931, US2006110339, US2006110307, US2006032384, US2005045049, US2004123746, US10306912, US10015981, NL2002331, NL2002331, JP2007517495, ES2039133, ES2039132, EP2175733, EP1961314, EP1495683, EP1316261, EP1316261, EP1316261, EP1198998, EP1198998, DE102006016742, CN104392549, CN101919575, AT378669,

Abstract:
A machine is presented which includes a liquid-coating or battering unit above a dry-coating or breading unit, the units being useful separately or when combined as described. The battering unit includes a batter reservoir in which an open mesh wire belt under tension travels beneath a submerger wheel so as to gently nip the product and drag it below the surface of the batter. In the breading application unit, the loose breading material is stored in a hopper above which is flat slider plate over which passes an open mesh wire conveyor belt in its product-advancing run. This belt then passes downwardly, after discharging the coated product, to a lower point in the hopper where the belt is inclined upwardly toward the opposite end of the unit at the inlet end of the slider plate. This portion of the conveyor belt is the breading material elevating run and it travels close to an inclined bottom wall of the hopper. During the latter part of this run, the conveyor passes through a slot of limited dimensions which causes the conveyor belt to pump the breading material upwardly toward the product-advancing run where the dry material is pumped up from the elevating run to the product-advancing run through the wire mesh of the belt. A V-shape splitter then splits the upper portion of the breading material flow while providing a bed of this material of predetermined thickness on a central product path while diverting parts of the breading material flow laterally to both sides of the central path portion. The liquid-coated food product is placed on the central path portion downstream from the splitter and, as the product advances along the run above the flat slider plate two side plows, one each side of the product travel path, converge the breading material on each side of the path toward the center over the traveling product. Preferably, a tamper plate is provided to bear down on the breading material above the product to flatten out the breading material on top of and around the food product. A take-away conveyor is disclosed for discharging the coated product outside of the machine.



21) Family number: 57613006 (US2014311371A)

© PatBase

Title: MISSILE WITH MID-FLIGHT OXIDIZER CHARGING

Priority: US20120615513 20120913 US20120666965 20121102 US20150828514 20150817 US20160245165 20160823 US20170628614 20170620 US20190280017 20190219

Family:

Publication number	Publication date	Application number	Application date
US2014311371 AA	20141023	US20120666965	20121102
US2015233674 AA	20150820	US20120615513	20120913
US2016033245 AA	20160204	US20150828514	20150817
US2016356582 AA	20161208	US20160245165	20160823
US2017284772 AA	20171005	US20170628614	20170620
US2019316878 AA	20191017	US20190280017	20190219
US9109864 BB	20150818	US20120666965	20121102
US9423223 BB	20160823	US20150828514	20150817
US9683813 BB	20170620	US20120615513	20120913
US9778003 BB	20171003	US20160245165	20160823
US10209035 BB	20190219	US20170628614	20170620

Probable Assignee: BECKMAN CHRISTOPHER V

Assignee(s):(std)**:** BECKMAN CHRISTOPHER V

Inventor(s):(std)**:** BECKMAN CHRISTOPHER V

International class (IPC 8-9): A61B10/00 F41A21/48 F41A27/22 F41A27/24 F41G1/46 F41G11/00 F41G3/00 F41G3/06 F41G3/08 F41G3/12 F41G3/14 F41G3/16 F41G3/26 F41G9/00 F42B10/60 F42B12/02 F42B12/36 F42B12/46 F42B12/52 F42B15/01 G06F19/00 G06G7/80 (Advanced/Invention);
F41A27/04 F41G1/473 F41G11/00 F41G3/08 F41G3/18 (Advanced/Non-invention)

CPC: F42B12/02 A61B10/0045 F42B12/36 F42B12/52 F42B15/01 F41G3/2644 F41G1/473 F41G1/46 F41G11/008 F41A21/48 F41A27/04 F41A27/22 F41A27/24 F41G3/08 F41G3/12 F41G3/142 F41G3/165 F41G3/18 F41G11/00 F41G3/005 F41G3/06

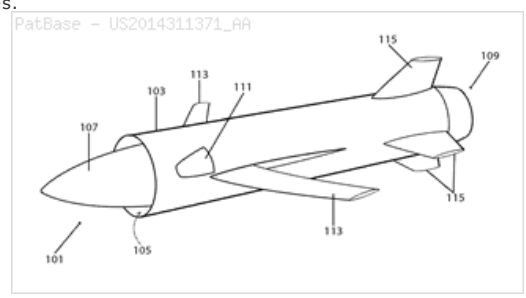
US class: 1/1 102/501 235/407 244/110R 244/119 244/3.22 600/562

Classification Explorer

Cited documents: US8464451 BB, US8453871 BB, US8398016 BB, US8312813 BB, US8210474 BB, US8132352 BB, US8104217 BB, US8094309 BA, US7992497 BA, US7916895 BB, US7867174 BB, US7753549 BB, US7721989 BB, US7703719 BA, US7624528 BA, US7350329 BA, US7331137 BB, US7163515 BB, US7100292 BB, US7051659 BB, US6886287 BA, US6691622 BB, US6647888 BA, US6614012 BB, US6530614 BA, US6499382 BA, US6499247 BA, US6484966 BA, US6332871 BA, US6237236 BA, US6210420 BA, US6192614 BA, US6149301 A, US6069692 A, US6058846 A, US6055046 A, US5824942 A, US5811713 A, US5782002 A, US5707128 A, US5698814 A, US5651185 A, US5559551 A, US5513571 A, US5511317 A, US5495675 A, US5408778 A, US5388005 A, US5368047 A, US5336899 A, US5324303 A, US5305530 A, US5303653 A, US5174384 A, US5167249 A, US5148750 A, US5097766 A, US5090805 A, US5086567 A, US4998811 A, US4982196 A, US4965439 A, US4895129 A, US4836108 A, US4811308 A, US4752779 A, US4745686 A, US4676319 A, US4669809 A, US4517978 A, US4497548 A, US4428293 A, US4372505 A, US4295289 A, US4195422 A, US4179613 A, US4128837 A, US4108400 A, US4096803 A, US4020324 A, US3991500 A, US3572250 A, US3333540 A, US3065798 A, US3011307 A, US2987875 A, US2857005 A, US2016377383 AA, US2016169603 AA, US2015377572 AA, US2015285601 AA, US2015067968 AA, US2014238222 AA, US2012272854 AA, US2012180366 AA, US2012178053 AA, US2012105951 AA, US2011296699 AA, US2011242669 AA, US2011010981 AA, US2010275496 AA, US2010108352 AA, US2010025542 AA, US2010024274 AA, US2010008539 AA, US2009277065 AA, US2009199452 AA, US2009124893 AA, US2009114774 AA, US2008279044 AA, US2008228078 AA, US2008136916 AA, US2008092425 AA, US2008043237 AA, US2008039962 AA, US2008010888 AA, US2008000133 AA, US2007240355 AA, US2007129775 AA, US2006234191 AA, US2006229641 AA, US2006144281 AA, US2005223930 AA, US2004133126 AA, US2003057320 AA, US2002173778 AA, US2002111565 AA, US2001037064 AA, US2001017730 AA,

Forward Citations: US2016290765, US10443984, US10274286, US10180565,

Abstract:
New missile systems are provided, implementing reduced pre-deployment weight, higher impact and greater deployment flexibility, among other advantages. In some embodiments, mid-flight oxygen filtration from atmospheric air, followed by concentration, compression and/or storage in ideal oxidizer deployment locations, leads to enriched, greatly increased oxidizer load and/or far greater missile weight just prior to impact. Among additional benefits, missiles implementing the system may be far less volatile, and therefore safer, prior to deployment and the concentration of oxidizer may be more concentrated than with ambient oxygen, overcoming the limitations of current fuel/air and other thermobaric explosives.



22) Family number: 55195006 (ES2431213R)

© PatBase

Title: SISTEMA DE BOMBEO MEDIANTE COMPENSACION DE CARGAS POR ELEMENTOS ELASTICOS.

Priority: ES20110001070 20110926

Family:

Publication number	Publication date	Application number	Application date
ES2431213 AB	20131125	ES20110001070	20110926
ES2431213 BA	20140610	ES20110001070	20110926
ES2431213 R1	20131202	ES20110001070	20110926

Probable Assignee: PRADO DONAMARIA JUAN C

Assignee(s):(std)**:** PRADO DONAMARIA JUAN C

Assignee(s): JUAN C PRADO DONAMARIA

Inventor(s):(std)**:** PRADO DONAMARIA JUAN C

Inventor(s): JUAN C PRADO DONAMARIA

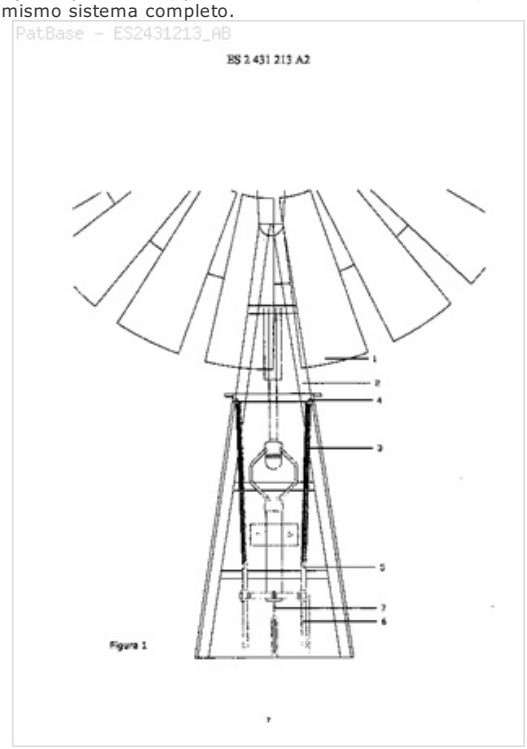
International class (IPC 8-9): F03D3/04 F03D80/80 F03D9/28 F04B17/02 (Advanced/Invention); F03D11/02 (Advanced/Non-invention)

CPC: Y02E10/74 F04B17/02 Y02P70/523 Y02P80/158

Classification Explorer

Cited documents: US3782222 A, US2364139 A, US2004131484 AA, US1994592 A,

Abstract:
Source: ES2431213R [ES] El sistema de mejora de rendimiento de dispositivos de bombeo con accionamiento eolico, mediante compensacion de cargas por elementos elasticos; permite de manera sencilla, economica y funcional incrementar de manera muy significativa el caudal de agua extraida. Se han demostrado mejoras de mas del 70 percent en sistemas implantados. La inclusion de elementos elasticos sujetos al sistema fijo y al movil permite que se compensen los esfuerzos en los movimientos de ascenso y descenso. Se reivindica tanto el propio sistema como la eliminacion de los vastagos rigidos empleados para hacer descender el sistema. Asi, al dejar de ser una limitante el peso de los mecanismos, se puede anadir un contrapeso a un cable o sirga dotados de cierta flexibilidad, eliminando el componente mas critico de las instalaciones cuyas reparaciones, por ser elementos subterraneos, son complejas y costosas. El esquema siguiente muestra ambos conceptos en un mismo sistema completo.



23) Family number: 20637006 (GB460291A)

© PatBase

Title: Improvements in or relating to the manufacture of hollow receptacles or containers

Priority: GB19350014611 19350618

Family:

Publication number	Publication date	Application number	Application date
GB460291 A	19370118	GB19350014611	19350618

Probable Assignee: GEORGE HOLLINSHEAD MELLOR

Assignee(s):(std)**:** GEORGE HOLLINSHEAD MELLOR

International class (IPC 8-9): B29C41/04 (Advanced/Invention)

International class (IPC 1-7): B29C11/00

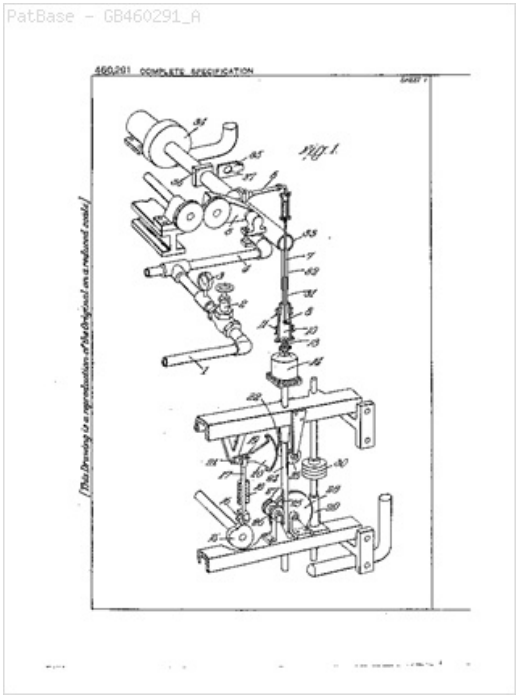
CPC: B29C41/045 B29K2001/00 B29K2001/12 B29K2105/0073 B29L2031/7158

European class: B29C41/04B2 L29K1/00 L29K1/12 L29K105/00G9 L29L31/7158

Classification Explorer

Forward Citations: US2951261,

Abstract:
460,291. Moulding hollow containers centrifugally. MELLOR, E., [Representative of MELLOR, G. H.] June 18, 1935, No. 14611. [Class 87 (ii)] [Also in Group XVII] Hollow articles, such as milk bottles, are cast centrifugally by projecting a filament of a solidifiable solution of cellulose acetate on to the interior surface of a rotating mould moving also in an axial direction so as to deposit the filament in a uniform helix, the convolutions of which merge together to form a coating of uniform thickness. The solution is supplied by a pump 5 through a tube 7 terminating in a nozzle 8 having one or more lateral orifices. The mould 10 is in two parts and is supported on a spigot 13 driven by an electric motor 14. When moulding a shaped article such as a bottle the mould is reciprocated vertically at a non-uniform speed in accordance with the variations of peripheral speed by means of a heart-shaped cam 15 and five-sided roller 16 through gearing 22, a counter-weight 30 being similarly reciprocated by gearing 26. The filaments may be of threadlike or tape-like form and several superposed layers may be deposited. A further telescopic tube 31 for extracting solvents and c. is provided connected to a vacuum pump 34. The solution may be coloured and various designs may be engraved on the interior of the mould or the mould may be lined with wire mesh or expanded metal which is incorporated in the article. The bottom of the article may be either formed separately or by means of an auxiliary jet directed downwards.



24) Family number: 30787007 (US2004160060A)

© PatBase

Title: TIDE COMPENSATED SWELL POWERED GENERATOR

Priority: US20030370223 20030219

Family:

Publication number	Publication date	Application number	Application date
US2004160060 AA	20040819	US20030370223	20030219
US6930406 BB	20050816	US20030370223	20030219

Probable Assignee: MONTGOMERY W C GRAY

Assignee(s): MONTGOMERY W C GRAY

Inventor(s):(std)**:** MONTGOMERY W C GRAY

International class (IPC 8-9): F03B13/18 F03B13/26 (Advanced/Invention); F03B13/00 (Core/Invention)

International class (IPC 1-7): B60L11/02 B61C9/38 F03B13/00 F03B13/10 F03B13/12 H02K23/52 H02P9/04

CPC: F03B13/1845 F03B13/26 Y02E10/28 Y02E10/38

European class: F03B13/18D F03B13/26 Y02E10/28 Y02E10/38

US class: 290/11 290/42 290/43 290/53 290/54

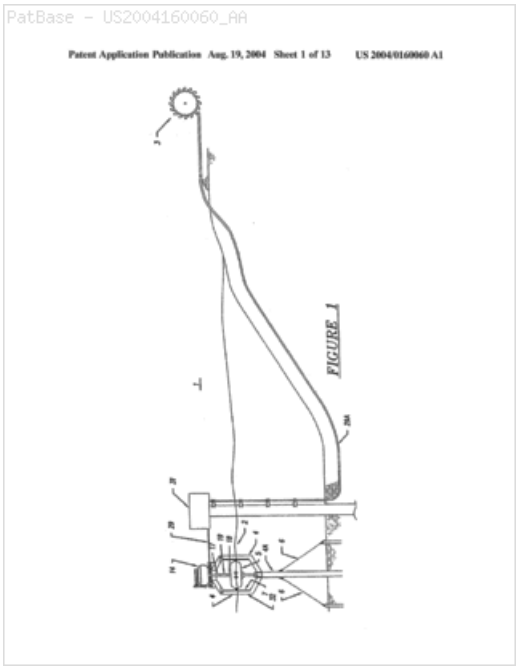
Classification Explorer

Cited documents: WO8402162 A1, US6800954 BA, US6768216 BA, US6229225 BA, US6140712 A, US6020653 A, US5986349 A, US5473892 A, US4883411 A, US4754157 A, US4739182 A, US4598211 A, US4455824 A, US4425510 A, US4421461 A, US4398095 A, US4208878 A, US4104006 A, US4076463 A, US3515889 A, US3487228 A, US2907304 A, RU2016224 C1,

Forward Citations: WO17217919, WO08068760, WO08028331, US9500177, US9308969, US9243608, US9062649, US8981582, US8667791, US8397496, US8264093, US8253263, US8146361, US8132406, US8120196, US8049356, US7911073, US7830032, US7781903, US7464546, US7355298, US2018245563, US2015021918, US2014117672, US2011068578, US2011012369, US2010219639, US2010171313, US2010154405, US2010101474, US2010084866, US2009309366, US2009236856, US2009212571, US2008183027, US2008012344, US2007271912, US2007222222, US10288034, US10047718, EP3469208, EP3469208, EP2504568, EP2504568,

Abstract:
The invention comprises a float system having a float connected to a pump line and a reservoir tank. As the float rises and falls with the passing swells, it forces water through the pump line into a reservoir tank. An outflow line connects the reservoir line to a

generator system, preferably located on shore, where the flowing water is used to drive a turbine and generate electricity. Preferably, there are a plurality of reservoir tanks, each with its own float and pump line, delivering water to the generator system. The flow of water through the pump line is kept steady by providing each reservoir tank with a pressurized air cushion which provides for constant outflow of water from each tank despite variances in the inflow.



25) Family number: 6344007 (DE3622674A1)

© PatBase

Title:	Vehicle for excavation work
Priority:	DE19863622674 19860705

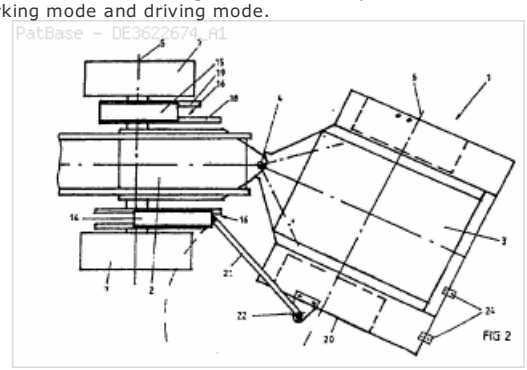
Family:

Publication number	Publication date	Application number	Application date
DE3622674 A1	19880114	DE19863622674	19860705

Probable Assignee:	MUELLER HERMANN
Assignee(s):(std)**:**	MUELLER HERMANN
Inventor(s):(std)**:**	MUELLER HERMANN
International class (IPC 8-9):	B62D53/02 E02F9/08 E02F9/18 (Advanced/Invention); B62D53/00 E02F9/08 E02F9/18 (Core/Invention)
International class (IPC 1-7):	B62D37/00 E02F9/18
CPC:	B62D53/02 E02F9/0841 E02F9/18
European class:	B62D53/02 E02F9/08D E02F9/18

Classification Explorer

Abstract:
In a vehicle (1) for excavation work comprising a front carriage (2), which in each case has a wheel axle (5 or 6) and a working unit, and a rear carriage (3), which is pivotally connected to the front carriage (2) via a joint and has a built-on tail unit, a simple and effective displacement of the counterweights (14, 15) and a high stability of the vehicle (1) both with the built-on tail unit mounted and with it demounted are achieved by providing that counterweights (14, 15) are arranged on both sides of the running gear (chassis) such that they can be displaced in the longitudinal direction thereof, that the counterweights (14, 15) can be fixed on the front carriage (2) above the wheel axle (5, 6) between the wheels (7) in receptacles (16) and, in a bent position of the rear carriage (3) in the direction of a counterweight (14), the latter can be pulled by means of an arm (21), which is pivotally mounted on the rear carriage (3), out of the receptacles (16) in the direction of the rear carriage (3) by readjusting the front carriage (2), and can be displaced and locked on the rear carriage (3) in receptacles (24) behind the wheel axle (6). This has the advantage that the stability of the vehicle (1) is always maintained both with and without the built-on tail unit and in working mode and driving mode.



26) Family number: 56015007 (EP2894328A1)

© PatBase

Title: RIGID BODY DYNAMICS-BASED HYDROPOWER TECHNOLOGY TECHNOLOGIE DE L'HYDROELECTRICITE SUR LA BASE DE LA DYNAMIQUE DES CORPS

Priority: GB20140000450 20140111 GB20140014154 20140811

Family:

Publication number	Publication date	Application number	Application date
EP2894328 A1	20150715	EP20150150543	20150108
GB201400450 A0	20140226	GB20140000450	20140111
GB201414154 A0	20140924	GB20140014154	20140811
GB2522047 A1	20150715	GB20140000450	20140111
GB2522092 A1	20150715	GB20140014154	20140811

Probable Assignee: SHARIF ISSAM

Assignee(s):(std)**:** SHARIF ISSAM

Assignee(s): ISSAM SHARIF

Inventor(s):(std)**:** SHARIF ISSAM

Inventor(s): ISSAM SHARIF

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

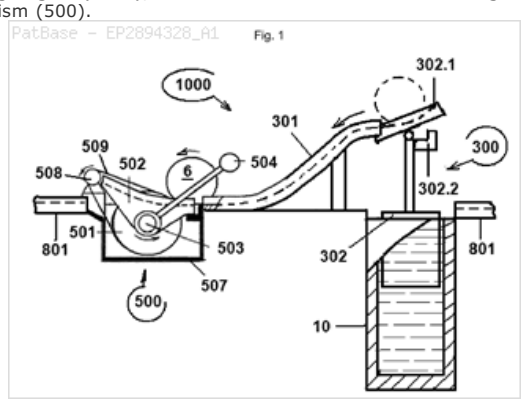
International class (IPC 8-9): F03B17/02 F03G3/00 (Advanced/Invention)

CPC: F03B17/02 F05B2210/11 F05B2250/241 F05B2250/41 Y02E10/20

Classification Explorer

Cited documents: US4599857 A, US4246756 A, US2012280515 AA, GB2484324 A1, FR2968723 A1,

Abstract:
This invention relates to a rigid body dynamics-based hydropower technology, which is capable of generating useful mechanical or electrical energy from gravitational potential energy of renewable water resources in a two phases production cycle involving the following production steps: a) containing the required amount of water for performing a production cycle at the level of the upstream water table or of water intake; b) transferring the contained gravitational potential energy of contained water to a rigid body in the form of a sphere (6); c) converting the gained gravitational potential energy of the rigid sphere into kinetic energy; d) converting the stored kinetic energy in the rigid sphere into useful mechanical or electrical energy. The first phase of production involves the stages (a-c) and could be carried out by means of the vertical rigid energy generating engine (1000), whereas the second involves the stage (d) and could be carried out by means of the rigid energy conversion mechanism (500).



27) Family number: 1731007 (DE2830650A1)

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Title: MINE AND QUARRY MATERIAL LOADING PROJECTOR - HAS SKIPS ATTACHED BY CONNECTING RODS TO ROTOR AND DRIVEN AT SAME ANGULAR VELOCITY

Priority: DE19782830650 19780712

Family:

Publication number	Publication date	Application number	Application date
DE2830650 A1	19800131	DE19782830650	19780712
DE2830650 C2	19840308	DE19782830650	19780712

Probable Assignee: NI I OK I AVTOMATISACII TSCHER

Assignee(s):(std)**:** NI I OK I AVTOMATISACII TSCHER ; NI I OK I AVTOMATIZACII CERNOJ

Assignee(s): NAUCNO ISSLEDOVATELSKIJ I OPYTNO KONSTRUKTORSKIJ INSTITUT AVTOMATIZACII CERNOJ METALLURGII DNEPROPETROVSK SU ; NAUTSCHNO ISSLEDOVATELSKIJ I OPYTNOKONSTRUKTORSKIJ INST AVTOMATISACII TSCHERNOJ METALLURGII ; NAUTSCHNO ISSLEDOVATELSKIJ I OPYTNOKONSTRUKTORSKIJ INSTITUT AVTOMATISACII TSCHERNOJ METALLURGII

Inventor(s):(std)**:** ASIKOV BORIS ALEKSEJEVIC ; KLIMKOVSKIJ BRONISLAV METSCHES ; KUS SERGEJ ANANJEVIC ; KUSCH SERGEJ ANANJEVITSCH ; ASIKOV BORIS ALEKSEJEVITSCH ; KLIMKOVSKIJ BRONISLAV MECESLAV ; NALIVKIN NIKOLAJ PETROVIC ; NALIVKIN NIKOLAJ PETROVITSCH ; SEMZOV MICHAIL USTINOVIC ; SEMZOV MICHAIL USTINOVITSCH

Inventor(s): USTINOVITSCH SEMZOV MICHAIL ; SEMZOV MICHAIL USTINOVIC DNEPROPETROVIC SU ; PETROVITSCH NALIVKIN NIKOLAJ ; NALIVKIN NIKOLAJ PETROVIC DNEPROPETROVSK SU ; KLIMKOVSKIJ BRONISLAV MECESLAVOVIC ; METSCHESLAVOVITSCH KLIMKOVSKIJ BRONISLAV ; ASIKOV BORIS ALEKSEJEVIC DNEPROPETROVSK SU ; ALEKSEJEVITSCH ASIKOV BORIS ; ANANJEVITSCH KUSCH SERGEJ

International class (IPC 8-9): B65G31/04 (Advanced/Invention); B65G31/00 (Core/Invention)

International class (IPC 1-7): B65G31/04 B65G65/20

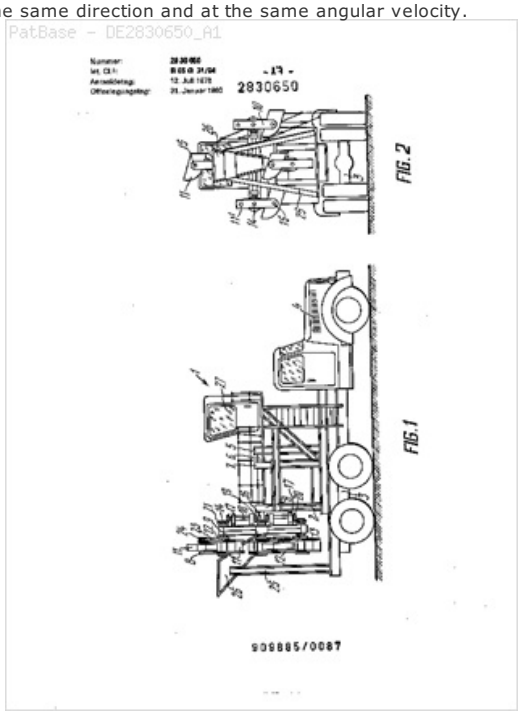
CPC: B65G31/04

European class: B65G31/04

Classification Explorer

Cited documents: US3589500 A, DE900556 A, DE529292 A, DE452058 A,

Abstract:
The material projector is particularly for loading in mines and quarries, and has a rotor with devices for receiving and discharging the material. Each of these devices comprises a skip (11), attached via a connecting rod (10) to the rotor (9). The rotor axis is parallel to the connecting rod pivot pins, and the centre distance (R2) between these pins is half that between the rotor axis and the nearest pivot pins (R1). A drive turns the rotor and the connecting rods with skips in the same direction and at the same angular velocity.



28) Family number: 22036007 (US2619880A)

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Title: MACHINE TOOL

Priority: US19460695677 19460909

Family:

Publication number	Publication date	Application number	Application date
US2619880 A	19521202	US19460695677	19460909

Probable Assignee: GIDDINGS AND LEWIS

Assignee(s):(std)**:** GIDDINGS AND LEWIS

Assignee(s): GIDDINGS AND LEWIS MACHINE TOOL CO

Inventor(s):(std)**:** HOSEA EVERETT E

International class (IPC 8-9): B23B39/02 (Advanced/Invention); B23B39/00 (Core/Invention)

International class (IPC 1-7): B23B39/02 B23C3/14 B23C9/00

CPC: B23B39/02 Y10T408/91 Y10T409/303976 Y10T409/306216 Y10T409/308232

European class: B23B39/02

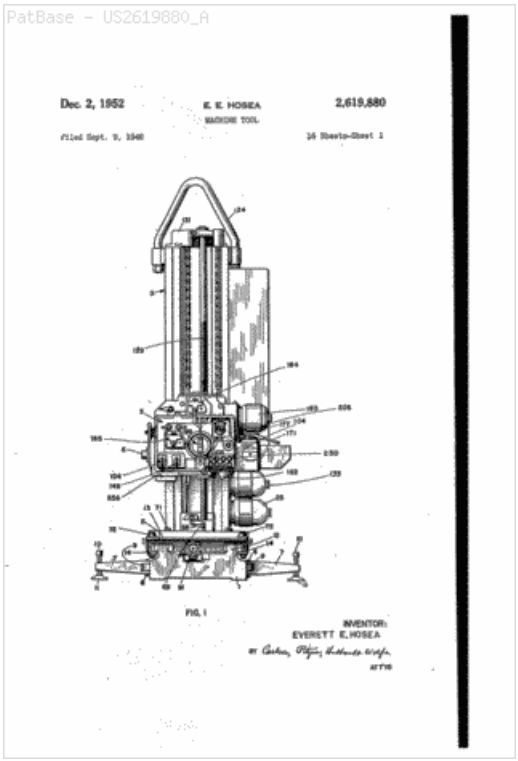
US class: 184/26 191/1R 192/20 192/21 192/48.2 318/467 408/234 409/135 409/175 409/211

Classification Explorer

Cited documents: US2355677 A, US2342829 A, US2341061 A, US2333589 A, US2310870 A, US2307222 A, US2286821 A, US2251016 A, US2251015 A, US2242293 A, US2224108 A, US2206031 A, US2202766 A, US2123825 A, US2075489 A, US2012249 A, US1706824 A, US1696660 A, US1676206 A,

Forward Citations: US5533845, US5161291, US5106243, US2892386,

Abstract:
(Claim 1) 1. In a machine tool, in combinatioli, a base frame, a base Slide reciprocable on said frame, a column mounted on said slide for translation therewith and for rotary movement thereon through 360', a drive transmission terminating in a pinion and an intermeshing rectilinear gear rack for translating said slide on said frame, a drive transmission terminating in a pinion and an intermeshing circular rack for rotating said column, a reversible variable-speed electric drive motor mounted on said column, a speed-reduction gear transmission within said column connected to said motor, selector clutches for connecting said gear transmission either to one or the other of said drive transmissions, and a clutch actuator for said selector clutches, said actuator serving as an interlock to prevent simultaneous engagement of said clutches.



29) Family number: 1131008 (US3874523A)

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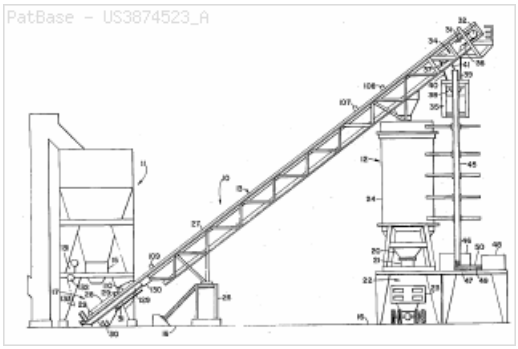
Title:	Asphalt mix preparation and storage plant
Priority:	US19720314842 19721213

Family:

Publication number	Publication date	Application number	Application date
US3874523 A	19750401	US19720314842	19721213

Probable Assignee:	CMI CORP
Assignee(s):(std)**:**	CMI CORP
Assignee(s):	CONGRESS FINANCIAL CORP ; CONGRESS FINANCIAL SOUTHWEST A CORP OF TEXAS COR ; CONGRESS FINANCIAL SOUTHWEST A CORP OF TEXAS CORP ; FIRST INTERSTATE BANK OF OKLAHOMA NA ; FIRST NATIONAL BANK OF CHICAGO ; FIRST NATIONAL BANK OF CHICAGO NA ; ASTEC IND ; ASTEC IND INC ; CMI A CORP OF OKLAHOMA CORP
Inventor(s):(std)**:**	BROCK JAMES DONALD ; JAKOB HERBERT EDWARD ; MIZE ERBIE GAIL
International class (IPC 8-9):	B66B9/04 B66B9/06 (Advanced/Invention); B66B9/04 B66B9/06 (Core/Invention)
International class (IPC 1-7):	B66B9/04
CPC:	B66B9/04 B66B9/06
European class:	B66B9/04 B66B9/06
US class:	414/267 414/299 414/595 414/673 417/269 60/445
Classification Explorer	
Cited documents:	US3722718 A, US3292554 A, US3108545 A, US1513580 A,
Forward Citations:	WO10079861, US6955045, US5397177, US2004161344,

Abstract:
An asphalt preparation and storage plant includes an elevated asphalt mixer arranged to gravity dispense mix to a transport vehicle below the mixer, or to dispense the mix to the carrier of an inclined hoist. The hoist is operated with a fluid powered motor and a constantly driven variable displacement piston pump, and a counterweight is attached to the cable of the hoist. The incline of the hoist, the weight of the carrier, the approximate maximum weight capacity rating of the carrier and the effective weight of the counterweight are matched so that the force required by the drive means to move a fully loaded carrier up the incline from the mixing plant to the surge hopper is approximately the same as the force required by the drive means to urge the empty carrier down the incline against the effective weight of the counterweight.



30) Family number: 22168008 (US2913910A)

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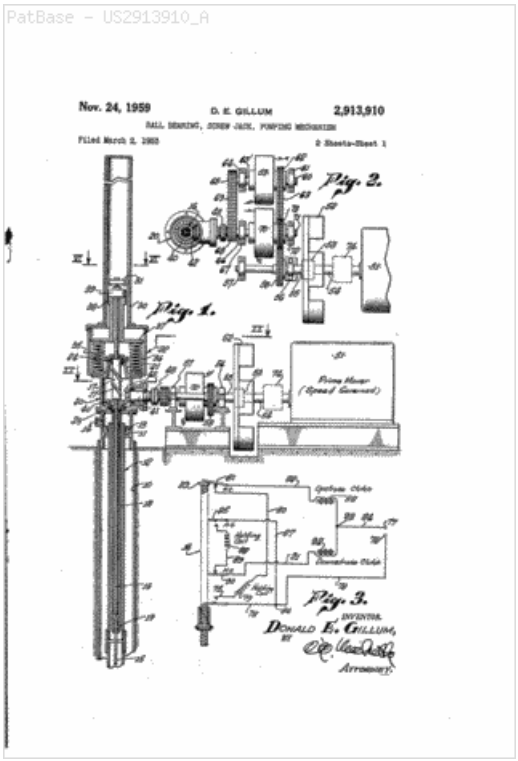
Title:	BALL BEARING, SCREW JACK, PUMPING MECHANISM
Priority:	US19530339688 19530302

Family:

Publication number	Publication date	Application number	Application date
US2913910 A	19591124	US19530339688	19530302

Probable Assignee:	US IND INC
Assignee(s):(std):	US IND INC ; US INDUSTRIES INC
Assignee(s):	U S IND INC ; U S INDUSTRIES INC
Inventor(s):(std):	GILLUM DONALD E
International class (IPC 8-9):	F04B9/02 F16H25/20 F16H33/02 (Advanced/Invention); F04B9/02 F16H25/20 F16H33/00 (Core/Invention)
International class (IPC 1-7):	F04B47/00
CPC:	F16H25/2015 F04B9/02 F16H25/2204 F16H33/02 F16H2025/2053 F16H2706/00 Y10T74/18312 Y10T74/18616
European class:	F04B9/02 F16H25/20C F16H33/02 R16H25/20T R16H25/22B R16H706/00
US class:	74/57 74/89.28
Classification Explorer	
Cited documents:	US760577 A, US2676352 A, US2629264 A, US2623403 A, US2519871 A, US2446393 A, US2324211 A, US2280261 A, US2260671 A, US2205333 A, US2004060 A, US1913663 A, US1789975 A, US1435892 A, US1216415 A,
Forward Citations:	WO19102119, US9059606, US8702400, US3225697, US3066777, US3065704, US2010098563, US2006275161, FR3074245, EP0166788, EP0166788,

Abstract:
(Claim 1) 1. In a long stroke pumping mechanism, the co_nbination of: a prime mover; a flywheel coupled to said prime mover through an overrunnin-, clutch; a ball bearing screw jack comprising a rotatable nut member and a longitudinally movable screw member; a forward driving clutch me__ns and transmission means coniiecting said nut member to said prime mover when said forward driving clutch is engaged; a reverse driving clutch means and transmission means reversely engaging said nut member with said flywheel when said reverse driving clutch n-ieans is engaged; and means controlled by longitudinal movement of said screw member for engaging and disengaging said forward and reverse driving clutch means.



31) Family number: 65380008 (IN201721000625A)

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Title: GRAVITY AIDED ELEVATOR SYSTEM

Priority: IN201721000625 20170106

Family:

Publication number	Publication date	Application number	Application date
IN201721000625 A	20170407	IN201721000625	20170106

Probable Assignee: PATEL JAYDEEPKUMAR RAMESHBHAI

Assignee(s): PATEL JAYDEEPKUMAR RAMESHBHAI

Inventor(s): BHATT JAINIL SHAILESHKUMAR

International class (IPC 8-9): G21D1/02 G21D3/06 (Advanced/Invention)

Classification Explorer

Abstract:
A gravity aided elevator system comprises a main frame (1) on which multiple pulleys (P1, P2, P3, P4) are mounted, a cabin (2) and a counterweight (3) suspended on either side of said pulleys (P1, P2) through wire ropes (R1, R2), a speed control mechanism (4) coupled with pulley (PI) and comprising a shaft (17), worm grooves (18), worm wheel (20), rack (21), piston (22), hydraulic cylinder (23), channel (25) and sump (24). Said speed control mechanism (4) controls the rotational speed of said pulley (PI) by transferring its motion to said piston (22) and controlling the fluid transfer from said cylinder (23) to said sump (24). Said cabin (2) is held at desired height by a locking mechanism (27), and a fluid pumping equipment (29) moves said cabin (2) upward by using electrical power.

32) Family number: 28105008 (US2001022950A)

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Title: DEVICE FOR POLYMERS SYNTHESIS

Priority: EP19960810806 19961118 EP19970950198 19971117 WO1997EP06407 19971117 US19990308095 19990621 US20010861245 20010518

Family:

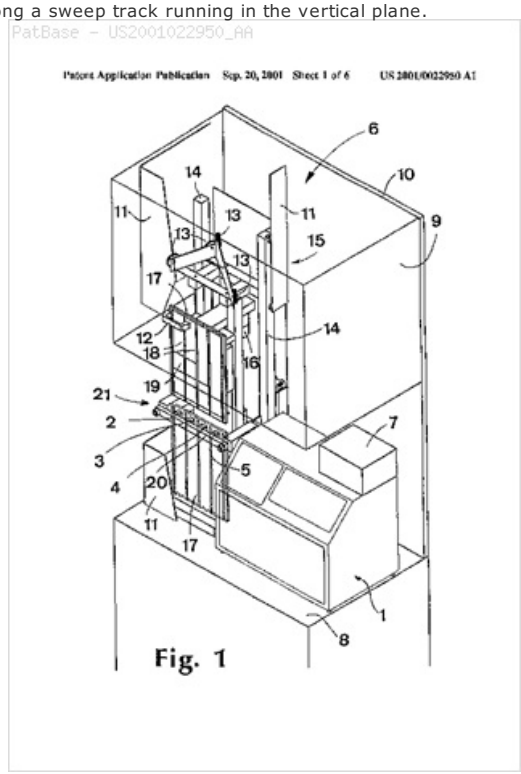
Publication number	Publication date	Application number	Application date
AT273746 E	20040915	AT19970950198T	19971117
AU199853227 A1	19980610	AU19980053227	19971117
DE69730346 D1	20040923	DE19976030346	19971117
DE69730346 T2	20050811	DE19976030346T	19971117
EP0946287 A1	19991006	EP19970950198	19971117
EP0946287 B1	20040818	EP19970950198	19971117
US2001022950 AA	20010920	US20010861245	20010518
WO9822211 A1	19980528	WO1997EP06407	19971117

Probable Assignee: NOVARTIS AG

Assignee(s):(std)**:** CIBA GEIGY AG ; HALL JONATHAN ; HASSLER MARTIN ; HUESKEN DIETER ; NOVARTIS AG ; NOVARTIS

	PHARMA GMBH
Assignee(s):	NOVARTIS AG BASEL ; HUSKEN DIETER
Inventor(s):(std):	HUESKEN DIETER ; HUSKEN DIETER ; HASSLER MARTIN ; HALL JONATHAN
Inventor(s):	JONATHAN HALL ; MARTIN HASSLER ; DIETER HUSKEN
Designated states:	AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SL SZ TJ TM TR TT UA UG US UZ VN YU ZW
International class (IPC 8-9):	B01J19/00 C40B40/06 C40B60/14 (Advanced/Invention); C40B40/06 C40B60/14 (Advanced/Non-invention); B01J19/00 (Core/Invention); C40B40/04 C40B60/14 (Core/Non-invention)
International class (IPC 1-7):	B01J19/00
CPC:	B01J19/0046 B01J2219/0043 B01J2219/00475 B01J2219/00527 B01J2219/0059 B01J2219/00596 B01J2219/00605 B01J2219/0061 B01J2219/00612 B01J2219/00626 B01J2219/00637 B01J2219/00657 B01J2219/00659 B01J2219/00686 B01J2219/00722 C40B40/06 C40B60/14
European class:	B01J19/00C L01J219/00C10B2 L01J219/00C2D24B L01J219/00C2H6 L01J219/00C2L8 L01J219/00C4D L01J219/00C4H L01J219/00C4L10 L01J219/00C4L12 L01J219/00C4L2 L01J219/00C4L2D L01J219/00C4L2F L01J219/00C4L2J2 L01J219/00C4L2L4 L01J219/00C6F M40B40/06 M40B60/14
US class:	422/131 422/131P
Classification Explorer	
Cited documents:	WO9533846 A1, WO9511748 A1, US6140133 A, US5429807 A, US4137866 A, EP0514927 A1,
Forward Citations:	WO9956865, US9059223, US7435390, US6932943, US6846454, US2009155936, US2009041634, US2008261220, US2005201896, US2003118717,

Abstract:
A device for synthesizing oligonucleotides includes a back plate (17) having a support material suitable for synthesis. Reaction cells (2, 3, 4, 5) are assigned to the support material, which reaction cells are open on the side facing the support material (19) and can be sealed against the support material (19). The back plate (17) can be slid vertically in the direction of gravity. The reaction cells (2, 3, 4, 5) can be repeatedly placed in this manner on the support material (19) along a sweep track running in the vertical plane.



33) Family number: 22432008 (US2359366A)

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Title:	SUBMERGED BARGE AND TOWBOAT
Priority:	US19420463662 19421028

Family:

Publication number	Publication date	Application number	Application date
US2359366 A	19441003	US19420463662	19421028

Probable Assignee:	MORRIS KATCHER
Assignee(s):(std):	MORRIS KATCHER ; WALKER STANLEY W
Inventor(s):(std):	MORRIS KATCHER ; WALKER STANLEY W
Inventor(s):	KATCHER MORRIS
International class (IPC 8-9):	B63G8/42 (Advanced/Invention); B63G8/00 (Core/Invention)

International class (IPC 1-7): B63B21/56 B63G8/14

CPC: B63G8/42

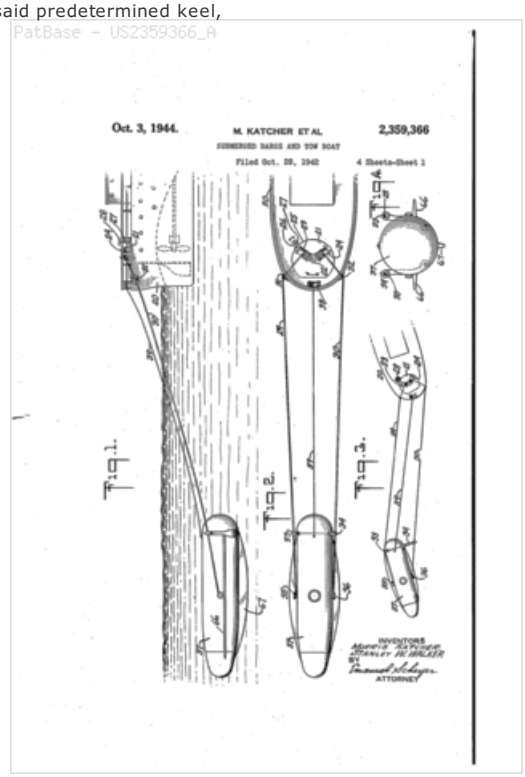
European class: B63G8/42

US class: 114/124 114/20.1 114/245 114/246 114/253 114/74T

Classification Explorer

Forward Citations: WO11029163, US5267220, US5057044, US4724788, US4480569, US3499411, US3385391, US3371739, US3368512, US3339513, US3296996, US3126559, US3125980, US3086490, US3085533, US3074321, US3067712, US3018748, US3001501, US2998793, US2990796, US2928367, US2595947, FR2364811,

Abstract:
1. In combination, a tow boat, a submarine barge, a tow connection connecting the boat and the barge, means for maintaining the barge at a predetermined depth, means for maintaining the barge at a predetermined keel, the barge at its forward portion riding the tow connection, being held up thereby at said portion higher than normal for said predetermined keel,



34) Family number: 44897009 (US2010089584A)

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Title: DOUBLE INSULATED HEATERS FOR TREATING SUBSURFACE FORMATIONS

Priority: US20080104974P 20081013 US20090168498P 20090410 US20090576772 20091009

Family:

Publication number	Publication date	Application number	Application date
US2010089584 AA	20100415	US20090576772	20091009
US9022118 BB	20150505	US20090576772	20091009

Probable Assignee: SHELL OIL CO

Assignee(s):(std)**:** BURNS DAVID BOOTH ; SHELL OIL CO

Inventor(s):(std)**:** BURNS DAVID BOOTH

Agent(s): SHELL OIL COMPANY

International class (IPC 8-9): E21B36/00 E21B36/04 E21B43/24 H01C17/00 H01C3/00 H05B3/00 H05B3/48 (Advanced/Invention); E21B36/00 E21B43/16 H01C17/00 H05B3/00 (Core/Invention)

CPC: H05B3/48 H05B2214/03 E21B44/02 Y10T29/49083 E21B43/2401 E21B43/24 E21B43/2405 H01C3/00

European class: E21B43/24B H01C3/00 H05B3/48

US class: 166/302 166/60 166/60S 29/611 29/611S

Classification Explorer

Cited documents: WO9901640, WO9723924, WO9506093, WO08048448, WO06116078, WO0181505, WO0019061, USRE39244 E, USRE39077 E, USRE35696 E, USRE30738 E, USRE30019 E, US94813 A, US8662175 BB, US8636323 BB, US8631866 BB, US8627887 BB, US8606091 BB, US8536497 BB, US8502120 BB, US8485847 BB, US8485256 BB, US8434555 BB, US8381815 BB, US8381806 BB, US8355623 BB, US8353347 BB, US8327932 BB, US8327681 BB, US8281861 BB, US8276661 BB, US8272455 BB, US8267185 BB, US8267170 BB, US8261832 BB, US8257112 BB, US8256512 BB, US8240774 BB, US8238730 BB, US8233782 BB, US8230927 BB, US8225866 BB, US8224165 BB, US8224164 BB, US8220539 BB, US8200072 BB, US8196658 BB, US8192682 BB, US8191630 BB, US8177305 BB, US8172335 BB, US8162405 BB, US8162059 BB, US8162043 BB, US8151907 BB, US8151880 BB, US8146669 BB, US8146661 BB, US8122957 BB, US8113272 BB, US8083813 BB, US8070840 BB, US8042610 BB, US8027571 BB, US8011451 BB, US7986869 BB, US7950453 BB, US7942203 BB, US7942197 BB, US7931086 BB, US7912358 BB, US7866388 BB, US7866386 BB, US7866385 BB, US7860377 BB,

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Forward Citations: WO16195511, US9939421, US9938782, US9822592, US9755415, US9705293, US9647194, US9528322, US9466896, US9447675, US9399905, US9341034, US9337550, US9309755, US9226341, US9181497, US9129728, US9127538, US9127523, US9080917, US9080409, US9051829, US9048653, US9033042, US9022109, US9016370, US8967259, US8943686, US8939207, US8881806, US8859942, US8857051, US8851170, US8833453, US8820406, US8816203, US8789586, US8752904, US8739874, US8732946, US8701769, US8701768, US8636323, US8631866, US8586867, US8586866, US8579031, US8562078, US8502120, US8485847, US8485256, US8485252, US8448707, US8434555, US8430168, US8381806,

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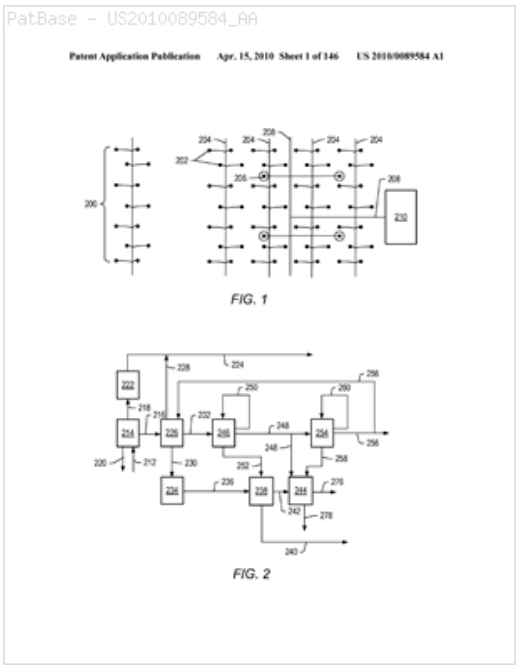
Abstract:
A heater includes a conduit and three insulated electrical conductors located in the conduit. At least one of the three insulated conductors includes an electrical conductor at least partially surrounded by an insulation layer and an electrically conductive sheath at least partially surrounding the insulation layer. One or more layers of electrical insulation at least partially surround the three insulated electrical conductors in the conduit. The one or more layers of electrical insulation electrically isolate the insulated electrical conductors from the conduit.



35) Family number: 65477009 (US2017106878A)

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Title: SUSPENDED CABLE TRANSPORTATION VEHICLE AND SYSTEM

Priority: US20150882799 20151014

Family:

Publication number	Publication date	Application number	Application date
US2017106878 AA	20170420	US20150882799	20151014
US10005477 BB	20180626	US20150882799	20151014

Probable Assignee: LOUWSMA KEVIN

Assignee(s):(std)**:** LOUWSMA KEVIN

Inventor(s):(std)**:** LOUWSMA KEVIN

Agent(s): J WILEY

International class (IPC 8-9): A63G21/20 A63G21/22 B61B12/12 B61B7/00 B61D17/02 (Advanced/Invention)

CPC: A63G21/22 A63G21/20

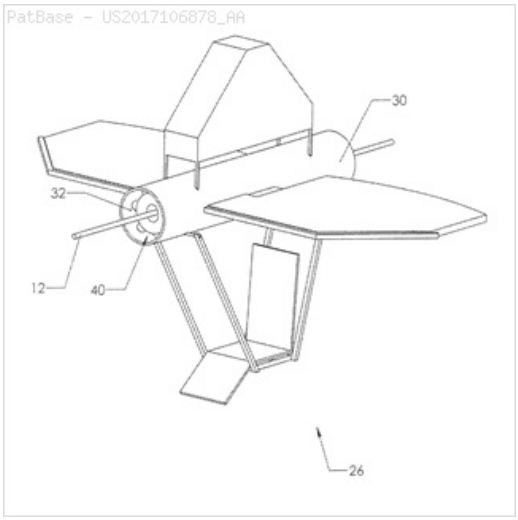
US class: 1/1 104/113

Classification Explorer

Cited documents: US8931417 BB, US8424460 BB, US8398497 BB, US5782699 A, US4898377 A, US3972527 A, US3298685 A, US2002185569 AA, US1422032 A,

Forward Citations: CN108712924,

Abstract:
A vehicle which is intended to travel along a downward sloping cable, which is suspended between two supports having a change in elevation. Preferably, the vehicle includes a fuselage, a trolley assembly, a translation system, a seat, a counterweight system, and at least one wing. The trolley assembly is attached to the cable. This connection allows the vehicle to travel along the cable. A counterweight system is included in order to balance the weight of the rider sitting in the seat below the fuselage. This allows the vehicle to easily rotate, via rotary joint, around the cable while traveling along the line. Preferably, the rider can induce roll by either activating ailerons or by rotating one of the wings about the lateral axis in order to increase the lift on one side of the aircraft depending on whether the wings are fixed.



36) Family number: 66519010 (GB2563383A)

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Title: SOLAR RAY CONCENTRATION SYSTEM FOR A POWER GENERATION SYSTEM

Priority: GB20170009013 20170606

Family:

Publication number	Publication date	Application number	Application date
GB201709013 A0	20170719	GB20170009013	20170606
GB2563383 A1	20181219	GB20170009013	20170606

Probable Assignee: OTEGUI VAN LEEUW JON

Assignee(s):(std)**:** JON OTEGUI VAN LEEUW ; OTEGUI VAN LEEUW JON

Inventor(s):(std)**:** JON OTEGUI VAN LEEUW

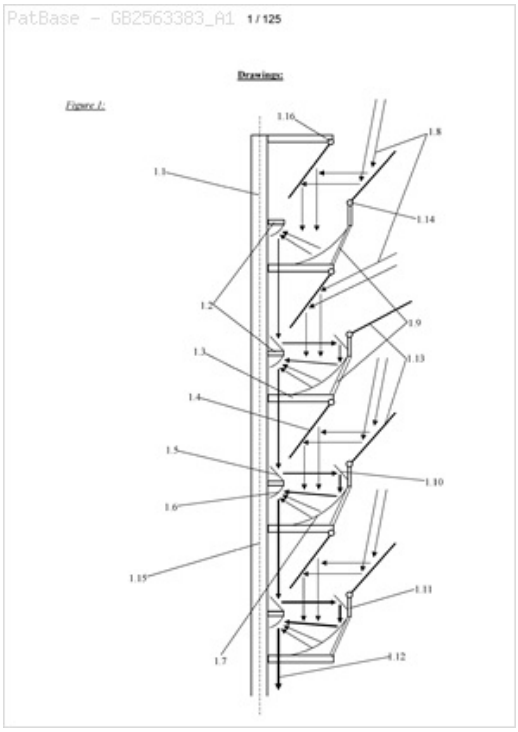
International class (IPC 8-9): F03G6/06 F24S20/20 F24S23/70 (Advanced/Invention)

CPC: F03G6/06 F24S23/70 F24S2023/832 Y02E10/41 F03G6/067 F24S20/20 F24S23/12 F24S23/77 F24S23/79

Classification Explorer

Cited documents: WO15161921 A1, US8428417 BA, US5694774 A, US2012228883 AA, US2009050324 AA, US2008092877 AA, GB2525389 A1, EP3176518 A1,

Abstract:
A solar thermal power generation system comprising a vertical tower or mast 10.4 with a plurality of arrays of mirrors mounted upon the mast, used to concentrate incoming solar rays downwards 10.6, to a focal point inside a channel. Each array of mirrors comprises a concave mirror 10.3, a convex mirror 10.6, and two pairs of flat inclined mirrors, all mounted on horizontal members protruding from the vertical tower. In some embodiments there may be a light ray shielding member 10.1 mounted parallel to the mast structure, to prevent the concentrated sun rays from being projected in unwanted directions. The concentrated solar rays are used to heat water in a water carrying tube, which is converted to steam to drive turbines for energy generation. The convex mirror may be a plano convex mirror, and the concave mirror may be a plano concave mirror.



37) Family number: 68950010 (MX2016009348A)

© PatBase

Title:	SYSTEM FOR GENERATING ELECTRIC POWER USING CONSTANT FLOWS.
Priority:	MX20160009348 20160718

Family:

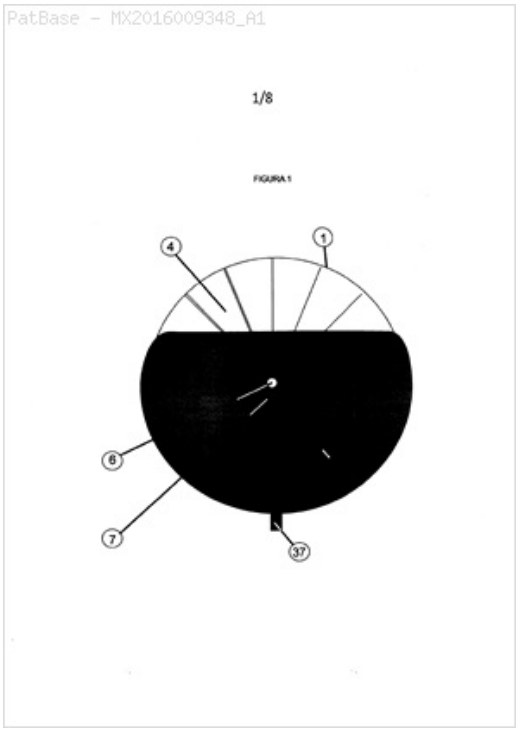
Publication number	Publication date	Application number	Application date
MX2016009348 A1	20180117	MX20160009348	20160718

Probable Assignee:	REYNALDO RAMIREZ TORRES
Assignee(s):(std)**:**	REYNALDO RAMIREZ TORRES
Inventor(s):(std)**:**	JOSE FERNANDO GALARZA CALDERON ; REYNALDO JAVIER RAMIREZ PENA ; REYNALDO RAMIREZ TORRES
International class (IPC 8-9):	F03B7/00 (Core/Invention)
CPC:	Y02E10/223

Classification Explorer

Abstract:
The present invention aims to generate electricity in an efficient and low-cost manner, environmentally friendly and within reach of any person or enterprise. Said system creates an electric power based on a set of mills with two purposes. The first aims to produce energy based on the rotational movement obtained from a water flow supplied by pipes to each of the generation mill units and that pulse being suitable for moving the mechanical components to transform them into electrical energy. The second purpose is for using the same water flow for obtaining the rotational movement in a series of water pumping mills with its mechanical components. Said purpose consist of transferring that rotational movement to a water pump that rise by piping to the main supply tank, thus restarting a cycle of times and actions and obtaining them as a result of the electric power generation.

PatBase - MX2016009348_A1



38) Family number: 51991010 (US2014037474A)

© PatBase

Title: SCROLL COMPRESSION DEVICE

Priority:

JP20110065607 20110324	JP20110066920 20110325	JP20110066921 20110325
JP20110067051 20110325	JP20110069123 20110328	JP20110071324 20110329
JP20110071495 20110329	WO2011JP79466 20111220	WO2011JP79467 20111220
WO2011JP79468 20111220	WO2011JP79464 20111220	WO2011JP79463 20111220
WO2011JP79465 20111220	WO2011JP79469 20111220	

Family:

Publication number	Publication date	Application number	Application date
CN103429898 A	20131204	CN201180069287	20111220
CN103429898 B	20160113	CN201180069287	20111220
CN103429899 A	20131204	CN201180069296	20111220
CN103429900 A	20131204	CN201180069347	20111220
CN103443463 A	20131211	CN201180069440	20111220
CN103443463 B	20151216	CN201180069440	20111220
CN103459849 A	20131218	CN201180069472	20111220
CN103459849 B	20160316	CN201180069472	20111220
CN103477077 A	20131225	CN201180069545	20111220
CN103477077 B	20151014	CN201180069545	20111220
JP2012202252 A2	20121022	JP20110065607	20110324
JP2012202277 A2	20121022	JP20110066920	20110325
JP2012202278 A2	20121022	JP20110066921	20110325
JP2012202281 A2	20121022	JP20110067051	20110325
JP2012202349 A2	20121022	JP20110069123	20110328
JP2012207535 A2	20121025	JP20110071324	20110329
JP2012207541 A2	20121025	JP20110071495	20110329
JP5824668 B2	20151125	JP20110067051	20110325
JP5824669 B2	20151125	JP20110071495	20110329
JP5838319 B2	20160106	JP20110071324	20110329
US2014037474 AA	20140206	US20110007181	20111220
US2014044572 AA	20140213	US20110007157	20111220
US2014044574 AA	20140213	US20110007244	20111220
US2014056736 AA	20140227	US20110007196	20111220
US2014064995 AA	20140306	US20110007171	20111220
US2014161649 AA	20140612	US20110007273	20111220
US9388808 BB	20160712	US20110007244	20111220
US9494155 BB	20161115	US20110007181	20111220
US9581160 BB	20170228	US20110007157	20111220
US10227982 BB	20190312	US20110007196	20111220
WO12127749 A1	20120927	WO2011JP79463	20111220
WO12127750 A1	20120927	WO2011JP79464	20111220
WO12127751 A1	20120927	WO2011JP79465	20111220
WO12127752 A1	20120927	WO2011JP79466	20111220

WO12127753 A1	20120927	WO2011JP79467	20111220
WO12127754 A1	20120927	WO2011JP79468	20111220
WO12127755 A1	20120927	WO2011JP79469	20111220

Probable Assignee: PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD

Assignee(s):(std)**:** AIDA KENJI ; AKUZAWA KATSUKI ; HAYASHI AKIHIRO ; IITSUKA SATOSHI ; KIYOKAWA YASUNORI ; SANYO ELECTRIC CO ; SUGIMOTO KAZUYOSHI ; NAGASAWA YOSHIAKI ; KON TSUTOMU ; NAGASE YOSHIHIKO ; PANASONIC IP MAN CO LTD

Assignee(s): PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO ; SANYO ELECTRIC CORP ; PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO LTD ; SANYO ELECTRIC CO LTD

Inventor(s):(std)**:** AKUZAWA KATSUKI ; SUGIMOTO KAZUYOSHI ; NAGASAWA YOSHIAKI ; IITSUKA SATOSHI ; HAYASHI AKIHIRO ; AIDA KENJI ; KIYOKAWA YASUNORI ; KON TSUTOMU ; NAGASE YOSHIHIKO ; IIZUKA SATOSHI ; HAYASHI TETSUHIRO ; FAN ZHONGMIN

Agent(s): WESTERMAN HATTORI DANIELS AND ADRIAN LLP; KUSHIBUCHI AND ASSOCIATES

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 KE KG KM KN KP KR KZ LA LC 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 QA RO RS RU RW 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

International class (IPC 8-9): B23B31/12 F04C18/02 F04C2/02 F04C23/00 F04C23/02 F04C29/00 F04C29/02 H02K15/03 (Advanced/Invention)

CPC: F04C18/0207 F04C23/02 F04C2/025 F04C29/02 F04C29/0078 F04C2230/603 F05C2251/12 Y10T29/4924 F04C2240/403 F04C2240/807 F05C2251/125 F04C18/0215 F04C23/008 F04C29/0085 F04C29/026 F04C29/028 F04C2240/40 F04C2240/56 F04C2240/60

European class: F04C18/02B2 F04C23/00D F04C29/02D F04C29/02F R04C230/605 R04C240/40 R04C240/807

US class: 1/1 29/888.022 361/143 417/365 417/372 417/410.5

JP class F-Term: 3H039 3H039/AA03 3H039/AA12 3H039/BB15 3H039/CC03 3H039/CC16 3H039/CC20 3H039/CC47 3H129 3H129/AA02 3H129/AA14 3H129/AA21 3H129/AA32 3H129/AB03 3H129/BB24 3H129/CC07 3H129/CC30 3H039/AA06 3H039/BB11 3H039/CC27 3H039/CC32 3H039/CC33 3H129/BB03 3H129/BB05 3H129/CC09 3H129/CC27 3H039/BB08 3H039/CC12 3H129/BB32 3H129/CC16 3H039/BB07 3H039/CC34 3H129/BB31 3H039/CC02 3H129/BB33 3H129/CC02 3H039/AA04 3H039/BB28 3H039/CC19 3H039/BB16

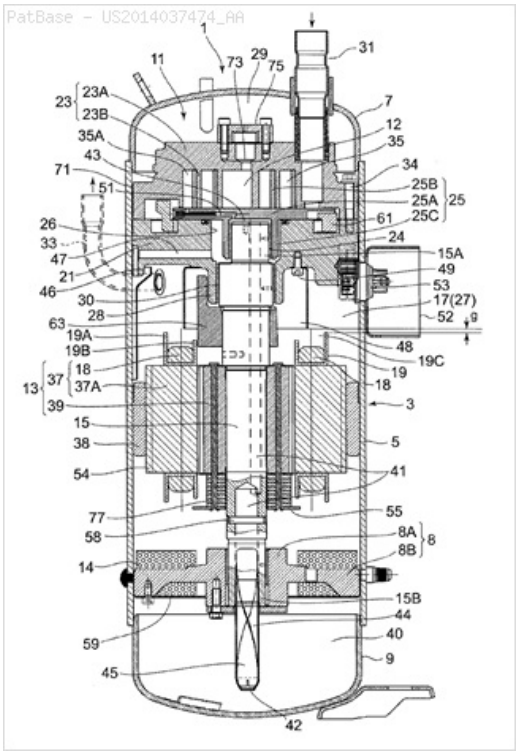
JP class F-Index: F04C18/02/311/B F04C29/00/D F04C18/02/311/Y F04C29/02/361/A F04C18/02/311/M F04C18/02/311/P F04C29/00/B F04C29/00/T

Classification Explorer

Cited documents: US6896493 BB, US6540489 BA, US5873710 A, US4496293 A, US2012007455 AA, US2011285240 AA, US2010215534 AA, US2010215533 AA, US2009293534 AA, US2009238704 AA, US2008298986 AA, US2008175738 AA, US2008069714 AA, US2007070560 AA, US2007065306 AA, US2006099086 AA, US2005220652 AA, US2005210663 AA, US2005086960 AA, US2004197213 AA, US2004040323 AA, US2003012672 AA, US2002140309 AA, US2002033305 AA, JP61167354 A2, JP61167354, JP60206998 A2, JP60075795 A2, JP60075795, JP59029785 A2, JP58165907 A2, JP58165907, JP57212389 A2, JP55046081 A2, JP5312157 A2, JP4032697 B2, JP2011047343 A2, JP2011047343, JP2009293589 A2, JP2009293589, JP2009243363 A2, JP2009162078 A2, JP2009097417 A2, JP2009097417, JP2009097358 A2, JP2009097358, JP2008190444 A2, JP2008190444, JP2007228684 A2, JP2007187049 A2, JP2006212746 A2, JP2006212746, JP2006132419 A2, JP2006132419, JP2005188519 A2, JP2004293492 A2, JP2004251173 A2, JP200411473, JP2004060532 A2, JP2004011473 A2, JP2004011473, JP2003230260 A2, JP2003035289 A2, JP2002199670 A2, JP2001041184 A2, JP2000161268 A2, JP11341752 A2, JP11275824 A2, JP11132164 A2, EP2416013 A1, EP1956244 A3, EP1956244 A2, CN1698249 A, CN1675016 A, CN1638241 A, CN1550669 A, CN1480695 A, CN1447491 A, CN1083181 A, CN101145716 A,

Forward Citations: WO17179714, WO14083939, US9976556, JP5875506, JP5664691, JP2016048099, JP2016048098, JP2014199008, JP2014109194, EP3325807, CN105443393, CN105402401, CN105387139, CN105387138, CN104373353, CN104343689, CN104209775, AU2017251203,

Abstract:
A scroll compression device that prevents scattering of lubrication oil to a discharge pipe side is provided. A cup 48 which is opened at the lower portion thereof and prevents scattering of lubrication oil is disposed on the lower surface of the main frame 21, and an annular insulator 19 having a double wall structure which surrounds windings is disposed on the upper surface of a stator 37. The peripheral wall of the cup 48 is hung between the double walls 19A, 19B of the insulator.



39) Family number: 3238010 (FR2249621A)

© PatBase

Title:	MILK STERILIZATION - USING THIN FILMS OF MILK
Priority:	FR19730040567 19731107

Family:

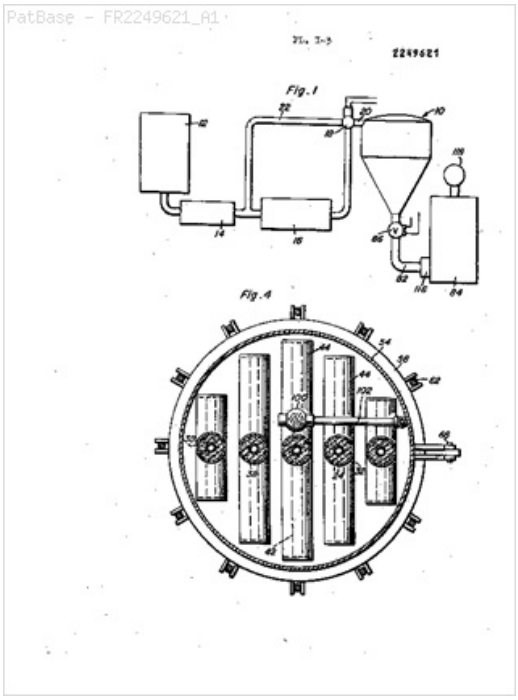
Publication number	Publication date	Application number	Application date
FR2249621 A1	19750530	FR19730040567	19731107
FR2249621 B1	19761119	FR19730040567	19731107

Probable Assignee:	DASI IND
Assignee(s):(std):	DASI IND ; DASI INDUSTRIES
Assignee(s):	DASI INDUSTRIES INC ; DASI INDUSTRIES INC US ; DASI IND INC US
International class (IPC 8-9):	A23C3/037 (Advanced/Invention); A23C3/00 (Core/Invention)
International class (IPC 1-7):	A23C3/00 A23C3/02
CPC:	A23C3/0375
European class:	A23C3/037B

Classification Explorer

Abstract:
Milk to be sterilized is introduced into the top of a press. vessel through a pipe which terminates in a discharge portion. This is arranged horizontally and is provided with a narrow slot through which the milk is discharged in the form of a thin film. Steam at a predetermined temp. and press. is introduced into the vessel for heating the milk films rapidly and with a min. agitation. The milk is discharged from the bottom of the vessel to a vacuum chamber for instantaneous cooling. The low degree of agitation prevents 'off' flavours developing in the milk.

PatBase - FR2249621_A1



40) Family number: 14932011 (ZA200100378A)

© PatBase

Title: WAVE-POWERED PUMP.

Priority: ZA19990003278 19990512 ZA19990007677 19991214 WO2000IB00627 20000510 ZA20010000378 20010112

Family:

Publication number	Publication date	Application number	Application date
AU200046009 A1	20001205	AU20000046009	20000510
AU200046009 A5	20001205	AU200000046009D	20000510
WO0070218 A1	20001123	WO2000IB00627	20000510
ZA200100378 A	20010814	ZA20010000378	20010112

Probable Assignee: WIENAND HENRY LEMONT

Assignee(s):(std)**:** WIENAND HENRY LEMONT

Assignee(s): HENRY LEMONT WIENAND

Inventor(s):(std)**:** WIENAND HENRY LEMONT

Inventor(s): HENRY LEMONT WIENAND

Agent(s): DAVIES COLLISON CAVE PTY LTD

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

International class (IPC 8-9): F03B13/18 (Advanced/Invention); F03B13/00 (Core/Invention); F03B (Subclass/Invention)

International class (IPC 1-7): F03B F03B13/18

CPC: F03B13/1885 Y02E10/38

European class: F03B13/18H Y02E10/38

Classification Explorer

Cited documents: WO9210675 A1, GB2062113 A1, GB1522661 A, FR2339071 A1, DE3419565 A1,

Forward Citations: WO11054125, WO10078940, WO10078940, WO05015008, US9074577, US8955546, CN102943736, CN102322389,

Abstract:
A pumping installation (10) pumps a fluid, especially water, more especially seawater, using wave action. The installation (10) is anchored (62) to a bed (60) of a body of water. A large primary float (24) and a small secondary float (28) are tied respectively by a long tie (26) and a short tie (30) to a lever (16) at opposite sides of its fulcrum (18). A wave lifts the large float (24) against bias of the small, submerged float (28) to pivot the lever (16) and a connected shaft (18) in a direction (64). When the wave has passed and the tie (26) slackens, the float (28) returns the lever (16) and shaft (18), thus generating reciprocal motion used to drive a pump such as a squeeze pump (14), a vane pump, or the like.

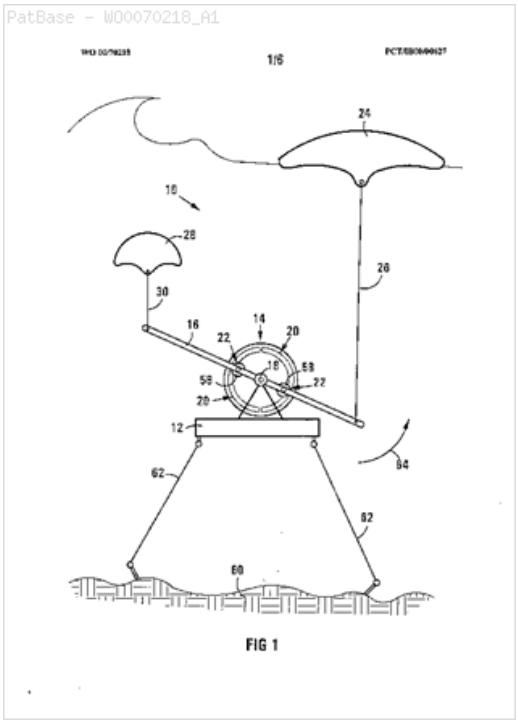


FIG 1

41) Family number: 71398011 (US2018282967A)

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Title:	HYDRAULIC SUPPLY SYSTEMS
Priority:	US20170478170P 20170329 US20170608937P 20171221 US20180939576 20180329

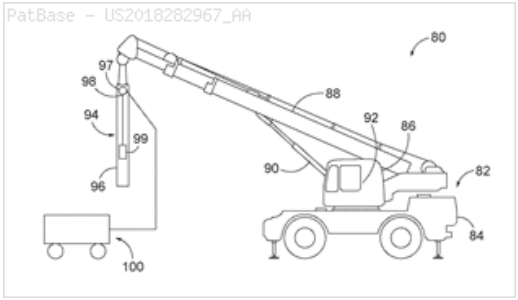
Family:

Publication number	Publication date	Application number	Application date
CA2999317 AA	20180929	CA20182999317	20180326
US2018282967 AA	20181004	US20180939576	20180329

Probable Assignee:	COACH TRUCK AND TRACTOR LLC
Assignee(s):(std)**:**	COACH TRUCK AND TRACTOR LLC
Assignee(s):	ELLIOTT KEVIN M
Inventor(s):(std)**:**	ELLIOTT KEVIN M
Agent(s):	BERESKIN AND PARR LLP SENCRL SRL
International class (IPC 8-9)**:**	B66C13/12 B66C13/40 B66C23/00 E02D7/08 E02D7/14 E02F9/22 F15B13/02 F15B13/08 F15B21/00 F15B21/08 F16B2/20 (Advanced/Invention)
CPC:	F15B2211/20576 F15B2211/6346 F15B2211/7142 F15B2211/85 B66C23/54 E02D7/08 E02D7/14 F16B1/02 F16B7/0426 F15B1/26 F15B21/042 F15B21/08 F16B2/205
US class:	1/1 405/232

Classification Explorer

Abstract:
Hydraulic supply systems and cranes incorporating the same are disclosed. Hydraulic supply systems may include an auxiliary hydraulic circuit that includes a pump, a power source, and a plurality of plumbing elements. The hydraulic supply systems may further include a control system that controls operation of at least a portion of the plurality of plumbing elements and a control panel that is positioned remotely from the control system and is in communication with the control system, where the control panel provides selective input to the control system.



42) Family number: 60288011 (CH709280B)

© PatBase

Title: PROCEDE D'ENTRETIEN ET DE REGULATION EN FREQUENCE D'UN RESONATEUR D'HORLOGERIE.

Priority: CH20140000204 20140217

Family:

Publication number	Publication date	Application number	Application date
CH709280 A2	20150828	CH20140000204	20140217
CH709280 B1	20180615	CH20140000204	20140217

Probable Assignee: SWATCH GROUP RES AND DEV LTD

Assignee(s):(std)**:** SWATCH GROUP RES AND DEV LTD

Assignee(s): SWATCH GROUP RESEARCH AND DEVELOPMENT LTD

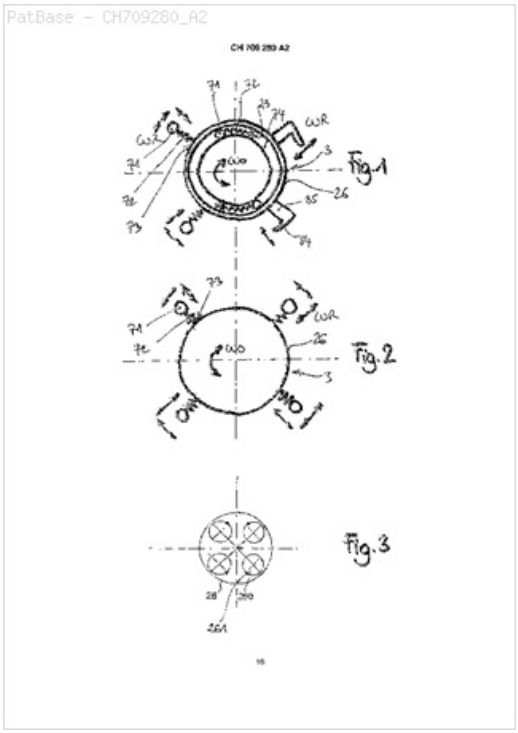
Inventor(s):(std)**:** DAVIDE SARCHI ; THIERRY HESSLER ; MARC STRANCZL ; HESSLER THIERRY ; STRANCZL MARC ; SARCHI DAVIDE

International class (IPC 8-9): G04B17/06 G04B17/26 (Advanced/Invention); G04B17/04 G04B17/10 (Advanced/Non-invention)

CPC: G04B17/045 G04B17/10 G04B15/14 G04B17/06 G04B17/26

Classification Explorer

Abstract:
Source: CH709280B [FR] L'invention concerne un procede d'entretien et de regulation en frequence, autour de sa frequence propre ?0 d'un mecanisme resonateur (26) d'horlogerie mettant en œuvre au moins un dispositif regulateur (71, 72) agissant sur ledit mecanisme resonateur avec un mouvement periodique. Ledit mouvement periodique impose une modulation periodique de la frequence de resonance et/ou du facteur de qualite et/ou du point de repos dudit mecanisme resonateur, avec une frequence de regulation ?R qui est comprise entre 0.9 fois et 1.1 fois la valeur d'un multiple entier de ladite frequence propre ?0, ledit entier etant superieur ou egal a 2.



43) Family number: 1630011 (FR2373487A)

© PatBase

Title: DISPOSITIF DE TRANSBORDEMENT DE FLUIDES

Priority: US19760748845 19761209

Family:

Publication number	Publication date	Application number	Application date
DE2754960 A1	19780706	DE19772754960	19771209
FR2373487 A1	19780707	FR19770036862	19771207
GB1586835 A	19810325	GB19770045868	19771104
JP53072216 A2	19780627	JP19770146525	19771206
NL7712229 A	19780613	NL19770012229	19771107

Probable Assignee: FMC CORP

Assignee(s):(std)**:** FMC CORP

Assignee(s): FMC TE SAN JOSE CALIFORNIE VER ST V AM CORP

Inventor(s):(std)**:** NIIRU ERISU JIEEMUSON ; JAMESON NEAL ELLIS

Inventor(s): ELLIS JAMESON NEAL

International class (IPC 8-9): B63B27/34 B67D9/02 F16L27/08 (Advanced/Invention)

International class (IPC 1-7): B63B27/24 B65G67/00 B65G67/58 B67D5/00 B67D5/36 B67D5/70

CPC: B67D9/02 F16L27/0861

European class: B67D9/02 F16L27/08F

JP class F-Term: 3E083 3E083/BB03

JP class F-Index: B67D5/70 B67D9/02

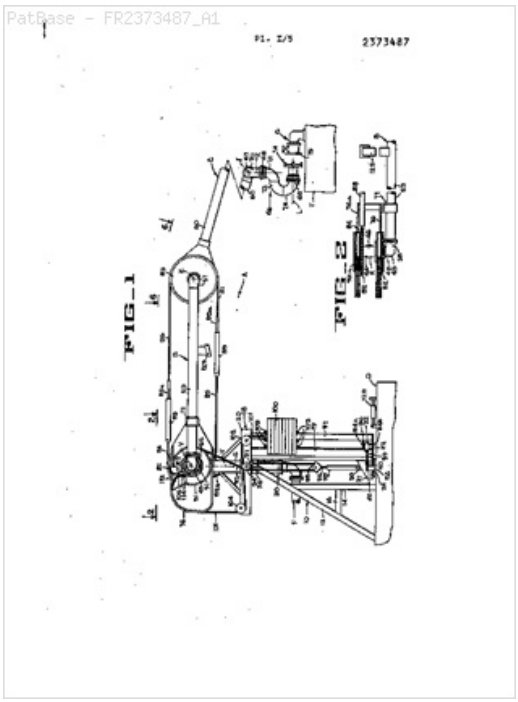
Classification Explorer

Cited documents: JP42006138 Y1, FR1170747 A,

Forward Citations: EP0045697,

Abstract:
Source: FR2373487A [FR] Dispositif de transbordement de fluides. Ce dispositif comporte un bras articule comprenant une conduite interieure B et une conduite exterieure C qui pivotent autour d'axes horizontaux, ainsi que des moyens 76, 101 pour equilibrer ces conduites en appliquant a la conduite interieure une force concentree, la distance radiale du point d'application de cette face par rapport a l'axe de la conduite interieure variant lorsque la distance horizontale du centre de gravite par rapport audit axe varie. Application: chargement et dechargement de bateaux-citernes.

Machine translation: Device transfer fluid. This device includes an articulated arm including a sedan and an outer pipe B C rotate about horizontal axes, and means 76, 101 to balance these lines by applying a sedan a concentrated force, the radial distance from the point Application of this face with respect to the axis of the sedan when varying the horizontal distance from the center of gravity relative to said axis varies. Application: loading and unloading of tankers.



44) Family number: 25168011 (US3469455A)

© PatBase

Title: APPARATUS FOR MEASURING CHANGES IN THE WEIGHT OF A SAMPLE

Priority: JP19660023052 19660412 JP19660084628 19661224 JP19660000078 19661227

Family:

Publication number	Publication date	Application number	Application date
CH461119 A	19680815	CH19670005099	19670411
DE1549170 B1	19720831	DE19671549170	19670410
DE1549170 C2	19730412	DE1967C041994	19670410
GB1165069 A	19690924	GB19670016600	19670411
US3469455 A	19690930	US19670629192	19670407

Probable Assignee: CHYO BALANCE CORP

Assignee(s):(std)**:** CHYO BALANCE CORP ; CHYO BALANCE CORP KYOTO JAPAN

Inventor(s):(std)**:** IWATA SHIGEO KYOTO ; SHIGEO IWATA ; IWATA SHIGEO

International class (IPC 8-9): G01G1/00 (Advanced/Invention)

International class (IPC 1-7): G01D21/00 G01G21/22 G01G9/00

CPC: G01G1/00

European class: G01G1/00

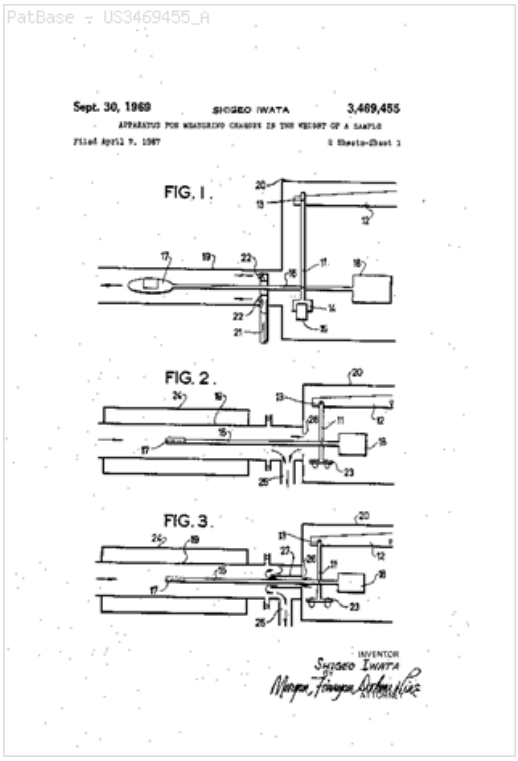
US class: 177/253 374/14 73/865.6

Classification Explorer

Cited documents: US779873 A, US401428 A, US3061027 A, US2622438 A, US2459618 A, US2244507 A, US201984 A, FR1423962 A,

Forward Citations: US6057516, US5685192, US5588746, US5321719, US4763536, US4729246, US2015153292, US10088402, DE4425958, CN104698025, CN104698025,

Abstract:
ABSTRACT OF THE DISCLOSURE
Apparatus for measuring changes in the weight of a sample in which the sample container is supported at the outer end of an elongated support bar laterally ex-tending from a sample loading member included in a weighing mechanism, the support bar being covered by a tube through which a fluid flows, so that the weighing mechanism can be prevented from being affected by the conditions and atmosphères in which the sample is placed.



45) Family number: 65823012 (US2017152621A)

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Title: LAUNDRY TREATING APPLIANCE

Priority:

US20150261515P	20151201	US20160345400	20161107	US20160345417	20161107
US20160345317	20161107	US20160345367	20161107	US20160344890	20161107
EP20160201581	20161130	EP20160201583	20161130	EP20160201586	20161130
EP20160201585	20161130	EP20160201584	20161130	US20190400645	20190501

Family:

Publication number	Publication date	Application number	Application date
DE602016004290 D1	20180816	DE201660004290T	20161130
DE602016005346 D1	20181004	DE201660005346T	20161130
DE602016014239 D1	20190619	DE201660014239T	20161130
DE602016015107 D1	20190704	DE201660015107T	20161130
DE602016016596 D1	20190808	DE201660016596T	20161130
EP3176300 A1	20170607	EP20160201586	20161130
EP3176300 B1	20190612	EP20160201586	20161130
EP3176301 A1	20170607	EP20160201581	20161130
EP3176301 B1	20180725	EP20160201581	20161130
EP3176302 A1	20170607	EP20160201583	20161130
EP3176302 B1	20190710	EP20160201583	20161130
EP3176303 A1	20170607	EP20160201584	20161130
EP3176303 B1	20180905	EP20160201584	20161130
EP3176304 A1	20170607	EP20160201585	20161130
EP3176304 B1	20190522	EP20160201585	20161130
US2017152621 AA	20170601	US20160345400	20161107
US2017152622 AA	20170601	US20160345417	20161107
US2017152623 AA	20170601	US20160345317	20161107
US2017152624 AA	20170601	US20160345367	20161107
US2017152625 AA	20170601	US20160344890	20161107
US2019257019 AA	20190822	US20190400645	20190501
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US10053808 BB	20180821	US20160345367	20161107
US10125446 BB	20181113	US20160344890	20161107

Probable Assignee: WHIRLPOOL CORP

Assignee(s):(std)**:** WHIRLPOOL CO

Assignee(s): WHIRLPOOL CORP ; WHIRLPOOL BENTON HARBOR CORP

Inventor(s):(std)**:** TEIGELKAMP KLAUS ; ERICKSON DONALD ; MILLER CHRISTOPH J ; MIKKELSEN DOUGLAS ; WALSH ERIC J ; RICHMAN LONNIE J

Agent(s):	GUERCI ALESSANDRO; SPINA ALESSANDRO
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
International class (IPC 8-9):	B29C47/00 B29C48/00 B29C48/06 B29C48/08 B29C49/06 B29C53/04 B29C65/00 B29C65/06 B29C65/08 B29L31/00 D06F37/00 D06F37/04 D06F37/20 D06F37/22 D06F37/26 D06F37/30 D06F39/08 D06F39/12 (Advanced/Invention); B29C48/00 B29C48/06 B29C48/08 B29C49/06 B29C53/04 B29C65/00 B29C65/06 B29C65/08 B29L31/00 D06F37/00 D06F37/04 D06F37/20 D06F37/22 D06F37/26 D06F37/30 D06F39/08 D06F39/12 (Advanced/Non-invention)
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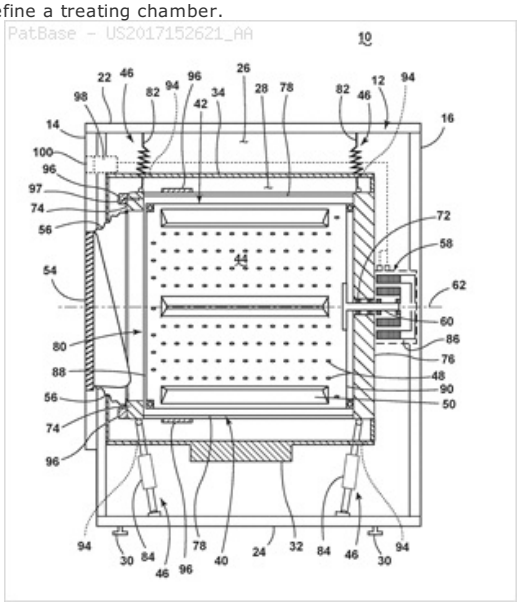
US class:	1/1 312/228.1 68/139 68/140 68/19
Classification Explorer	
Cited documents:	WO09030688 A1, WO09030688 A1, WO08102396 A2, WO08102396 A2, US8763618 BB, US8646293 BB, US8646292 BB, US8646190 BB, US8616027 BB, US8387421 BB, US8341983 BB, US8336340 BB, US8336339 BB, US8322170 BB, US8302434 BB, US8256246 BB, US8156770 BB, US7976111 BB, US7930910 BB, US7820995 BB, US7765838 BB, US7571625 BB, US7533548 BB, US6655177 BB, US6050113 A, US5989466 A, US4949557 A, US3152202 A, US2922526 A, US2656696 A, US2237535 A, US2016186371 AA, US2016177487 AA, US2015197881 AA, US2015176166 AA, US2015052954 AA, US2015052953 AA, US2014150281 AA, US2013036774 AA, US2013031938 AA, US2012047760 AA, US2012017655 AA, US2009038349 AA, US2009038349 AA, US2007144564 AA, US2007018453 AA, US2005028568 AA, US2005005652 AA, IT1205674 B, IT1205674 A, IT1169242 B, IT1169242 A, GB2189511 A1, GB2189511 A1, GB2096649 A1, GB2096649 A1, GB1598210 A, FR1513957 A, FR1375530 A, ES2464242 AB, ES2464242 A2, ES2463487 AA, ES2463315 AB, ES2463315 A2, ES2463168 AA, ES2399674 AB, ES2399674 A2, EP2460924 A2, EP2385163 A1, EP2385163 A1, EP1990462 A2, EP1990462 A2, EP1783266 A1, EP1688531 A1, EP1688531 A1, EP1619286 A2, EP1619286 A2, EP1522624 A2, EP1522624 A2, EP1433891 A2, EP1433891 A2, EP1433890 A2, EP1433890 A2, EP0765963 A1, EP0765963 A1, EP0234243 A1, EP0234243 A1, DE3817611 A1, DE1610077 A1, DE1610077 A1, DE10252011 A1, DE102010028437 A1 DE102010028437 A1 CH346852 A, CH346852 A,

Abstract:
A fabric treating appliance for treating an article according to a cycle of operation includes a chassis defining an interior. An extruded tub is provided in the interior and mounted to the chassis including a sump aperture, and defining a liquid chamber. A sump is provided in the sump aperture. A rotatable drum is located within the tub to define a treating chamber.



46) Family number: 44897012 (US2010089586A)

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Title:	MOVABLE HEATERS FOR TREATING SUBSURFACE HYDROCARBON CONTAINING FORMATIONS
Priority:	US20080104974P 20081013 US20090168498P 20090410 US20090576763 20091009

Family:

Publication number	Publication date	Application number	Application date
US2010089586 AA	20100415	US20090576763	20091009
US8256512 BB	20120904	US20090576763	20091009

Probable Assignee:	SHELL OIL CO
Assignee(s):(std):	SHELL OIL CO ; STANECKI JOHN ANDREW
Assignee(s):	SHELL OIL COMPANY
Inventor(s):(std):	STANECKI JOHN ANDREW
Agent(s):	SHELL OIL COMPANY

International class (IPC 8-9):	E21B36/00 E21B36/02 E21B36/04 E21B43/24 (Advanced/Invention); E21B36/00 E21B43/16 (Core/Invention)
CPC:	H05B3/48 H05B2214/03 E21B44/02 Y10T29/49083 E21B43/2401 E21B43/24 E21B43/2405 H01C3/00
European class:	E21B43/24B H01C3/00 H05B3/48
US class:	166/272.1 166/272.3 166/272.7 166/302 166/302S 166/303 166/50

Classification Explorer

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WO9901640, WO9723924, WO9506093, WO08048448, WO0181505, WO0019061, USRE39244 E, USRE39077 E, USRE35696 E, USRE30738 E, USRE30019 E, US94813 A, US8162405 BB, US8162059 BB, US8151907 BB, US8083813 BB, US8070840 BB, US8042610 BB, US8027571 BB, US8011451 BB, US7986869 BB, US7950453 BB, US7942203 BB, US7942197 BB, US7931086 BB, US7912358 BB, US7866388 BB, US7866386 BB, US7866385 BB, US7860377 BB, US7849922 BB, US7845411 BB, US7841425 BB, US7841408 BB, US7841401 BB, US7832484 BB, US7831134 BB, US7831133 BB, US7798221 BB, US7798220 BB, US7793722 BB, US7785427 BB, US7735935 BB, US7730947 BB, US7730946 BB, US7730945 BB, US7730936 BB, US7717171 BB, US7703513 BB, US7683296 BB, US7681647 BB, US7677314 BB, US7677310 BB, US7673786 BB, US7673681 BB, US7644765 BB, US7640980 BB, US7635025 BB, US7635024 BB, US7635023 BB, US7631690 BB, US7631689 BB, US7610962 BB, US7604052 BB, US760304 A, US7597147 BB, US7591310 BB, US7584789 BB, US7581589 BB, US7575053 BB, US7575052 BB, US7562707 BB, US7562706 BB, 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US2799341 A, US2794504 A, US2793696 A, US2789805 A, US2786660 A, US2780450 A, US2780449 A, US2777679 A, US2771954 A, US2761663 A, US2757739 A, US2743906 A, US2734579 A, US2732195 A, US2714930 A, US2703621 A, US2695163 A, US2685930 A, US2670802 A, US2647306 A, US2642943 A, US2634961 A, US2630307 A, US2630306 A, US2623596 A, US2595979 A, US2593477 A, US2548360 A, US2497868 A, US2484063 A, US2481051 A, US2472445 A, US2466945 A, US2444755 A, US2423674 A, US2390770 A, US2381256 A, US2365591 A, US2319702 A, US2288857 A, US2244256 A, US2244255 A, US2011710 A, US2011247820 AA, US2011247811 AA, US2011247810 AA, US2011247809 AA, US2011132600 AA, US2010288497 AA, US2010258291 AA, US2010258290 AA, US2010258265 AA, US2010206570 AA, US2010175872 AA, US2010096137 AA, US2010089584 AA, US2010071904 AA, US2010071903 AA, US2009321417 AA, US2009301724 AA, US2009272578 AA, US2009272536 AA, US2009272535 AA, US2009272526 AA, US2009260824 AA, US2009260823 AA, US2009207041 AA, US2009206834 AA, US2009200854 AA, 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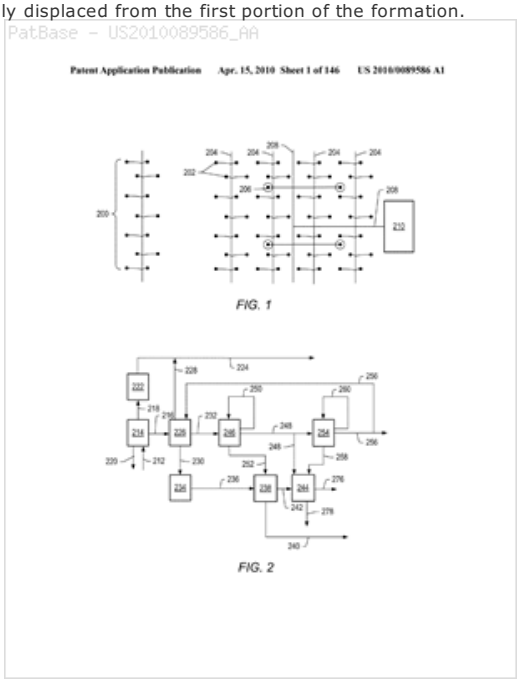
SE123136, SE121737, GB674082, GB156396, GB1454324, GB1204405, GB1010023, EP0940558, EP0130671, EP0107927, CA899987, CA2015460, CA1288043, CA1253555, CA1196594, CA1168283,

Forward Citations: US9938782, US9822592, US9755415, US9647194, US9618435, US9528322, US9466896, US9399905,

US9382785, US9341034, US9337550, US9309755, US9226341, US9129728, US9127538, US9127523, US9080917, US9080409, US9051829, US9048653, US9033042, US9022118, US9022109, US9016370, US8967259, US8943686, US8939207, US8881806, US8875788, US8859942, US8857506, US8857051, US8851170, US8833453, US8820406, US8816203, US8791396, US8789586, US8752904, US8739874, US8732946, US8701769, US8701768, US8636323, US8631866, US8586867, US8586866, US8579031, US8562078, US8536497, US8502120, US8485847, US8485256, US8485252, US8448707, US8434555, US8381806, US8356935, US8355623, US8353347, US8327932, US8281861, US8272455, US8267185, US8267170, US8257112, US8233782, US8225866, US8220539, US8196658, US8177305, US8172335, US8162405, US8162059, US8151907, US8146669, US8113272, US8042610, US8027571, US7987613, US7942203, US7931086, US2015276570, US2011277992, US2009194287, US2008298512, US2008184587, US10373928, US10294736, US10024122,

Abstract:
A method for treating a hydrocarbon containing formation includes providing heat to a first portion of the formation using a heater. The heating section of the heater is at least partially located in a substantially horizontal or inclined portion of a wellbore and is located in or proximate to a hydrocarbon containing layer of the formation. The heating section has a length that is at most 1/2 the length of the horizontal or inclined portion of the wellbore. At least a portion of the heating section in the wellbore is moved such that heat is provided to a second portion of the formation. The second portion is horizontally displaced from the first portion of the formation.



47) Family number: 56436013 (WO14073952A1)

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Title: SLIDE TRACK WITH IMPROVED CAPACITY COMPRISING A PLURALITY OF SELECTABLE DOWNSTREAM SLIDE WAYS

Priority: NL20121039884 20121108

Family:

Publication number	Publication date	Application number	Application date
NL1039884 C	20140512	NL20121039884	20121108
NL1039884 C2	20140512	NL20121039884	20121108
WO14073952 A1	20140515	WO2013NL00053	20131107

Probable Assignee: DREAMX

Assignee(s):(std)**:** DREAMX ; DREAMX DESIGN

Inventor(s):(std)**:** VERHAEG MICKY PETRUS MARTINUS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 IR IS IT JP KE KG KM KN KP KR KZ LA LC 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A63G21/14 A63G21/18 (Advanced/Invention)

CPC: A63G21/18

Classification Explorer

Cited documents: US3830161 A, US2012258812 AA, US2007049385 AA, NL9301619 A,

Forward Citations: EP2959950, EP2959950,

Abstract:
The invention is directed to a slide track 100 with a movable selection segment 300a between an upstream slide way segment 101 and a downstream slideway segment 103 comprising multiple slide ways, wherein a continuous flow path is provided to a selected slide way. To ensure safe operation, multiple sensors are located in the slide track 100 for detecting the speed and position of the rider. The selection segment 300a moves only from a first position to a second position if the movement can be completed in time before the arrival of the rider at the exit of the selection segment 300a.

PatBase - WO14073952_A1

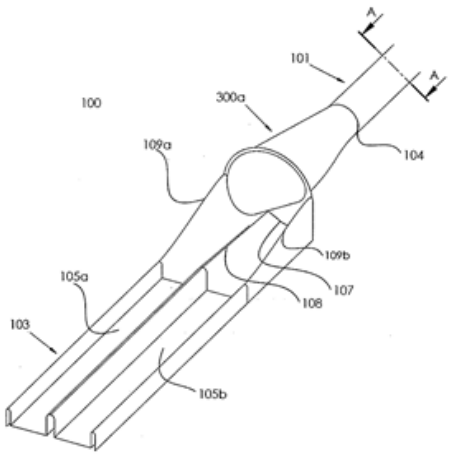

Fig. 1

48) Family number: 21235014 (US2132514A)

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Title:	APPARATUS DESIGNED TO ILLUSTRATE THE LAWS OF ECONOMICS BY PHYSICAL ANALOGIES
Priority:	US19370167559 19371006

Family:

Publication number	Publication date	Application number	Application date
US2132514 A	19381011	US19370167559	19371006

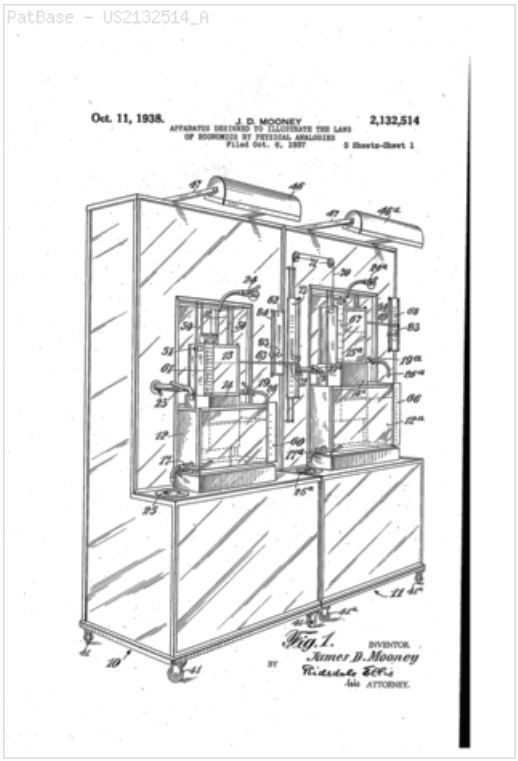
Probable Assignee:	MOONEY JAMES D
Assignee(s):(std)**:**	MOONEY JAMES D
Inventor(s):(std)**:**	MOONEY JAMES D
International class (IPC 8-9):	G09B19/18 (Advanced/Invention); G09B19/00 (Core/Invention)
International class (IPC 1-7):	G06G7/38 G09B25/00
CPC:	G09B19/18
European class:	G09B19/18
US class:	235/61A 434/107

Classification Explorer

Forward Citations: US2903186, DE3337149,

Abstract:
1. Apparatus for illustrating economic laws, comprising a tank containing liquid, means for admitting liquid to and means for discharging liquid from said tank at relatively variable rates to represent the strength of two economic factors, a float i.n said tank; a liquid receptacle carried by the neat, means for admitting liquid to and means for discharging liquid from said receptacle at relatively variable rates to represent the strength of two other economic factors, and means for indicating the algebraic sum of the vertical movements of said float and receptacle due to the variations i.n the heights of liquid in the tank and receptacle and thereby integrate the resultant effects of all four economic factors.

PatBase - US2132514_A



49) Family number: 9458014 (EP0574616A1)

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Title: LIFT TRUCK.

Priority: EP19920201756 19920615

Family:

Publication number	Publication date	Application number	Application date
DE69214131 D1	19961031	DE19926014131	19920615
DE69214131 T2	19970403	DE19926014131T	19920615
EP0574616 A1	19931222	EP19920201756	19920615
EP0574616 B1	19960925	EP19920201756	19920615

Probable Assignee: BLOM R BEHEER BVR

Assignee(s):(std)**:** BLOM BEHEER R BV ; BLOM R BEHEER BVR

Assignee(s): R BLOM BEHEER B V ; R BLOM BEHEER B V ST ANNAPAROCHI NL ; R BLOM BEHEER BV

Inventor(s):(std)**:** DE VRIES HENDRIK

Inventor(s): DE VRIES HENDRIK NL 9076 AG ST ANNAPAROCHIE NL

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

International class (IPC 8-9): B66F9/08 B66F9/10 (Advanced/Invention); B66F9/08 (Core/Invention)

International class (IPC 1-7): B66F9/075 B66F9/08

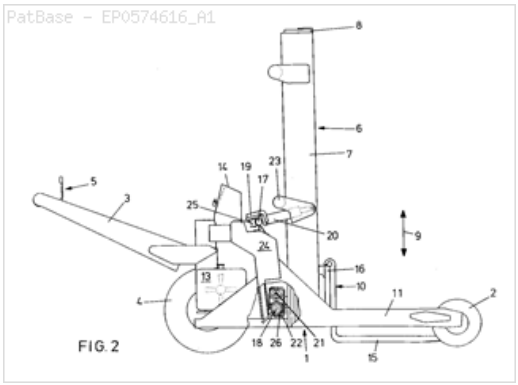
CPC: B66F9/082 B66F9/10

European class: B66F9/08B B66F9/10

Classification Explorer

Cited documents: US3710967 A, US3637100 A, GB2025364 A1, FR2298507 A1, FR1161796 A, CA1148123 A1,

Abstract:
The frame (1) comprises two arms (11) which carry front wheels (2) spaced from the upright (6) in forward direction. Across the frame (1) extend upper and lower rails (17 and 18, respectively) for guiding displacement of the upright (6). The upright (6) is connected to a runner (19) guided by one of the rails (17) and to a working cylinder (20) connected to that runner (19). The working cylinder (20) is directed substantially transversely to the upright (6), one end of the working cylinder (20) is connected to the upright (6) adjacent the front thereof and the other end of the working cylinder (20) is connected direct to the runner (19). Advantages: simple construction, good view of the area of the load carrier, lowered centre of gravity and a construction of short structural dimensions.



50) Family number: 8445014 (WO9415095A1) © PatBase

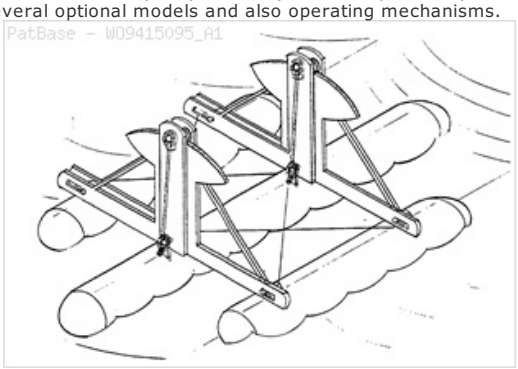
Title:	MARINE ENERGY GENERATOR II BASED ON THE LEVER PRINCIPLE
Priority:	BR1992PI04741 19921229 WO1993BR00019 19930528

Family:

Publication number	Publication date	Application number	Application date
AU199343023 A1	19940719	AU19930043023	19930528
BRPI9204741 A	19940705	BR1992PI04741	19921229
EP0767875 A1	19970416	EP19930912492	19930528
WO9415095 A1	19940707	WO1993BR00019	19930528

Probable Assignee:	BUSTOS NELSON SABINO JAQUE
Assignee(s):(std)**:**	BUSTOS NELSON SABINO JAQUE ; NELSON SABINO JAQUE BUSTOS
Inventor(s):(std)**:**	BUSTOS NELSON SABINO JAQUE
Inventor(s):	NELSON SABINO JAQUE BUSTOS
Designated states:	AT AU BE CH DE DK ES FR GB GR IE IT JP LU MC NL PT SE US
International class (IPC 8-9):	F03B13/18 (Advanced/Invention); F03B13/00 (Core/Invention)
International class (IPC 1-7):	F03B13/14
CPC:	F03B13/181 Y02E10/38
European class:	F03B13/18B2 Y02E10/38
Classification Explorer	
Cited documents:	US917411 A, US882883 A, US714166 A, US625101 A, US4379235 A, US1385083 A, FR351937 A, AT113222 B,
Forward Citations:	WO18107203, WO12166064, WO10111354, WO07000033, WO0225107, US8671675, US7994651, RU2702828, RU2626188, RU2592094, GB2434620, GB2434620, EP2041428, EP2041428,

Abstract:
The assembly consists of three closed and floating tanks, joined by levers and locks fixation of the tanks, which perform a shuttle movement. This shuttle movement is transmitted by levers which turn around a common central shaft, and is transformed into an oscillating and opposed movement by cog wheels, crowns or pinions on one hand, and racks, on the other and transformed again into a gyrating movement. By means of the union of adjustable connecting-rods, adjustable levers, or adjustable levers of the equalizing type with racks, this type of movement increased or decreased. Another means to take advantage of this shuttle movement is through pulling cables to move shafts joined to a mechanical system. The rotating movement of the cog wheels, or pinions, or crowns, or crowns with ratchets by means of shafts, pinions and crowns with or without ratchets drives: 1) a flywheel; 2) a clutch system; 3) a gear box; 4) and finally, the rotor of an alternator or dynamo. Figures show several optional models and also operating mechanisms.



51) Family number: 20694015 (US6231011B) © PatBase

Title:	SATELLITE ANGULAR MOMENTUM CONTROL SYSTEM USING MAGNET-SUPERCONDUCTOR FLYWHEELS

Priority: US19980184914 19981102 WO1999US25727 19991101

Family:

Publication number	Publication date	Application number	Application date
AU200014628 A1	20000522	AU20000014628	19991101
AU200014628 A5	20000522	AU20000014628	19991101
EP1042167 A1	20001011	EP19990971385	19991101
JP2002528342 T2	20020903	JP20000579485T	19991101
US6231011 BA	20010515	US19980184914	19981102
WO0026084 A1	20000511	WO1999US25727	19991101

Probable Assignee: UNIV HOUSTON SYSTEM

Assignee(s):(std)**:** UNIV HOUSTON SYSTEM

Assignee(s): UNIVERSITY OF HOUSTON SYSTEM ; OF HOUSTON SYSTEM UNIV ; THE UNIVERSITY OF HOUSTON SYSTEM

Inventor(s):(std)**:** CHU WEI KAN ; MA KI BUI ; YU JANG HORNG ; CHEN QUARK YUNG SUNG ; LEE EUNJEONG ; POSTREKHIN YEVGENIY ; LEE EUJEONG

Inventor(s): WEI KAN CHU ; KI BUI MA ; JANG HORNG YU ; QUARK YUNG SUNG CHEN ; EUNJEONG LEE ; YEVGENIY POSTREKHIN

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

International class (IPC 8-9): B64G1/28 B64G1/32 B64G1/36 F16C39/06 G01C19/02 G05D1/08 (Advanced/Invention); B64G1/24 B64G1/36 F16C39/00 G01C19/00 G05D1/08 (Core/Invention)

International class (IPC 1-7): B64G1/28 F16C39/06 G01C19/02 G05D1/08

CPC: F16C2361/55 B64G1/283 B64G1/285 B64G1/32 B64G1/36 F16C2326/47 B64G1/244 F16C32/0438

European class: B64G1/28B B64G1/28C B64G1/32 B64G1/36 F16C32/04M2S2 F16C32/04M4C G05D1/08D

US class: 244/165 244/166 505/166

JP class F-Term: 2F105 3D140 3D143

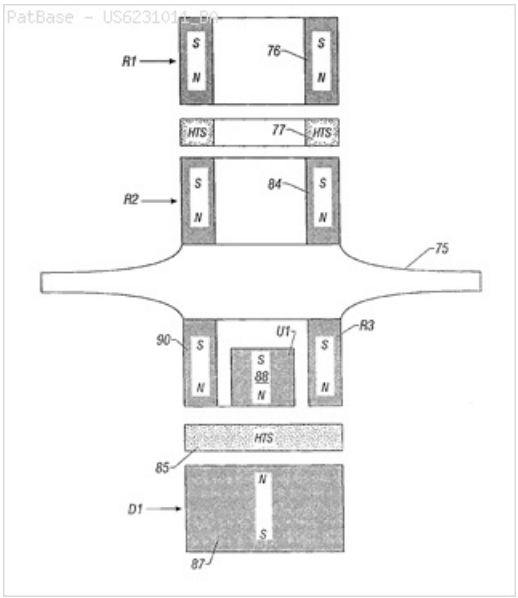
JP class F-Index: B64G1/28/C G01C19/02/B

Classification Explorer

Cited documents: US5831362 A, US5826829 A, US5747426 A, US5567672 A, US5540116 A, US5177387 A, US5159219 A, US4961352 A, US4886778 A, US4879537 A, US4688746 A, US3810683 A, US3493274 A, US3378315 A, US3026151 A, JP9242755, JP8121480, EP0829655 A1, EP0728956 A1, EP0575619 A1,

Forward Citations: WO17062881, WO15135209, WO09150081, WO07097711, US9778619, US9362801, US9325217, US9243677, US9114891, US9083207, US9065529, US8803363, US8505853, US8437817, US8437816, US8437815, US8401599, US8396523, US8396522, US8269470, US8242649, US7561947, US7188008, US6779759, US6517029, US2018136608, US2015362892, US2013299290, US2013148250, US2010283340, US2010001697, US2008271550, US2008164772, US2008045146, US2007228857, US2005174073, US2005125111, US10474107, US10228248, US10175065, US10047823, RU2581281, KR101581019, FR2932163, EP2134965, EP1697212, CN102099250, CN101859143, CN101415941,

Abstract:
A torque/reactive momentum wheel control system for use in satellites for dynamic attitude maintenance and alteration where the flywheel of each momentum wheel is levitated by a high-temperature superconducting element repulsively interacting with permanent magnets in the flywheel. The spin rate (rpm) of the flywheel being controlled by either an active magneto or electromagneto drive system. Each momentum wheel is cooled by a cryo-cooler and can have a total weight of about 10 Kg to a fraction of 1 Kg and delivering 3.5 Js with less than 1 W loss.



52) Family number: 59521015 (WO15086929A1)

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Title: POWER TRAIN WHICH IS FITTED WITH AN ACTUATING PUSH-ROD CONTROLLED BY A CAM TRACK CARRIED BY A CONNECTING ROD

Priority: FR20130062304 20131209 EP20140793217 20140925 WO2014FR52396 20140925

Family:

Publication number	Publication date	Application number	Application date
DE602014021344 D1	20180322	DE201460021344T	20140925
EP3080433 A1	20161019	EP20140793217	20140925
EP3080433 B1	20180221	EP20140793217	20140925
ES2664378 T3	20180419	ES20140793217T	20140925
FR3014499 A1	20150612	FR20130062304	20131209
FR3014499 B1	20151211	FR20130062304	20131209
WO15086929 A1	20150618	WO2014FR52396	20140925

Probable Assignee: RENAULT SA

Assignee(s):(std)**:** RENAULT S A S ; RENAULT SA ; RENAULT SAS

Inventor(s):(std)**:** CHANCERELLE JEAN BAPTISTE ; VINCENT FRANCK ; PORTELA GARNIKA GONZALO

Inventor(s): GONZALO PORTELA GARNIKA ; FRANCK VINCENT ; JEAN BAPTISTE CHANCERELLE

Agent(s): ELZABURU SLP ELZABURU SLP; GEVERS FRANCE; RENAULT SAS

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 IR 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): F02M37/06 F02M39/02 F02M59/10 F16C7/00 (Advanced/Invention)

CPC: F02M59/102 F02M39/02 F02M59/06 F16C7/023

Classification Explorer

Cited documents: EP2375030 A2, EP2375030 A2, DE3910794 A1, DE3910794 A1,

Forward Citations: DE102014223597, DE102014223597,

Abstract:
The invention relates to a power train (10) of a motor vehicle, comprising: - a crankshaft (12) mounted rotatably about an axis of rotation (X); - at least one connecting rod (14) having a head (28) mounted rotatably on a crank pin (18) associated with the crankshaft (12); - at least one actuating push-rod (44) sliding in a plane perpendicular to the axis of rotation (X) of the crankshaft (12) between an extended position towards which it is recalled, and a retracted position; - a cam track (48) which is turned by the crankshaft (12) to push the push-rod (44) towards the retracted position thereof on each revolution of the crankshaft (12), the free end (46) of the push-rod (44) forming a cam follower; characterized in that the cam track (48) is carried by the connecting rod (14).

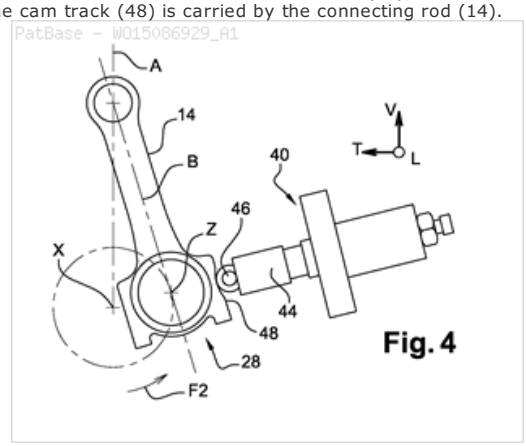

Fig. 4

53) Family number: 19127015 (GB563608A)

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Title: Improvements in and connected with extrusion presses for lead and lead alloys

Priority: GB19430006805 19430429

Family:

Publication number	Publication date	Application number	Application date
GB563608 A	19440822	GB19430006805	19430429

Probable Assignee: JOSEPH GORDON LAUDER

Assignee(s):(std)**:** BRITISH INSULATED CABLES LTD ; JOSEPH GORDON LAUDER ; WILLIAM PAYNE FULLER

Assignee(s): BRITISH INSULATED CABLES LIMITED

International class (IPC 8-9): B21C33/02 (Advanced/Invention); B21C33/00 (Core/Invention)

International class (IPC 1-7): B21C33/02

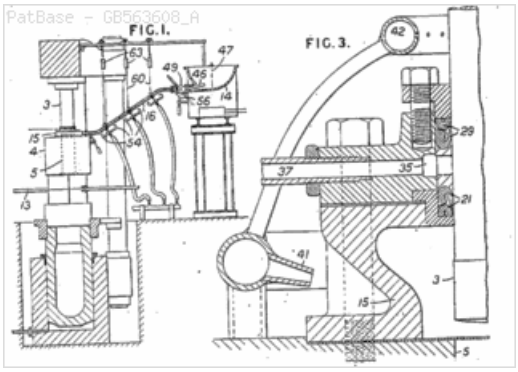
CPC: B21C33/02

European class: B21C33/02

Classification Explorer

Abstract:
6805. [Class 83 (iv)] An extrusion press of the kind having a fixed ram 3 and a vertical container 4 which is raised, over the ram, to extrude a metal sheath and c. 13, includes a melting pot 14, an annular feed chamber 15 on the container, and surrounding its bore 5, a flexible pipe 16 connecting the pot and chamber, and means, e.g. gas burners 54, for heating the pipe 16. This may be of corrugated steel connected to a valve 49 and to rigid pipe 46 terminating above the bottom of the pot 14. This may have a perforated

plate 47 to separate melting metal and c. from the fluid portion. The pipe 16 may be supported at intermediate points by wires and c. 60 and counterweights 63. Gas jets 56 for the valve 49, 42, Fig. 3, for the ram and 41 for the chamber 15 may be provided. To prevent air from being drawn into the chamber 15 around the ram 3, the opening for the ram is provided with two sets of packing 21, 29 between which a chamber 35 is arranged and this chamber is supplied with neutral gas under pressure or evacuated by means of a pipe 37.



54) Family number: 43954016 (US2009272526A)

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Title:	ELECTRICAL CURRENT FLOW BETWEEN TUNNELS FOR USE IN HEATING SUBSURFACE HYDROCARBON CONTAINING FORMATIONS
Priority:	US20080046329P 20080418 US20080104974P 20081013 US20090422119 20090410

Family:

Publication number	Publication date	Application number	Application date
US2009272526 AA	20091105	US20090422119	20090410
US8172335 BB	20120508	US20090422119	20090410

Probable Assignee:	SHELL OIL CO
Assignee(s):(std)**:**	BURNS DAVID BOOTH ; HWANG HORNG JYE JAY ; MACDONALD DUNCAN CHARLES ; MARWEDE JOCHEN ; PRINCE WRIGHT ROBERT GEORGE ; SHELL OIL CO
Assignee(s):	SHELL OIL COMPANY
Inventor(s):(std)**:**	MARWEDE JOCHEN ; MACDONALD DUNCAN CHARLES ; BURNS DAVID BOOTH ; HWANG HORNG JYE JAY ; PRINCE WRIGHT ROBERT GEORGE
Inventor(s):	HWANG HORNG JYE (JAY)
Agent(s):	SHELL OIL COMPANY; SHELL OIL CO
International class (IPC 8-9):	E21B36/00 E21B43/00 E21B43/24 (Advanced/Invention); E21B36/00 E21B43/16 (Core/Invention)
CPC:	E21B7/068 E21B3/00 E21B4/04 E21B47/06 C10G21/22 C10G21/28 C10G2300/207 C10G2300/301 C10G2300/302 C10G2300/308 C10G2300/4006 C10G2300/4012 C10G2300/42 C10G2300/807 C10G2400/02 E21B7/18 E21B10/003 E21B19/08 E21B21/00 E21B21/08 E21B36/001 E21B36/02 E21B36/04 E21B43/119 E21B43/2401 E21B43/2403 E21B43/243 E21B43/281 E21B43/30 E21B43/305 E21B47/022
European class:	C10G21/22 C10G21/28 E21B10/00C E21B19/08 E21B21/00 E21B21/08 E21B36/00B E21B36/02 E21B36/04 E21B43/119 E21B43/243 E21B43/24B E21B43/24F E21B43/28B E21B43/30 E21B43/30B E21B47/022 E21B7/18
US class:	166/248 166/50 166/50S 166/57 166/57S 299/2

Classification Explorer

Cited documents: WO9901640, WO9723924, WO9506093, WO08048448, WO0181505, WO0019061, USRE39244 E, USRE39077 E, USRE35696 E, USRE30738 E, USRE30019 E, US94813 A, US7986869 BB, US7950453 BB, US7942203 BB, US7942197 BB, US7931086 BB, US7912358 BB, US7866388 BB, US7866386 BB, US7866385 BB, US7860377 BB, US7849922 BB, US7845411 BB, US7841425 BB, US7841408 BB, US7841401 BB, US7832484 BB, US7831134 BB, US7831133 BB, US7798221 BB, US7798220 BB, US7793722 BB, US7785427 BB, US7735935 BB, US7730947 BB, US7730946 BB, US7730945 BB, US7717171 BB, US7703513 BB, US7683296 BB, US7681647 BB, US7677314 BB, US7677310 BB, US7673786 BB, US7673681 BB, US7644765 BB, US7640980 BB, US7635025 BB, US7635024 BB, US7635023 BB, US7631690 BB, US7631689 BB, US7610962 BB, US7604052 BB, US760304 A, US7597147 BB, US7591310 BB, US7584789 BB, US7581589 BB, US7575053 BB, US7575052 BB, US7562707 BB, US7562706 BB, US7559368 BB, US7559367 BB, US7556096 BB, US7556095 BB, US7549470 BB, US7546873 BB, US7540324 BB, US7533719 BB, US7527094 BB, US7510000 BB, US7500528 BB, US7490665 BB, US7481274 BB, US7461691 BB, US7435037 BB, US7431076 BB, US7424915 BB, US7383877 BB, US7370704 BB, US7360588 BB, US7357180 BB, US7353872 BB, US7331385 BB, US7320364 BB, US7259688 BB, US7258752 BB, US7225866 BB, US7219734 BB, US7204327 BB, US7170424 BB, US7165615 BB, US7156176 BB, US7153373 BB, US7147059 BB, US7147057 BB, US7128153 BB, US7128150 BB, US7124584 BA, US7121342 BB, US7121341 BB, US7114880 BB, US7114566 BB, US7104319 BB, US7100994 BB, US7096953 BB, US7096942 BA, US7096941 BB, US7090013 BB, US7086468 BB, US7086465 BB, US7077199 BB, US7077198 BB, US7073578 BB, US7066257 BB, US7066254 BB, US7063145 BB, US7055602 BB, US7055600 BB, US7051808 BA, US7051807 BB, US7048051 BB, US7040400 BB, US7040399 BB, US7040398 BB, US7040397 BB, US7036583 BB, US7032809 BA, US7032660 BB, US7011154 BB, US7004251 BB, US7004247 BB, US6997518 BB, US6997255 BB, US6995646 BA, US6994169 BB, US6994168 BB, US6994160 BB, US6991045 BB, US6991036 BB, US6991033 BB, US6991032 BB, US6981553 BB, US6981548 BB, US6973967 BB, US6969123 BB, US6966374 BB, US6966372 BB, US6964300 BB, US6959761 BB, US6958704 BB, US6953087 BB, US6951250 BB, US6951247 BB, US6948563 BB, US6948562 BB, US6942037 BA, US6942032 BB, US6932155 BB, US6929067 BB, US6923258 BB, US6923257 BB, US6918444 BB, US6918443 BB, US6918442 BB, US6915850 BB, US6913079 BB, US6913078 BB, US6910537 BB, US6910536 BB, US6902004 BB, US6902003 BB, US6896053 BB, US6889769 BB, US6880635 BB, US6880633 BB, US6877555 BB, US6877554 BB, US6871707 BB, US6866097 BB, US6854929 BB, US6854534 BB, US6820688 BB, US6805195 BB, US6805194 BB, US6789625 BB, US6782947 BB,

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US3262741 A, US3250327 A, US3246695 A, US3241611 A, US3237689 A, US3233668 A, US3221811 A, US3221505 A, US3209825 A, US3208531 A, US3207220 A, US3205946 A, US3205944 A, US3205942 A, US3191679 A, US3183675 A, US3182721 A, US3181613 A, US3170842 A, US3165154 A, US3164207 A, US3163745 A, US3150715 A, US3149672 A, US3149670 A, US3142336 A, US3139928 A, US3138203 A, US3137347 A, US3132692 A, US3131763 A, US3127936 A, US3127935 A, US3120264 A, US3116792 A, US3114417 A, US3113623 A, US3113620 A, US3113619 A, US3110345 A, US3106244 A, US3105545 A, US3097690 A, US3095031 A, US3062282 A, US3061009 A, US3058730 A, US3057404 A, US3051235 A, US3050123 A, US3048221 A, US3044545 A, US3036632 A, US3032102 A, US3026940 A, US3017168 A, US3016053 A, US3010516 A, US3010513 A, US3007521 A, US3004603 A, US3004601 A, US2998457 A, US2997105 A, US2994376 A, US2991046 A, US2974937 A, US2970826 A, US2969226 A, US2958519 A, US2954826 A, US2952449 A, US2942223 A, US2939689 A, US2932352 A, US2923535 A, US2914309 A, US2906340 A, US2906337 A, US2902270 A, US2890755 A, US2890754 A, US2889882 A, US2862558 A, US2857002 A, US2841375 A, US2825408 A, US2819761 A, US2804149 A, US2803305 A, US2801089 A, US2799341 A, US2794504 A, US2793696 A, US2789805 A, US2786660 A, US2780450 A, US2780449 A, US2777679 A, US2771954 A, US2757739 A, US2743906 A, US2734579 A, US2732195 A, US2714930 A, US2703621 A, US2695163 A, US2685930 A, US2670802 A, US2647306 A, US2642943 A, US2634961 A, US2630307 A, US2630306 A, US2623596 A, US2595979 A, US2593477 A, US2548360 A, US2497868 A, US2484063 A, US2481051 A, US2472445 A, US2466945 A, US2444755 A, US2423674 A, US2390770 A, US2381256 A, US2365591 A, US2319702 A, US2244256 A, US2244255 A, US2010288497 AA, US2010258309 AA, US2010258291 AA, US2010258290 AA, US2010258265 AA, US2010224368 AA, US2010206570 AA, US2010155070 AA, US2010147522 AA, US2010147521 AA, US2010108379 AA, US2010108310 AA, US2010101794 AA, US2010101784 AA, US2010101783 AA, US2010096137 AA, US2010089586 AA, US2010089584 AA, US2010071904 AA, US2010071903 AA, US2009321417 AA, US2009301724 AA, US2009272578 AA, US2009272536 AA, US2009272535 AA, US2009272533 AA, US2009260824 AA, US2009260823 AA, US2009207041 AA, US2009206834 AA, US2009200854 AA, US2009200290 AA, US2009200031 AA, US2009200025 AA, US2009200023 AA, US2009200022 AA, US2009194524 AA, US2009194333 AA, US2009194329 AA, US2009194287 AA, US2009194286 AA, US2009194282 AA, US2009194269 AA, US2009189617 AA, US2009139716 AA, US2009126929 AA, US2009120646 AA, US2009101346 AA, US2009095480 AA, US2009095479 AA, US2009095478 AA, US2009095477 AA, US2009095476 AA, US2009090509 AA, US2009090158 AA, US2009084547 AA, US2009078461 AA, US2009071652 AA, US2009038795 AA, US2009014181 AA, US2009014180 AA, US2008283246 AA, US2008283241 AA, US2008277113 AA, US2008236831 AA, US2008217321 AA, US2008217016 AA, US2008217015 AA, US2008217004 AA, US2008217003 AA, US2008185147 AA, US2008174115 AA, US2008173449 AA, US2008173444 AA, US2008173442 AA, US2008142217 AA, US2008142216 AA, US2008135254 AA, US2008135253 AA, US2008135244 AA, US2008128134 AA, US2008107577 AA, US2008078552 AA, US2008078551 AA, US2008038144 AA, US2008035705 AA, US2008035348 AA, US2008035347 AA, US2008035346 AA, US2008017416 AA, US2008017380 AA, US2008017370 AA, US2008006410 AA, US2007284108 AA, US2007246994 AA, US2007221377 AA, US2007144732 AA, US2007137857 AA, US2007137856 AA, US2007133960 AA, US2007133959 AA, US2007131428 AA, US2007131427 AA, US2007131420 AA, US2007131419 AA, US2007131415 AA, US2007131411 AA, US2007127897 AA, US2007125533 AA, US2007119098 AA, US2007108201 AA, US2007108200 AA, US2007095537 AA, US2007095536 AA, US2007045268 AA, US2007045267 AA, US2007045266 AA, US2007045265 AA, US2007044957 AA, US2007000810 AA, US2006289536 AA, US2006191820 AA, US2006178546 AA, US2006116430 AA, US2006052905 AA, US2005269313 AA, US2005269091 AA, US2005269090 AA, US2005269089 AA, US2005133414 AA, US2005133405 AA, US2005045325 AA, US2005006097 AA, US2004146288 AA, US2004144540 AA, US2004140096 AA, US2004035582 AA, US2003201098 AA, US2003196789 AA, US2003157380 AA, US2003146002 AA, US2003131989 AA, US2003085034 AA, US2003079877 AA, US2003066642 AA, US2003029617 AA, US2002153141 AA, US2002112987 AA, US2002112890 AA, US2002076212 AA, US2002053431 AA, US2002040780 AA, US2002040779 AA, US2002038069 AA, US2002036089 AA, US2002036085 AA, US2002033253 AA, US2002028070 AA, US2002027001 AA, US1913395 A, US1811560 A, US1773407 A, US1681523 A, US1666488 A, US1660818 A, US1646599 A, US1634236 A, US1510655 A, US1457479 A, US1342741 A, US1269747 A, SU1836876, SE126674, SE123138, SE123137, SE123136, SE121737, GB674082, GB156396, GB1454324, GB1204405, GB1010023, EP0940558, EP0130671, EP0107927, CA899987, CA2043092, CA2015460, CA1288043, CA1253555, CA1196594, CA1168283,

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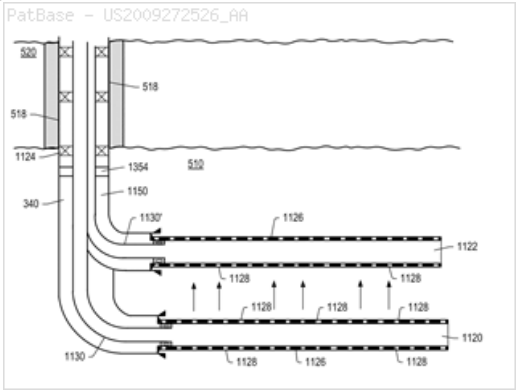
Abstract:
A system for treating a subsurface hydrocarbon containing formation includes one or more shafts. A first substantially horizontal or inclined tunnel extends from one or more of the shafts. A second substantially horizontal or inclined tunnel extends from one or more of the shafts. Two or more heat source wellbores extend from the first tunnel to the second tunnel. The heat source wellbores are configured to allow electrical current to flow between the heat source wellbores.



55) Family number: 22560016 (US3402699A)

Title:	Milking system
Priority:	US19610098366 19610327 US19660558155 19660311

Family:

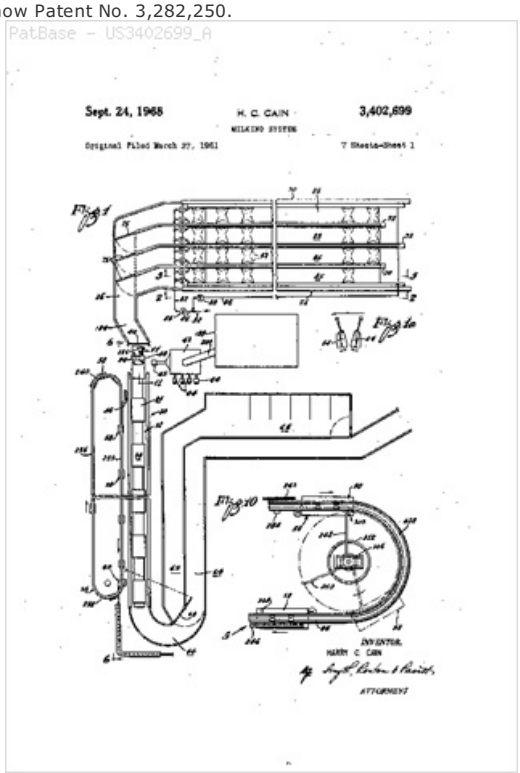
Publication number	Publication date	Application number	Application date
US3282250 A	19661101	US19610098366	19610327
US3402699 A	19680924	US19660558155	19660311

Probable Assignee:	HARRY C CAIN
Assignee(s):(std):	CAIN HARRY C ; HARRY C CAIN
Inventor(s):(std):	CAIN HARRY C
International class (IPC 8-9):	A01K1/12 (Advanced/Invention); A01K1/00 (Core/Invention)
International class (IPC 1-7):	A01J5/00 A01K1/04
CPC:	A01K1/12
European class:	A01K1/12
US class:	119/14.04 119/14.11

Classification Explorer

Cited documents:	US2986268 A, US2932382 A, US2879885 A, US2814271 A, US2721538 A, US2691359 A, US2671428 A, US2630903 A, US2358000 A, US2305259 A, US2092440 A, US2021591 A, US1968564 A, US1959716 A, US1863603 A, US1834175 A,
Forward Citations:	WO08003341, US7484474, US4805559, US4261292, US4010714, US3822672, US3810442, US3805741, US3738320, US3699922, US3683856, US3487497, US3460515, US3426731, US2008017119, FR2423149,

Abstract:
ABSTRACT OF THE DISCLOSURE
This disclosure describes a system for milking cows which includes means for cleaning of the cows bodies prior to performance of the milking operation. The cows are then put into stalls on a moving platform and feed is -^ delivered automatically to the traveling stalls. The milking operation is performed by milking units which travel on an adjacent overhead track at the same rate as the moving platform. This is a division of application Ser. No. 98,366 filed Mar. 27, 1961, now Patent No. 3,282,250.



56) Family number: 64164017 (US2016348684A)

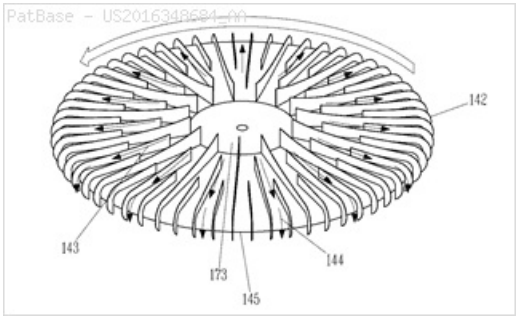
Title:	ANGULAR VELOCITY STEPPING AND METHODS OF USE IN TURBOMACHINERY
Priority:	US20150169016P 20150601 US20150183816P 20150624 US20160991487 20160108

Family:

Publication number	Publication date	Application number	Application date
US2016348684 AA	20161201	US20160991487	20160108
US9957975 BB	20180501	US20160991487	20160108

Probable Assignee:	KUHNS COREY B
Assignee(s):(std)**:**	KUHNS COREY B
Inventor(s):(std)**:**	KUHNS COREY B
Agent(s):	MEREK BLACKMON AND VOORHEES LLC
International class (IPC 8-9):	F01D1/06 F01D17/16 F04D17/12 F04D19/02 F04D25/04 F04D29/44 (Advanced/Invention)
CPC:	F04D29/441 F01D1/06 F01D17/165 F04D17/122 Y02T50/672
US class:	1/1 417/53
Classification Explorer	
Cited documents:	US6062028 A, US5454646 A, US4009972 A, US3232043 A, US3093084 A, US3071313 A, US2017022887 AA,
Forward Citations:	US9618002, US2017114644, US10267157,

Abstract:
Provided is an improved architecture for rotary kinetic fluid motors and pumps, in which working fluid gains or loses pressure by flowing through an alternating sequence of radial-flow impellers and radial-flow fluid vortices, the impellers and fluid vortices all rotating around a single axis and in a common direction at staggered speeds, each vortex being the product of rotating fluid that is flowing radially through a bladeless annular volume.



57) Family number: 960017 (US3590932A)

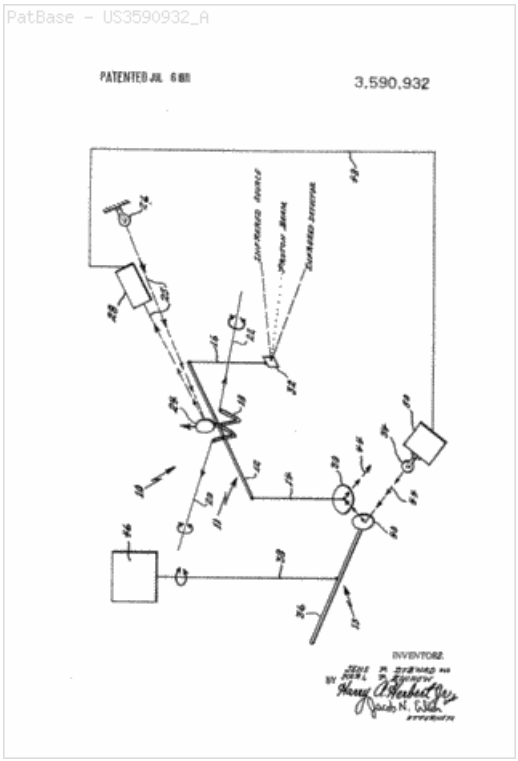
Title:	LIGHT PRESSURE OPERATED MICROBALANCE
Priority:	US19700033444 19700430

Family:

Publication number	Publication date	Application number	Application date
US3590932 A	19710706	US19700033444	19700430

Probable Assignee:	US AIR FORCE
Assignee(s):(std)**:**	US AIR FORCE
Assignee(s):	AIR FORCE USA
Inventor(s):(std)**:**	DYBWAD JENS P ; ZINNOW KARL P
Inventor(s):	JENS P DYBWAD ; KARL P ZINNOW
International class (IPC 8-9):	G01G23/32 G01G23/36 G01G3/10 (Advanced/Invention); G01G23/18 G01G3/00 (Core/Invention)
International class (IPC 1-7):	G01G23/32 G01G3/00 G01G7/00 G01G9/00
CPC:	G01G3/10 G01G23/32 G01G23/361
European class:	G01G23/32 G01G23/36A G01G3/10
US class:	177/1 177/178 177/196 177/210 177/210R 177/212
Classification Explorer	
Cited documents:	US3061027 A, US2360751 A,
Forward Citations:	US5239563, US4715458, US3837416, US3753472, US2017241827, US2006279825, US10151646,

Abstract:
(Claim 1) 1. 1. A microbalance comprising a balance device and a measuring device, said balance device being made up of a balance beam, means for supporting said balance beam, said balance beam supporting a sample to be investigated at one end thereof and a means for receiving a light beam at the other end thereof, said measuring device being made up of a horizontal rod, means for supporting said rod, said rod having a means for receiving and transmitting a light beam secured at one end thereof, said receiving and transmitting means being optically aligned with said receiving means on said balance beam, and a light source for producing a light beam positioned so that said light beam strikes said receiving and transmitting means on said horizontal rod, whereby varying the forces on said sample moves said balance beam out of equilibrium and varying the intensity of



58) Family number: 33100019 (US2006144028A)

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Title: INDEPENDENT HYDRAULIC HEADER LIFT AND FLOTATION SYSTEM

Priority: US20040814409 20040331 US20040822465 20040412 US20050699271P 20050714 US20050699550P 20050715 US20050699548P 20050715 US20060484476 20060711 US20060487006 20060714 US20060486495 20060714 US20090476608 20090602

Family:

Publication number	Publication date	Application number	Application date
US2006144028 AA	20060706	US20040822465	20040412
US2006248868 AA	20061109	US20060484476	20060711
US2006254239 AA	20061116	US20060486495	20060714
US2007012010 AA	20070118	US20060487006	20060714
US2009235626 AA	20090924	US20090476608	20090602
US7168226 BB	20070130	US20040822465	20040412
US7555883 BB	20090707	US20060486495	20060714
US7703266 BB	20100427	US20090476608	20090602
US7869922 BB	20110111	US20060484476	20060711

Probable Assignee: BLUE LEAF IP INC

Assignee(s):(std)**:** DECHRISTOPHER DAVID M ; MCLEAN KENNETH W ; OTTO DOUGLAS R ; FACKLER ROBERT L ; HOFFMAN CHARLES H ; OSBORNE DONALD L ; PAULIN STEPHEN V ; KOPP SEAN P ; CNH AMERICA LLC

Assignee(s): CNH INDUSTRIAL AMERICA LLC ; BLUE LEAF IP ; BLUE LEAF IP INC

Inventor(s):(std)**:** MCLEAN KENNETH W ; OTTO DOUGLAS R ; DECHRISTOPHER DAVID M ; FACKLER ROBERT L ; HOFFMAN CHARLES H ; OSBORNE DONALD L ; PAULIN STEPHEN V ; KOPP SEAN P

Inventor(s): FACKLER ROBERT ; OTTO DOUGLAS ; MCLEAN KENNETH ; DECHRISTOPHER DAVID ; HOFFMAN CHARLES ; OSBORNE DONALD ; PAULIN STEPHEN ; KOPP SEAN

Agent(s): CNH AMERICA LLC; MICHAEL G; JOHN WILLIAM; PATRICK M

International class (IPC 8-9): A01D34/00 A01D41/14 A01D46/08 A01D75/18 A01D75/28 (Advanced/Invention); A01D34/00 A01D41/00 A01D75/00 (Core/Invention)

CPC: A01D41/145 A01D41/14 A01D41/141

European class: A01D41/14 A01D41/14B A01D41/14L

US class: 56/10.20E 56/10.20EP 56/10.20R 56/10.2E 56/10.2R 56/10.4 56/102E 56/15.8 56/15.800P 56/208 56/314 701/50 701/99

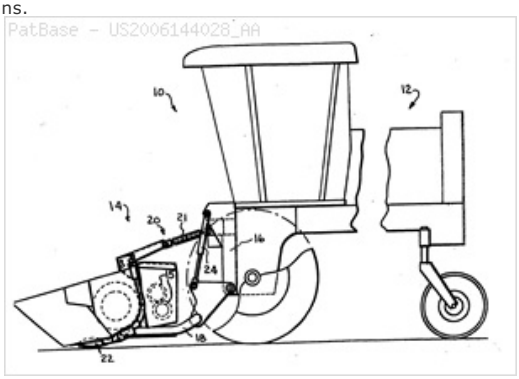
Classification Explorer

Cited documents: US7707811 BA, US7703266 BB, US7669392 BB, US7603837 BB, US7588118 BB, US7555883 BB, US7530921 BB, US7430846 BB, US7306062 BB, US7222475 BB, US7207164 BB, US7168229 BA, US7168226 BB, US7159687 BB, US7133758 BB, US7058495 BB, US6901729 BA, US6871483 BA, US6865870 BB, US6842680 BB, US6813873 BB, US6681551 BA, US6616398 BB, US6615569 BA, US6591591 BB, US6588187 BB, US6449553 BA, US6345490 BA, US6292729 BB, US6167337 A, US6151874 A, US6119442 A, US6105679 A, US6086509 A, US6058343 A, US5983615 A, US5964077 A, US5906089 A, US5810095 A, US5778644 A, US5704200 A, US5684691 A, US563854 A, US5633452 A, US5613352 A, US5577373 A, US5535577 A, US5524424 A, US5473870 A, US5471825 A, US5471823 A, US5469694 A, US5463854 A, US5455769 A, US5415586 A, US5359836 A, US5297019 A, US4733523 A, US4676053 A, US4648466 A, US4622803 A, US4612757 A, US4527381 A, US4523886 A, US4335561 A, US4227363 A,

US3908345 A, US3603066 A, US2009037072 AA, US2006248868 AA, US2005065689 AA, US2004128966 AA, US2004050025 AA, US2004040276 AA, US2003140609 AA, US2003019196 AA, US2003000193 AA, US2002178710 AA,

Forward Citations: WO18091958, WO13071445, WO11001263, WO11001263, US9968033, US9896820, US9769986, US9769982, US9713305, US9474209, US9404237, US9380744, US9295189, US9253943, US9198349, US9179600, US9043955, US9038358, US8863489, US8863484, US8863483, US8667886, US8560182, US8554425, US8401745, US8333057, US8109068, US8079204, US8051632, US8001751, US7975458, US7896731, US7869922, US7849952, US7707811, US7669392, US7630808, US7603837, US7467506, US7430846, US7207164, US2017064904, US2016305087, US2015082761, US2015033692, US2015013795, US2014295922, US2014237980, US2014144116, US2013333343, US2013305674, US2013255214, US2011132185, US2011047946, US2010287900, US2010287898, US2010223896, US2010144412, US2010071330, US2009071666, US2009069988, US2007214760, US2007204585, US2007170669, US2007163220, US2006271243, US2006254233, US2006248868, US10433486, US10426088, US10349578, US10280948, US10080328, EP3126581, EP2779817, EP2767152, EP2767152, EP2330254, EA029020, EA028084, CN105230236, CN102086655, CN102086655,

Abstract:
A hydraulic lift/flotation system for the header of a crop harvesting machine wherein each side of the header is supported by a single cylinder, which performs both the flotation and lift functions. For even lifting and flotation of an unbalanced header, each cylinder has its own control valve, pump, and accumulator. The operator sets the desired flotation force by actuating rocker switches; one switch position allows hydraulic oil to enter an accumulator to reduce header contact force with the ground. The other position allows oil to exit the accumulator to increase header contact force with the ground. To evenly float an unbalanced header, separate switches adjust each side independently. Once the flotation forces are set, the control valves will return to this preset flotation condition whenever float mode is selected, regardless of subsequent header lift and lower operations.



59) Family number: 29610019 (US1902371A)

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Title: CONTROL FOR PUMP ACTUATING MECHANISMS AND THE LIKE

Priority: US19310532771 19310425

Family:

Publication number	Publication date	Application number	Application date
US1902371 A	19330321	US19310532771	19310425

Probable Assignee: CALKINS ELMER E

Assignee(s):(std)**:** CALKINS ELMER E ; GREENE LYNN M ; MILLER JOSEPH G ; MILLER LLOYD M

Inventor(s):(std)**:** MILLER JOSEPH G ; GREENE LYNN M ; MILLER LLOYD M ; CALKINS ELMER E

International class (IPC 8-9): F04B49/06 (Advanced/Invention); F04B49/06 (Core/Invention)

International class (IPC 1-7): F04B49/06

CPC: F04B49/06

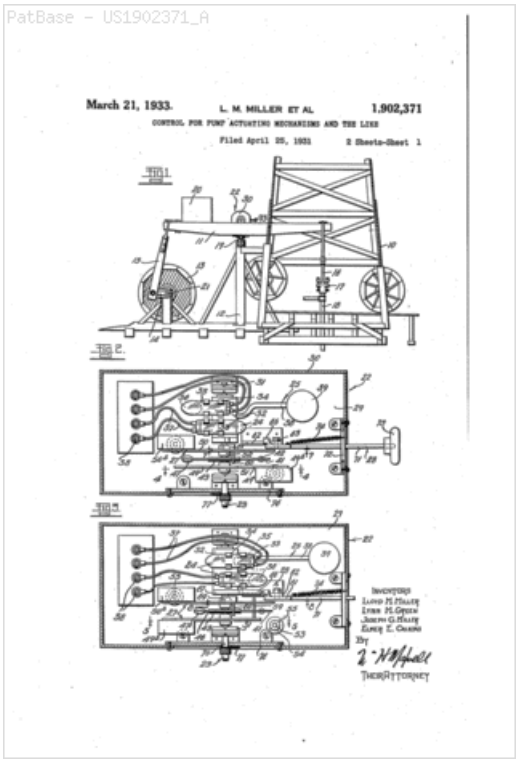
European class: 59A28A F04B49/06

US class: 192/116.5 192/129A 192/140 192/147 200/61.47 261/1

Classification Explorer

Forward Citations: US2734103, US2530461, US2016348658, US10443362,

Abstract:
1, A device of the character described adapted to be mounted on a walking beam Which includes, avcontact mechanism, a shaft for operating the contact mechanism, means normally tending to operate the shaft, means for releasably holding the shaft against operation, and means for releasing said releasable means upon acceleration of the motion of the beam.



60) Family number: 56142019 (US2014094637A)

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Title: FOCUSING A PARTICLE BEAM USING MAGNETIC FIELD FLUTTER

Priority: US20120707572P 20120928 JP20150534729T 20130927 US20130039084 20130927 WO2013US62120 20130927 JP20160144068 20160722

Family:

Publication number	Publication date	Application number	Application date
CN104813747 A	20150729	CN201380062107	20130927
CN104813747 B	20180202	CN201380062107	20130927
EP2901820 A2	20150805	EP20130783421	20130927
JP2015532510 T2	20151109	JP20150534729T	20130927
JP2016213198 A2	20161215	JP20160144068	20160722
JP6254600 B2	20171227	JP20150534729T	20130927
JP6342455 B2	20180613	JP20160144068	20160722
TW201429514 A	20140801	TW20130135174	20130927
TWI604868 B	20171111	TW20130135174	20130927
US2014094637 AA	20140403	US20130039084	20130927
US9155186 BB	20151006	US20130039084	20130927
WO14052722 A2	20140403	WO2013US62120	20130927
WO14052722 A3	20140530	WO2013US62120	20130927

Probable Assignee: MEVION MEDICAL SYSTEMS INC

Assignee(s):(std)**:** MEVION MEDICAL SYSTEMS INC

Inventor(s):(std)**:** ZWART GERRIT TOWNSEND ; LAAN JAN VAN D ; O NEAL III CHARLES D ; FRANZEN KEN YOSHIKI ; GALL KENNETH P ; GERRIT TOWNSEND ZWART ; CHARLES D O NEAL III ; KEN YOSHIKI FRANZEN ; KENNETH P GALL ; JAN VAN D LAAN

Inventor(s): JAN VAN DER LAAN

Agent(s): CONROY JOHN; FISH AND RICHARDSON PC; PYSHER PAUL A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N5/10 G21K1/093 G21K5/04 H05H13/00 H05H13/02 H05H7/04 H05H7/10 H05H7/12 (Advanced/Invention)

CPC: H05H7/10 A61N5/1077 A61N2005/1095 H05H7/04 H05H13/005 H05H13/02 H05H2007/046

US class: 1/1 315/502 600/1

JP class F-Term: 2G082 2G085 2G085/AA11 2G085/BA13 2G085/BA16 2G085/BA19 2G085/BC10 2G085/BE04 2G085/CA16 2G085/CA21 2G085/EA07 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AG02 4C082/AG12 4C082/AG44 4C082/AG52 2G085/BA02 2G085/BC13 2G085/BC18 2G085/BE02 2G085/CA06 4C082/AE01

JP class F-Index: A61N5/10/H G21K1/093/F G21K5/04/A H05H13/02

Classification Explorer

Cited documents: WOWO73480, WOWO70588, WOWO70173, WO9939385, WO9817342, WO9302536, WO9203028,

WO9012413, WO8607229, WO14052722, WO14052719, WO14052716, WO14052708, WO14018876, WO14018706, WO13142409 A1, WO13098089, WO13079311, WO10089574, WO09080080, WO09070173 A1, WO09048745, WO08081480, WO08030911, WO07145906, WO07130164, WO07084701, WO07061937, WO06012467, WO04101070, WO04026401, WO03092812, WO03039212, WO0207817, WO0126569, WO0126230, WO0049624, WO0040064, US94866207, US94835907, US93757307, US8975836 BB, US8791656 BA, US8653473 BB, US8653314 BB, US8581525 BB, US8581523 BB, US8581215 BB, US8569717 BB, US8552408 BB, US8552406 BB, US85056506 P, US8502173 BB, US8487278 BB, US8483357 BB, US8472583 BB, US8466441 BB, US8445872 BB, US8440987 BB, US8436323 BB, US8426833 BB, US8421041 BB, US8416918 BB, US8415643 BB, US8405056 BB, US8405042 BB, US8399866 BB, US8389949 BB, US8382943 BB, US8378321 BB, US8378299 BB, US8373145 BB, US8373143 BB, US8368043 BB, US8368038 BB, US8350214 BB, US8344340 BB, US8335397 BB, US8334520 BB, US8330132 BB, US8309941 BB, US8304750 BB, US8304725 BB, 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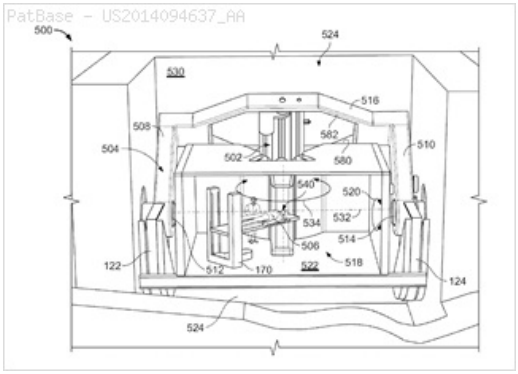
Forward Citations: US9962560, US9925395, US9723705, US9706636, US9681531, US9661736, US9622335, US9545528, US9301384, US9185789, US9155186, US2017231081, US2017028224, US2017001040, US2016205760, US2015241598, US2014094640, US2014094639, US2014094371, US10456591, US10434331, US10368429, US10279199, US10258810, US10254739, US10155124, JP6452721, JP6441508, JP2018524764, JP2016092622, CN109076689, CN108551717,

Abstract:
An example particle accelerator may include the following: a voltage source to sweep a radio frequency (RF) voltage in a cavity to accelerate particles from a plasma column, where the cavity has a magnetic field causing particles accelerated from the plasma column to move orbitally within the cavity, and where the magnetic field has flux that bows at edges of the cavity; a regenerator to provide a magnetic field bump within the cavity to thereby change successive orbits of the particles accelerated from the plasma column so that, eventually, particles output to an extraction point, where the regenerator is located at a radius in the cavity relative to the plasma column; and ferromagnetic arrangements located in the cavity proximate to the radius, where each ferromagnetic arrangement provides a magnetic field bump, and where ferromagnetic arrangements adjacent to the regenerator are separated from the regenerator by a space.



61) Family number: 877019 (US3460177A)

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Title: AIRCRAFT WASHING SYSTEM

Priority: US19670663694 19670828

Family:

Publication number	Publication date	Application number	Application date
US3460177 A	19690812	US19670663694	19670828

Probable Assignee: BROWN ENG CO INC

Assignee(s):(std)**:** BROWN ENG CO INC

Inventor(s):(std)**:** RHINEHART RICHARD W ; CONN HENRY L ; MORRIS HOWARD E

Inventor(s): HENRY L CONN ; HOWARD E MORRIS ; RICHARD W RHINEHART

International class (IPC 8-9): B64F5/00 (Advanced/Invention); B64F5/00 (Core/Invention)

International class (IPC 1-7): A47L11/38 B60S3/04 B64F5/00

CPC: B08B1/00 Y10S15/02 B08B3/024 B64F5/30

European class: B64F5/00B

US class: 15/21 15/210 15/50.1 15/53.1 15/DIG.2 244/114.00R 244/114R

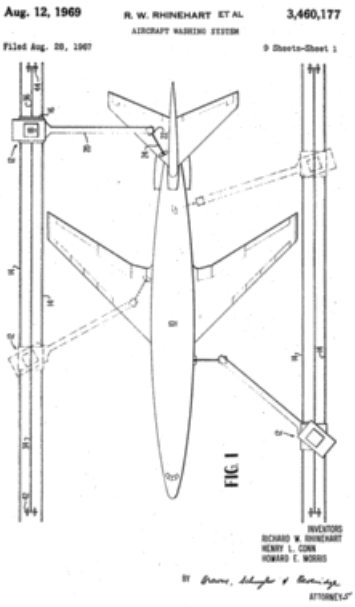
Classification Explorer

Cited documents: US3196472 A, US2852149 A, FR1403051 A,

Forward Citations: WO9506586, WO9112906, WO14207216, WO10064071, USRE31838, US9579679, US9365298, US8580043, US8381747, US7934467, US7861347, US7459092, US6969029, US5330579, US5280662, US5248341, US5092012, US4668301, US4654087, US4112533, US3892250, US3835498, US3783819, US3775798, US3748680, US3680164, US3648316, US3612075, US3601832, US3570503, US2018078029, US2015158601, US2012152283, US2009120461, US2009045127, US2007277334, US2005224656, US2005196543, US2005178905, US2004150864, US10117507, FR2237456, FR2033238, EP2949580, EP2949580, EP0455371, EP0455371, EP0262097, EP0262097, EP0184577, EP0184577, DE3249264, DE2332075, CN105312196, CN105312196, CN102556364, CN102556364, CN102348602, CN102348602,

Abstract:
ABSTRACT OF THE DISCLOSURE
For washing aircraft or similarly large structures, a system including a tower movable horizontally along a fixed path on the ground surface, an arm supported on, and projecting from the tower towards the aircraft to be washed and a mobile unit including a washing brush assembly movable along the arm towards and away from the aircraft. To obtain the desired washing level, the arm is movable vertically along the tower which may also be rotated to further position the arm at various angles to the fixed path on the ground surface. In addition to being movable along the arm, the mobile unit is also rotatable relative to the arm to place the brush assembly at various angles relative to the arm. At the extremity of the brush assembly one or more rotatable cleaning brushes are engageable with the aircraft for washing. An extendible and retractable boom in the brush assembly positions the brush adjacent the aircraft surface and the brush assembly may be pivoted relative to the mobile unit to press the brush against the aircraft surface for washing. Further adjustment of the brush may be achieved by rotating the extendible and retractable boom. Detergent or other washing fluid may also be dispensed from the brush assembly through nozzles located adjacent the brushes. Cable systems are employed to translate the tower, arm and mobile unit. Hydraulic motors drive the cable systems, and the associated power lines are wound on drums supported on the components to accommodate their different positions. SUMMARY OF OBJECTS AND INVENTION

PatBase - US3460177_A



62) Family number: 20268019 (GB839641A)

© PatBase

Title: A pneumatic pressure amplification device

Priority: GB19560034928 19561115

Family:

Publication number	Publication date	Application number	Application date
GB839641 A	19600629	GB19560034928	19561115

Probable Assignee: JUNKALOR VEB

Assignee(s):(std)**:** JUNKALOR VEB

Assignee(s): VEB JUNKALOR

Inventor(s):(std)**:** SCHEFFLER PETER

International class (IPC 8-9): F15C3/00 (Advanced/Invention); F15C3/00 (Core/Invention)

International class (IPC 1-7): F15C3/00 G05B11/48 G06D1/02

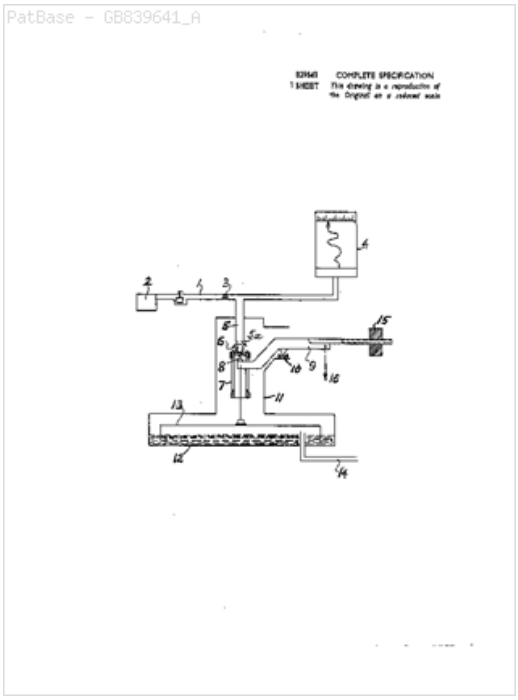
CPC: F15C3/00

European class: F15C3/00

Classification Explorer

Abstract:
839,641. Fluid-pressure servomotor-control systems. JUNKALOR VEB. Nov. 15, 1956, No. 34928/56. Class 135. A pneumatic pressure-amplifier comprises a partially submerged plunger bell 13 connected to one end of a counter-weighted balance beam 9 on which a cylinder 7 having an upper plane face is supported on a knife-edge 8. The cylinder 7 is made long so that its centre of gravity is well

below the knife-edge to ensure that the plane face on which a ball 6 rests is always horizontal and the ball is in the centre of a nozzle outlet 5a of a compressed air line 5 supplied through a restriction 3 by a diaphragm pump 2. Any variation in an input signal, viz. a small pneumatic pressure conveyed to the bell 13 through a line 14 moves the ball 6 to regulate the nozzle opening and hence the pressure in the line 5 which is greater than and proportional to the pressure in the bell 13. The pressure in the line 5 may be used for indicating or regulating purposes. The bell may be omitted and the input signal supplied by a force applied at 16 to the balance beam or alternatively the force may be applied to the balance beam and the bell retained. In the latter case the bell follows the movement of the beam and produces a damping effect.



63) Family number: 22982019 (US3144045A)

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Title:	INTERNAL COUNTERBALANCED CHECK VALVE
Priority:	US19630282652 19630523

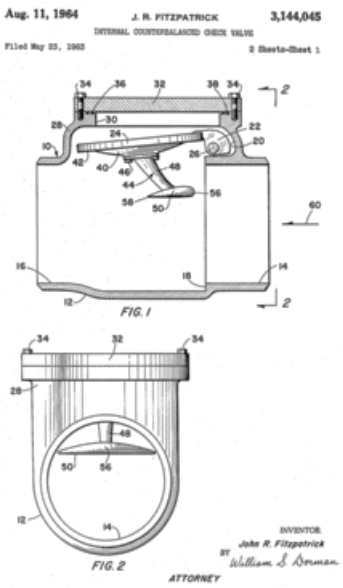
Family:

Publication number	Publication date	Application number	Application date
US3144045 A	19640811	US19630282652	19630523

Probable Assignee:	CHARLES WHEATLEY CO
Assignee(s):(std)**:**	CHARLES WHEATLEY CO ; CHARLES WHEATLEY COMPANY
Inventor(s):(std)**:**	FITZPATRICK JOHN R
International class (IPC 8-9):	F16K15/03 (Advanced/Invention); F16K15/02 (Core/Invention)
International class (IPC 1-7):	F16K15/03
CPC:	F16K15/03 Y10T137/7903
European class:	F16K15/03
US class:	137/527.8
Classification Explorer	
Cited documents:	US651964 A, US3075547 A, US2864401 A, US2737879 A, US2557210 A, US2546219 A, US2048088 A, US1572687 A, DE545879 A,
Forward Citations:	WO14009640, US9561949, US6102072, US4197824, US4161932, US4054153, US3304882, EP2872401, DE1297426, CN104520193,

Abstract:
(Claim 1) 1. A check valve comprising a body having opposed inlet and outlet ports, a Valve seat provided in the proximity of said inlet port, a closure member pivotally secured in the body in the Proximity of the valve seat for cooperation therewith to provide alternate opened and closed positions for the valve, a counterbalance member secured to the closure member on the face thereof associated with the inlet port during the closed position of the valve, said counterbalance member comprising an angularly disposed arm member having a counterbalance vane member secured adjacent the outer extremity thereof, said counterbalance vane member being so arranged with respect to the closure member as to reduce the effective weight of the closure me-.nber whereby fluid pressure required for opening thereof is reduced durin.- operation of the valve.

PatBase - US3144045_A



64) Family number: 15950020 (BE1013282A)

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Title:	Trailer with tipping body
Priority:	BE20000000116 20000210

Family:

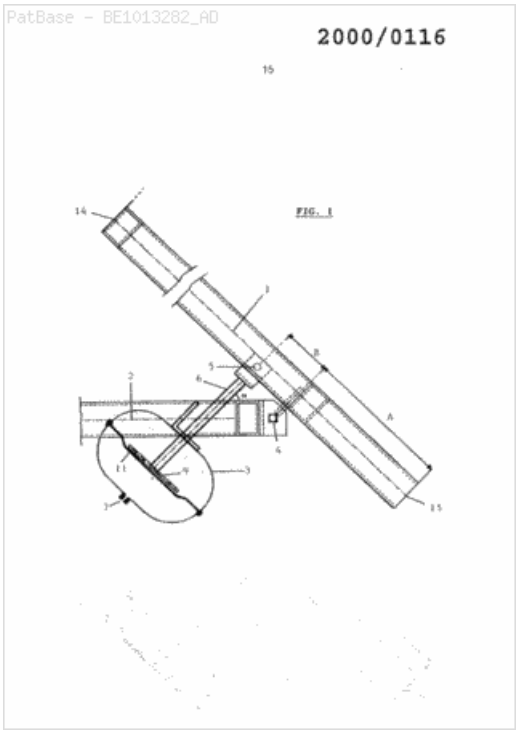
Publication number	Publication date	Application number	Application date
BE1013282 AD	20011106	BE20000000116	20000210

Probable Assignee:	GEENEN JOHAN
Assignee(s):(std)**:**	GEENEN JOHAN
International class (IPC 1-7):	B60P1/28
CPC:	B60P1/283
European class:	B60P1/28B

Classification Explorer

Cited documents: US2022181 A, DE1817729 U, DE1801551 U,

Abstract:
Trailer with tipping body (1), in which the body (1) is hinged onto achassis (2) using a hinge spindle (4). The trailer has a mechanism forletting the body (1) be tipped up, that is mounted on the chassis (2) on theunderside of the body (1). This mechanism contains a pneumatic apparatus, thepneumatic apparatus consisting of one or more membrane cylinders (3) and anair pump for powering the membrane cylinders (3). The hinge spindle is placeda given distance (A) from the side (14) of the body (1), this side beingdesigned to tilt downwards when the body is tipped.



65) Family number: 56142020 (US2014094638A)

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Title: CONTROLLING INTENSITY OF A PARTICLE BEAM

Priority: US20120707466P 20120928 JP20150534721T 20130927 US20130039307 20130927 WO2013US62103 20130927 JP20180072427 20180404

Family:

Publication number	Publication date	Application number	Application date
CN104813749 A	20150729	CN201380062111	20130927
CN104813749 B	20190702	CN201380062111	20130927
EP2901823 A2	20150805	EP20130774338	20130927
JP2015532507 T2	20151109	JP20150534721T	20130927
JP2018110133 A2	20180712	JP20180072427	20180404
JP6367201 B2	20180801	JP20150534721T	20130927
TW201424467 A	20140616	TW20130135162	20130927
US2014094638 AA	20140403	US20130039307	20130927
US9723705 BB	20170801	US20130039307	20130927
WO14052709 A2	20140403	WO2013US62103	20130927
WO14052709 A3	20140530	WO2013US62103	20130927

Probable Assignee: MEVION MEDICAL SYSTEMS INC

Assignee(s):(std)**:** MEVION MEDICAL SYSTEMS INC

Inventor(s):(std)**:** ZWART GERRIT TOWNSEND ; LAAN JAN VAN D ; COOLEY JAMES ; O NEAL III CHARLES D ; GALL KENNETH P ; SOBCZYNSKI THOMAS C ; MOLZAHN ADAM C ; O NEAL CHARLES D III ; KENNETH P GALL ; GERRIT TOWNSEND ZWART ; ADAM C MOLZAHN ; CHARLES D O NEAL III ; THOMAS C SOBCZYNSKI ; JAMES COOLEY ; JAN VAN D LAAN

Inventor(s): JAN VAN DER LAAN

Agent(s): CONROY JOHN; CHOATE HALL AND STEWART LLP; PAUL; PYSHER PAUL A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N5/10 G21K5/04 H05H1/24 H05H13/02 H05H7/02 H05H7/12 (Advanced/Invention); H05H7/08 (Advanced/Non-invention)

CPC: H05H7/02 H05H13/02 A61N5/1077 A61N2005/1087 H05H7/12 H05H2007/082 H05H2007/122

US class: 315/502 600/1

JP class F-Term: 2G082 2G085 2G085/AA11 2G085/BA02 2G085/BA06 2G085/BA13 2G085/BA16 2G085/BA19 2G085/BE04 2G085/CA16 2G085/CA21 2G085/CA22 2G085/EA07 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AG02 4C082/AG12 4C082/AG44 4C082/AG52 2G084 2G084/AA12 2G084/CC05 2G084/CC08 2G084/CC17 2G084/CC32 2G084/DD01 2G085/BA05 2G085/BA17 2G085/BB07 2G085/BC04 2G085/BC18 2G085/BE06 2G085/CA05 2G085/CA13 2G085/CA15 2G085/CA17 2G085/CA26

JP class F-Index: A61N5/10/H G21K5/04/A H05H13/02 H05H1/24 H05H7/12

Classification Explorer

Cited documents: WO9939385 A1, WO9817342 A2, WO9302536 A1, WO9203028 A1, WO9012413 A1, WO8607229 A1, WO14052722 A2, WO14052721 A1, WO14052719 A2, WO14052718 A2, WO14052716 A2, WO14052709 A2,

WO14052708 A2, WO14018876 A1, WO13142409 A1, WO13098089 A1, WO13079311 A1, WO12071142 A2, WO12071142, WO12044957 A1, WO10149740 A1, WO10149740, WO10089574 A2, WO09080080 A1, WO09073480 A2, WO09070588 A1, WO09070588, WO09070173 A1, WO09056165 A1, WO09048745 A2, WO08081480 A1, WO08030911 A2, WO07145906 A2, WO07130164 A2, WO07130164, WO07084701 A1, WO07061937 A2, WO06012467 A2, WO06012467, WO06012452 A1, WO05102453 A1, WO04101070 A1, WO04026401 A1, WO03092812 A1, WO03092340 A1, WO03039212 A1, WO0207817 A2, WO0126569 A1, WO0126230 A1, WO0049624 A1, WO0040064 A2, US9452301 BB, US9451688 BB, US9176468 BB, US9056199 BB, US9044600 BB, US9028384 BB, US9012866 BB, US8975816 BB, US8970137 BB, US8963112 BA, US8952634 BB, US8907311 BB, US8905908 BB, US8901509 BB, US8791435 BB, US8766218 BB, US8653473 BB, US8653314 BB, US8637833 BB, US8581525 BB, US8581523 BB, US8581215 BB, US8575563 BB, US8569717 BB, US8552408 BB, US8552406 BB, US8487278 BB, US8483357 BB, US8472583 BB, US8466441 BB, US8445872 BB, 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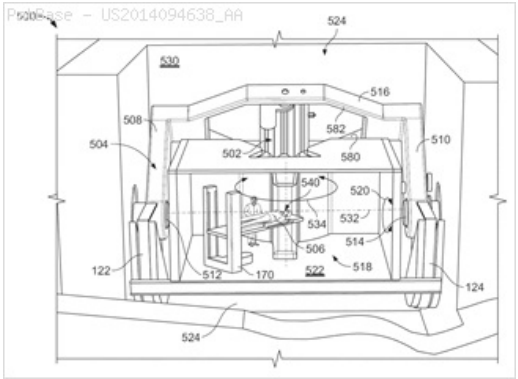
Forward Citations: WO18156446, US9962560, US9723705, US9706636, US9681531, US9661736, US9622335, US9545528, US9301384, US9185789, US9155186, US2018192506, US2017157422, US2017128746, US2016205760, US2014094639, US2014094637, US10456591, US10434331, US10368429, US10306746, US10258810, US10254739, US10155124, RU2656851, JP6367022, JP2018110133, JP2016015422, CN108883295, CN107615890, CN106406216,

Abstract:
In an example, a synchrocyclotron includes a particle source to provide pulses of ionized plasma to a cavity; a voltage source to provide a radio frequency (RF) voltage to the cavity to accelerate particles from the plasma column outwardly; and an extraction channel to receive a beam of particles from the cavity for output from the particle accelerator. The particle source is configured to control pulse widths of the ionized plasma in order to control an intensity of the beam of particles. This example synchrocyclotron may include one or more of the following features, either alone or in combination.



66) Family number: 20996020 (US1896760A)

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Title: COMPRESSOR

Priority: US19300446839 19300424

Family:

Publication number	Publication date	Application number	Application date
US1896760 A	19330207	US19300446839	19300424

Probable Assignee: J G DE REMER RES CORP

Assignee(s):(std)**:** J G DE REMER RES CORP

Assignee(s): J G DE REMER RESEARCH CORP

Inventor(s):(std): WARNER LAWRENCE E

International class (IPC 8-9): F04F5/04 (Advanced/Invention); F04F5/00 (Core/Invention)

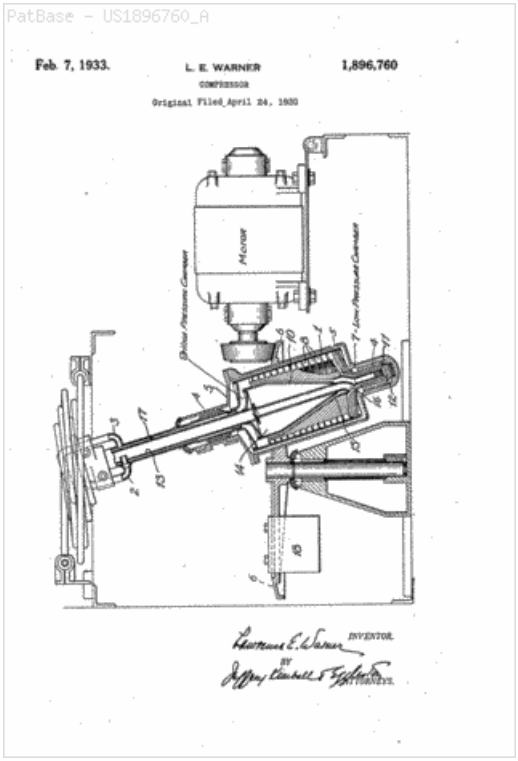
CPC: F04F5/04

European class: F04F5/04

US class: 417/94 62/499 62/502

Classification Explorer

Abstract:
1. A compressor or the like comprising in combination, a. piston liquid circuit, a rotating member having a helical passage included in said circuit with its axis of rotation disposed at an angle to the axis of the helical passage, the direction of helical pitch acting to screw the piston liquid inwards or toward said axis of rotation, means for conducting fluid to the entrance to said helical passage, and means for conducting it away from the A - _ 1,898,760 exit of said helical passages V



67) Family number: 56142021 (US2014094639A)

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Title: ADJUSTING ENERGY OF A PARTICLE BEAM

Priority:

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JP20150534726T 20130927	JP20160174372 20130927	US20130039342 20130927
WO2013US62117 20130927	US20160074975 20160318	JP20160174372 20160907
US20170468656 20170324	JP20180177145 20180921	US20190269287 20190206

Family:

Publication number	Publication date	Application number	Application date
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CN104812444 B	20171121	CN201380062116	20130927
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US9706636 BB	20170711	US20160074975	20160318
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WO14052719 A3	20140724	WO2013US62117	20130927

WO18175679 A1	20180927	WO2018US23694	20180322	

Probable Assignee: MEVION MEDICAL SYSTEMS INC

Assignee(s):(std)**:** MEVION MEDICAL SYSTEMS INC

Assignee(s): MEVION MEDICAL SYSTEMS INC LITTLETON

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Inventor(s): JAN VAN DER LAAN ; GALL KENNETH P LITTLETON ; FRANZEN KEN YOSHIKI ACTON ; O NEAL III CHARLES D BOLTON ; BUSKY MICHAEL BERLIN ; ROSENTHAL STANLEY WAYLAND ; GALL KENNETH P HARVARD ; ZWART GERRIT TOWNSEND DURHAM

Agent(s): CONROY JOHN; PETERREINS SCHLEY; FISH AND RICHARDSON PC; CHOATE HALL AND STEWART LLP; PAUL; PYSHER PAUL A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ 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 IR IS IT JO JP KE KG KH KM KN KP KR KW 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N5/10 G05B19/19 G21K1/10 G21K3/00 G21K5/04 H02K11/215 H02K11/30 H02K7/08 H02K7/116 H04N5/225 H04N5/232 H05H1/24 H05H13/00 H05H13/02 H05H7/04 H05H7/10 H05H7/12 (Advanced/Invention);
A61N5/10 H05H7/00 (Advanced/Non-invention)

CPC: H05H7/10 A61N5/1077 G05B19/19 H02K7/08 H02K7/116 H02K11/215 H02K11/30 G05B2219/39221 G05B2219/40555 A61N2005/1095 H05H7/04 H05H13/02 H05H2007/004 H05H13/005 H05H2007/045 H05H2007/048 H05H2277/11

US class: 1/1 315/502 600/1 700/275

JP class F-Term: 2G082 2G085 2G085/AA11 2G085/BA02 2G085/BA13 2G085/BA16 2G085/BA19 2G085/BC04 2G085/BC09 2G085/BC10 2G085/BC18 2G085/BE03 2G085/BE04 2G085/CA06 2G085/CA21 2G085/EA01 2G085/EA07 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AG01 4C082/AG43 4C082/AT01 2G084 2G084/AA12 2G084/DD39 2G085/BC11 2G085/BE02 2G085/BE07 2G085/CA12 2G085/CA16 2G085/CA20 4C082/AC04 4C082/AE01 4C082/AG11 4C082/AJ16 4C082/AL07 4C082/AP11 2G085/BE05 2G085/CA17 4C082/AG12 4C082/AG52

JP class F-Index: A61N5/10/H G21K3/00/W G21K3/00/Y G21K5/04/A H05H13/02 H05H7/10 H05H1/24 H05H13/02/ZAA

JP class Facet: ZAA

Classification Explorer

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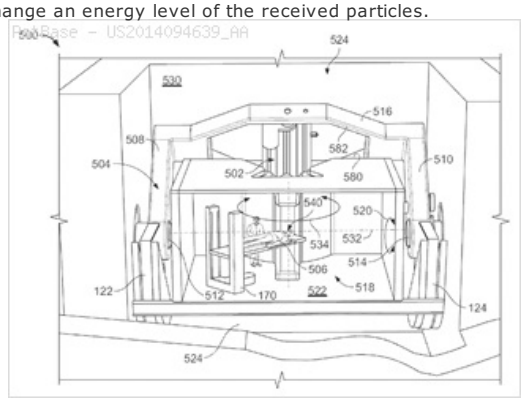
Forward Citations: WO18175679, WO18127990, WO18125315, WO17160758, WO17156419, WO17153805, US9974513,

US9962560, US9925395, US9867272, US9723705, US9706636, US9681531, US9661736, US9622335, US9616252, US9545528, US9301384, US9185789, US9155186, US2017231081, US2017199506, US2017028224, US2017001040, US2016205760, US2016174355, US2014094640, US2014094637, US2014094371, US10456591, US10440810, US10434331, US10368429, US10279199, US10258810, US10254739, US10155124, US10039935, US10028369, TWI660648, RU2700583, RU2617689, JP6499803, JP6434051, JP6316528, JP6231039, JP2019114539, JP2018127990, JP2016207667, JP2016207454, JP2016092623, GB2563557, EP3232742, CN107006115, CN107006115, CN106406216, CN105655223,

Abstract:
An example particle accelerator includes a coil to provide a magnetic field to a cavity; a particle source to provide a plasma column to the cavity; a voltage source to provide a radio frequency (RF) voltage to the cavity to accelerate particles from the plasma column, where the magnetic field causes particles accelerated from the plasma column to move orbitally within the cavity; an enclosure containing an extraction channel to receive the particles accelerated from the plasma column and to output the received particles from the cavity; and a structure arranged proximate to the extraction channel to change an energy level of the received particles.



68) Family number: 18971021 (GB359505A)

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Title:	Filling and capping machine for container
Priority:	GB19300012408 19300422

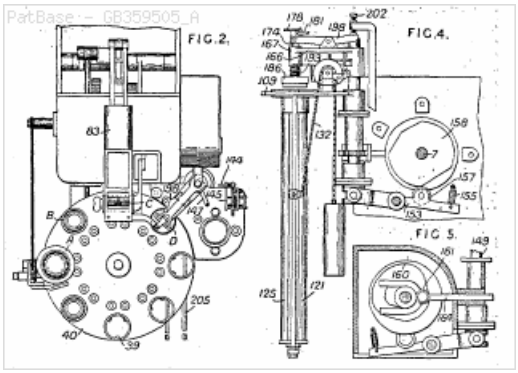
Family:

Publication number	Publication date	Application number	Application date
GB359505 A	19311022	GB19300012408	19300422

Probable Assignee:	VORTEX CUP CO
Assignee(s):(std):	VORTEX CUP CO ; VORTEX CUP COMPANY
International class (IPC 8-9):	B65B3/32 (Advanced/Invention); B65B3/00 (Core/Invention)
International class (IPC 1-7):	B65B3/32 B67B3/10
CPC:	B65B3/32
European class:	B65B3/32
Classification Explorer	
Forward Citations:	CN106864789,

Abstract:
359,505. Filling cartons. HERON, F. H., 181, Queen Victoria Street, London.- (Vortex' Cup Co.; 421, North Western Avenue, Chicago, U.S.A.) April 22, 1930, No. 12408. [Class 125 (ii).] Relates to rotary machines for filling conical paper cups with predetermined quantities of icecream and c. in which the cups are capped by crimping their marginal edges over the caps. According to the invention the cap delivery and securing mechanisms are pivotally mounted on a joint support for transferring a cap to a filled container, and the cap securing mechanism moves the cap at rightangles to the direction of delivery from the magazine. The cap feed and transfer control cam disc 158 is carried on a shaft 7. A cam 160 and roller 161 on the opposite side of the disc 158 controls the rotation of the shaft 149. When a conical cup is carried by the turntable 40 from B to C, Fig. 2, and is filled with ice-cream and c. the control cam 158 coacting with the roller 157 holds the arm 166 and the shaft 149 in the raised position. Thereupon the cam 160 coacting with the roller 161, Fig. 5, actuates the rack 164 to swing the arm over the cap magazine. The control cam 158 now permits the coiled spring 155 to actuate the bar 153 causing the arm 166 and the shaft 149 to be lowered and to centre the cap gripper over an opening in the table 109 which is directly above the cap supply magazine 121.. 125. A set-screw on a bracket arm 147, Fig. 2, now moves into engagement with a stub shaft 144 causing a bar 145 to be tripped downwardly and thereby operating a chain 132. This elevates a shelf in the cap magazine so that the upper cap is positioned beneath the cap transfer head. Suction from an air pipe 181 now lifts the cap to the cap gripper. Internal springs in the cap magazine prevent the withdrawal of more than one cap. The arm 166 is now raised through the cam 158 and the gripper and cap are raised above the turntable 40 while the table turns and a filled cup moves from C to D. Meanwhile the gripper is swung by the cam 160 and rack 164 over the position D. The cam 158 now permits the coil spring 155 to lower the arm 166 and centre the cap and rim deflecting mechanism thereon. The arm 166 is now further lowered by the spring 155 and the inner end of a pivotal beam 198 contacts with a set-screw 202 causing relative movement between a plunger sleeve 174 and a bracket sleeve 167. This permits a coiled spring 193 to expand and hold the crimping die plate in position. This downward movement of the sleeve 174 also causes the edge of the cup to be turned downwardly over the cap, and the valve 178 to be opened releasing the suction on the cap. The downward movement of the arm 166 now continues while the hood 186 and sleeve 174 are held stationary by contact with the table 40, and the crimping mechanism is operated thereafter. The cap transfer head is now retracted by the cam 158, lever 153, and arm 166 leaving the filled cup in the turntable ready to be advanced to the discharge position E. Filled containers are dropped through the turntable openings 39 into a discharge shoot 205. The cups are fed to the turntable at A, Fig. 2, and move to B and thence to C where they are filled. A valve and plunger mechanism 83 is shown and described for filling the cups.

PatBase — GB359505_A



69) Family number: 56142022 (US2014094641A)

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Title: FOCUSING A PARTICLE BEAM

Priority: US20120707704P 20120928 US20130039752 20130927 WO2013US62116 20130927

Family:

Publication number	Publication date	Application number	Application date
CN104813748 A	20150729	CN201380062126	20130927
CN104813748 B	20190709	CN201380062126	20130927
EP2901822 A2	20150805	EP20130774341	20130927
JP2015532508 T2	20151109	JP20150534725T	20130927
JP6121544 B2	20170426	JP20150534725T	20130927
TW201422279 A	20140616	TW20130135151	20130927
US2014094641 AA	20140403	US20130039752	20130927
US8927950 BB	20150106	US20130039752	20130927
WO14052718 A2	20140403	WO2013US62116	20130927
WO14052718 A3	20140530	WO2013US62116	20130927

Probable Assignee: MEVION MEDICAL SYSTEMS INC

Assignee(s):(std)**:** MEVION MEDICAL SYSTEMS INC

Inventor(s):(std)**:** ZWART GERRIT TOWNSEND ; LAAN JAN VAN D ; O NEAL III CHARLES D ; FRANZEN KEN YOSHIKI ; GALL KENNETH P ; O NEAL CHARLES D III

Inventor(s): O NEAL CHARLES D

Agent(s): CONROY JOHN; FISH AND RICHARDSON PC; PYSHER PAUL A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N5/00 A61N5/10 G21K1/08 G21K1/093 G21K5/04 H05H13/02 H05H7/00 H05H7/04 H05H7/10 H05H7/18 (Advanced/Invention)

CPC: H05H7/04 H05H7/10 H05H13/02 H05H2007/043 A61N5/1077

US class: 250/492.1 250/492.3 315/503 600/1

JP class F-Term: 2G082 2G085 2G085/AA11 2G085/BA13 2G085/BA15 2G085/BA16 2G085/BC09 2G085/BC10 2G085/BE03 2G085/BE04 2G085/CA06 2G085/CA16 2G085/CA21 2G085/EA07 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AG01 4C082/AT01

JP class F-Index: A61N5/10/H G21K1/093/F G21K5/04/A H05H13/02 H05H7/10

Classification Explorer

Cited documents: WO9939385, WO9817342, WO9302536, WO9203028, WO9012413, WO8607229, WO14052718, WO14018876, WO14018706, WO13098089 A1, WO10089574 A2, WO10089574, WO09073480, WO09070588, WO09070173, WO09048745, WO08081480, WO08030911, WO07145906, WO07130164, WO07084701, WO07061937, WO06012467, WO04101070, WO04026401, WO03092812, WO03039212, WO0207817, WO0126569, WO0126230, WO0049624, WO0040064, US94973404, US94866207, US94835907, US93757307, US8653473 BB, US8653314 BB, US8643314 BB, US8581525 BB, US8581523 BB, US8581215 BB, US8569717 BB, US8552408 BB, US8552406 BB, US85056506 P, US8487278 BB, US8483357 BB, US8472583 BB, US8466441 BB, US8445872 BB, US8440987 BB, US8436323 BB, US8426833 BB, US8421041 BB, US8416918 BB, US8415643 BB, US8405056 BB, US8405042 BB, US8399866 BB, US8389949 BB, US8382943 BB, US8378321 BB, US8378299 BB, US8373145 BB, US8373143 BB, US8368043 BB, US8368038 BB, US8350214 BB, US8344340 BB, US8335397 BB, US8334520 BB, US8330132 BB, US8309941 BB, US8304750 BB, US8304725 BB, US8294127 BB, US8291717 BB, US8288742 BB, US8232536 BB, US8227768 BB, US8222613 BB, US8198607 BB, US8188688 BB, US8173981 BB, US8144832 BB, US8129699 BB, US8111125 BB, US8093568 BB, US8093564 BB, US8089054 BB, US8085899 BB, US8080801 BB, US8071966 BB, US8069675 BB, US8067748 BB, US8053746 BB, US8053745 BB, US8053739 BB, US8053508 BB, US8049187 BB, US8044364 BB, US8041006 BB, US8039822 BB, US8009804 BB, US8009803 BB, US8003964 BB, US8002466 BB, US7997553 BB, US7990524 BB, US7989785 BB, US7987053 BB, US7986768 BB, US7984715 BB, US7982416 BB, US7982198 BB, US7977656 BB, US7977648 BB, US7961844 BB, US7960710 BB, US7950587 BB, US7949096 BB, US7947969 BB, US7943913 BB, US7940881 BB, US7934869 BB, US7928415 BB, US7920675 BB, US7920040 BB, US7919765 BB, US7914734 BB, US7906769 BB, US7894574 BA, US7881431 BB, US7875868 BB, US7875861 BB, US7868301 BB, US7860550 BB, US7860216 BB, US7857756 BB, US7848488 BB, US7839973 BB, US7839972 BB, US7835502 BB, US7835494 BB, US7834336 BB, US7834334 BB, US7817836 BB, US7817778 BB, US7816657 BB, US7812326 BB, US7812319 BB, US7809107 BB, US7807982 BB, US7801988 BB,

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US7473913 BB, US7468506 BB, US7466085 BB, US7465944 BB, US7453076 BB, US7449701 BB, US7446490 BB, US7446328 BB, US7439528 BB, US7432516 BB, US7425717 BB, US7405407 BB, US7402963 BB, US7402824 BB, US7402823 BB, US7402822 BB, US7398309 BB, US7397901 BA, US7397054 BB, US7381979 BB, US7378672 BB, US7372053 BB, US7368740 BB, US7355189 BB, US7351988 BB, US7348579 BB, US7348557 BB, US7345292 BB, US7345291 BB, US7332880 BB, US7331713 BB, US7319336 BB, US7319231 BB, US7318805 BB, US7307264 BB, US7301162 BB, US7297967 BB, US7295649 BB, US7280633 BB, US7274018 BB, US7262565 BB, US7262424 BB, US7259529 BB, US7257191 BB, US7247869 BB, US7227161 BB, US7221733 BA, US7212609 BB, US7212608 BB, US7208748 BB, US7199382 BB, US7193227 BB, US7186991 BB, US7173385 BB, US7173265 BB, US7173264 BB, US7162005 BB, US7154991 BB, US7154108 BB, US7154107 BB, US7138771 BB, US7135678 BB, US7122978 BB, US7122966 BB, US7122811 BB, US7102144 BB, US7091478 BB, US7084410 BB, US7081619 BB, US7073508 BB, US7071479 BB, 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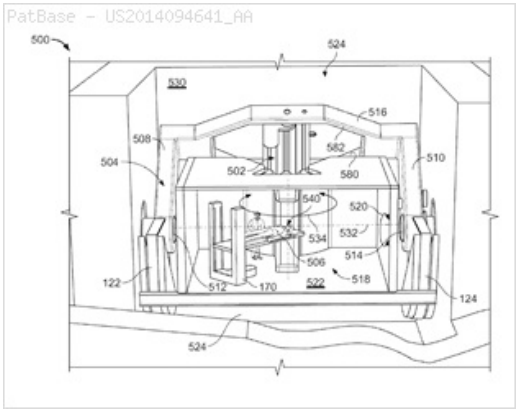
CN1537657 A, CN102308676 A, CN101933406, CN101933405, CN101932361, CN101631422 A, CN101361156 A, CN101061759, CA2629333,

Forward Citations: US9962560, US9925395, US9867272, US9723705, US9706636, US9681531, US9661736, US9622335, US9545528, US9301384, US9185789, US9155186, US8927950, US2017231081, US2017028224, US2017001040, US2016205760, US2016174355, US2014094640, US2014094639, US2014094637, US10456591, US10440810, US10434331, US10368429, US10279199, US10258810, US10254739, US10155124, US10076675, CN108551717, CN106163074,

Abstract:
An example particle accelerator includes the following: a resonant cavity in which particles are accelerated, where the resonant cavity has a background magnetic field having a first shape; and an extraction channel for receiving particles output from the resonant cavity. The extraction channel comprises a series of focusing regions to focus a beam of received particles. At least one of the focusing regions is a focusing element configured to alter a shape of the background magnetic field to a second shape that is substantially opposite to the first shape in the presence of a magnetic field gradient resulting from reduction of the background magnetic field from the resonant cavity to the extraction channel.



70) Family number: 18414022 (GB195133A)

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Title: Improved means for transmitting the motion of reciprocating masses such as pistons, cylinders and the like

Priority: GB19210033919 19211216

Family:

Publication number	Publication date	Application number	Application date
FR544291 A	19220919		00000000
GB195133 A	19230316	GB19210033919	19211216

Probable Assignee: ALESSANDRO TEBALDI

Assignee(s):(std)**:** ALESSANDRO TEBALDI

International class (IPC 8-9): F16F15/22 (Advanced/Invention); F16F15/22 (Core/Invention)

International class (IPC 1-7): F02B59/00 F16J1/00

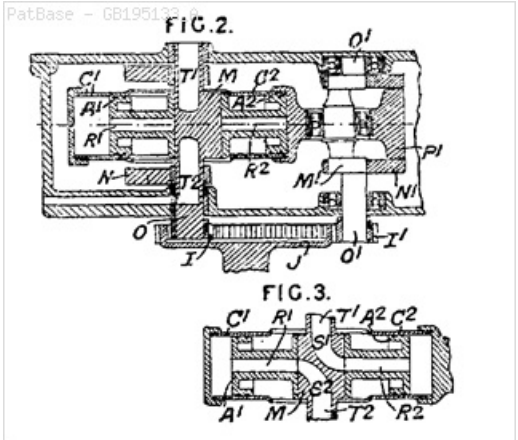
CPC: F16F15/22

European class: F16F15/22

Classification Explorer

Forward Citations: GB2216600,

Abstract:
195,133. Tebaldi, A. Dec. 16, 1921. Rotary cylindrical valves.-In a compressedair motor in which a double piston A<1>, A<2> is mounted on an eccentric M on the shaft O, and works in a cylinder C<1>, C<2> connected to cranks M<1> on the shaft O<1>, the eccentric M constitutes a distributing-valve, being formed with recesses S', S<2> which communicate with admission and exhaust passages T<1>, T<2> and with passages R', R<2> through the pistons.



71) Family number: 22708022 (FR1286172A)

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Title:	PROCEDE PERFECTIONNE POUR SEPARER LE NOIR DE CARBONE DE SUSPENSIONS GAZEUSES QUI EN CONTIENNENT IMPROVED METHOD FOR SEPARATING CARBON BLACK SUSPENSIONS GAS WHICH CONTAIN (Machine translation)
Priority:	FR19610857707 19610404

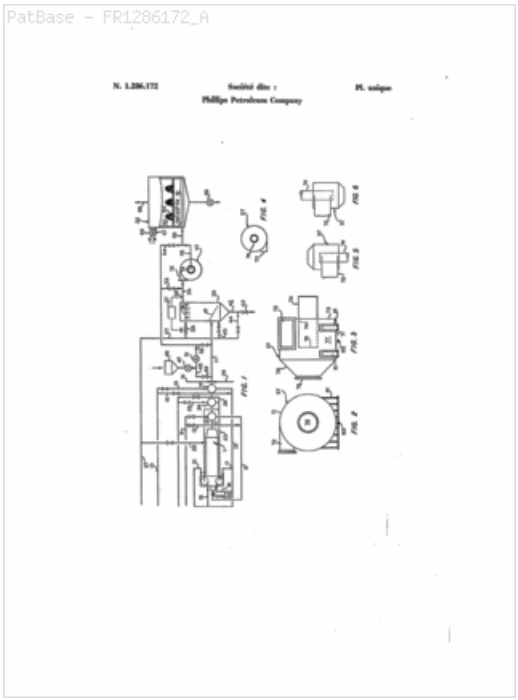
Family:

Publication number	Publication date	Application number	Application date
FR1286172 A	19620302	FR19610857707	19610404

Probable Assignee:	PHILLIPS PETROLEUM CO
Assignee(s):(std)**:**	PHILLIPS PETROLEUM CO
Assignee(s):	PHILLIPS PETROLEUM COMPANY
International class (IPC 8-9):	C09C1/60 (Advanced/Invention); C09C1/44 (Core/Invention)
International class (IPC 1-7):	C09C1/60
CPC:	C01P2004/61 C09C1/60
European class:	C09C1/60
Classification Explorer	
Forward Citations:	US3318070,

Abstract:
Source: FR1286172A [FR] (Claim 1) 1. On envoie la fumee contenant du noir de carbone dans un dispositif d'agglomeration ou l'on agglomere les particules en suspension dans cette fumee pour former des particules plus grosses sous l'effet de la force centrifuge, sans separer ces particules de la fumee qu'on envoie ensuite directement a travers un tamis filtrant pour separer de la fumee les particules de noir de carbone qui sont agglomerees;

Machine translation: (Claim 1) 1. It sends smoke containing carbon black agglomeration in a device or agglomerated particles are suspended in the smoke to form larger particles under the influence of centrifugal force, without separate particles of smoke that 'are next sent directly through a filter screen to separate the particles of the smoke of carbon black which are agglomerated



72) Family number: 71977022 (WO18209377A1)

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Title:	VALVE FOR LARGE SCALE IRRIGATION
Priority:	AU20170901799 20170515 AU20170901907 20170519

Family:

Publication number	Publication date	Application number	Application date
WO18209377 A1	20181122	WO2018AU00071	20180515

Probable Assignee:	COUNTRY COCKY PTY LTD
Assignee(s):(std)**:**	COUNTRY COCKY PTY LTD
Inventor(s):(std)**:**	COCCIARDI PETER ANTHONY
Agent(s):	DREW DAVID
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ 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 IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

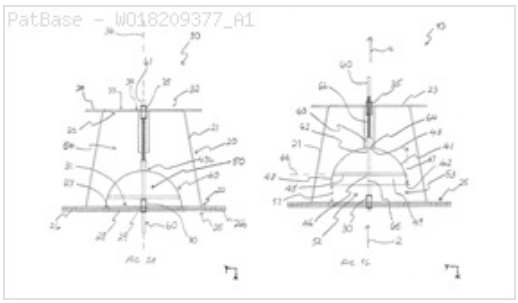
International class (IPC 8-9): F16K1/36 F16K15/02 F16K21/04 (Advanced/Invention)

CPC: F16K15/063 F16K47/023

Classification Explorer

Cited documents: US2016178076 AA, US2015122353 AA, US2014216575 AA, US2011000556 AA, US2009145497 AA,

Abstract:
A valve assembly (10) for large scale irrigation including a valve body (20) and a valve head (40). The valve head is adapted to reciprocally travel along a longitudinal axis, supported by a longitudinally aligned shaft (60) inside the valve body. The valve head includes a wall (41) terminating in a peripheral sealing contact surface (42), the wall extending inwardly from the peripheral contacting surface.



73) Family number: 813023 (US3369490A) © PatBase

Title: PUMPING APPARATUS

Priority: US19660554628 19660804

Family:

Publication number	Publication date	Application number	Application date
US3369490 A	19680220	US19660554628	19660804

Probable Assignee: HARRY W HAWK

Assignee(s):(std)**:** HARRY W HAWK

Inventor(s):(std)**:** HAWK HARRY W

International class (IPC 8-9): F04B47/04 (Advanced/Invention); F04B47/00 (Core/Invention)

International class (IPC 1-7): F04B47/02

CPC: F04B47/04 Y10T137/7785 Y10T137/7869

European class: F04B47/04

US class: 103/33 137/498 137/517 60/369 60/372 60/379 60/403 91/220 91/274 91/279 91/443 91/445 91/452

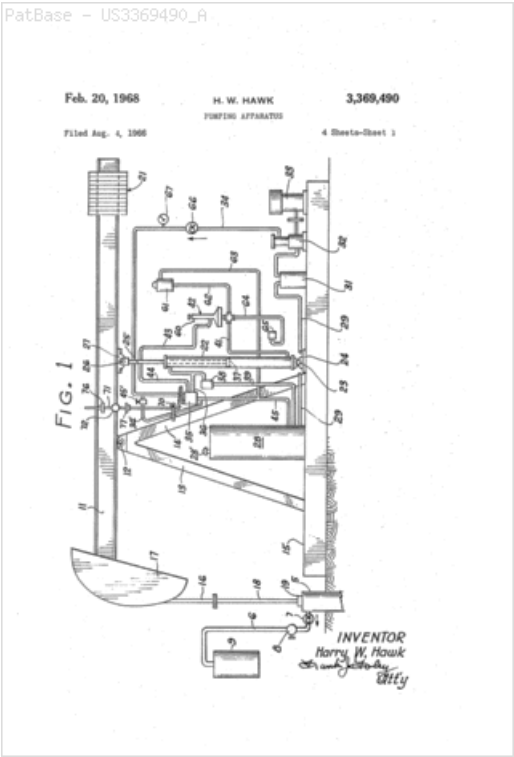
Classification Explorer

Cited documents: US2780063 A, US2704552 A, US2477359 A, US2432735 A, US2251290 A, US2204757 A, US2200790 A, US2167623 A, US2141703 A, US1053032 A,

Forward Citations: US4534168, US4462759, US4201115, US4176520, US4099447, US3971213, US3939656, US3538777, CN105221114,

Abstract:
(Claim 1) 1. In a petroleum well pumping apparatus, a base, a Walking beam pivotally supported on the base, a well pump supported operatively on the beam forwardly of the beam pivot, counterweights connected to the beam 25 rearwardly of the beam pivot completely gravitationally counterbalancing the forces downwardly acting on the beam forwardly of its pivot, a double acting hydraulic cylinder pivotally supported on the base and having its piston pivotally connected to the beam rearwardly of the 30 beam pivot, means including an hydraulic pump, conduits and a directional flow control valve adapted for sup-plying hydraulic fluid through the valve alternately to and returning the fluid to the valve from the upper and lower end Chambers of the cylinder for rocking the beam, 35 and valve means actuated by pressure greater than a predetermined pressure occurring in the hydraulic fluid flowing from said lower end Chamber to said valve adapted instantly to terminate further fluid flow from said lower Chamber to thereby immobilize said beam.

PatBase - US3369490_A



74) Family number: 56142023 (US2014094640A) © PatBase

Title: MAGNETIC FIELD REGENERATOR

Priority: US20120707590P 20120928 CN201380062113 20130927 JP20150534724T 20130927 US20130039652 20130927 WO2013US62112 20130927 US20170441563 20170224

Family:

Publication number	Publication date	Application number	Application date
CN105103662 A	20151125	CN201380062113	20130927
CN105103662 B	20180413	CN201380062113	20130927
CN108770178 A	20181106	CN201810206998	20130927
EP2901821 A2	20150805	EP20130774340	20130927
JP2015536028 T2	20151217	JP20150534724T	20130927
JP2017130470 A2	20170727	JP20170087070	20170426
JP6138947 B2	20170531	JP20150534724T	20130927
TW201424466 A	20140616	TW20130135161	20130927
US2014094640 AA	20140403	US20130039652	20130927
US2017231081 AA	20170810	US20170441563	20170224
US9622335 BB	20170411	US20130039652	20130927
US10368429 BB	20190730	US20170441563	20170224
WO14052716 A2	20140403	WO2013US62112	20130927
WO14052716 A3	20140605	WO2013US62112	20130927

Probable Assignee: MEVION MEDICAL SYSTEMS INC

Assignee(s):(std)**:** MEVION MEDICAL SYSTEMS INC

Inventor(s):(std)**:** KENNETH P GALL ; JAN VAN D LAAN ; KEN YOSHIKI FRANZEN ; GERRIT TOWNSEND ZWART ; GALL KENNETH P ; FRANZEN KEN YOSHIKI ; O NEAL III CHARLES D ; LAAN JAN VAN D ; ZWART GERRIT TOWNSEND ; O NEAL CHARLES D III

Inventor(s): O NEAL CHARLES D

Agent(s): CONROY JOHN; CHOATE HALL AND STEWART LLP; PAUL; PYSHER PAUL A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N5/10 G21K1/093 G21K5/04 H05H1/24 H05H13/02 H05H7/02 H05H7/04 H05H7/10 H05H7/18 (Advanced/Invention)

CPC: H05H13/02 A61N5/1077 H05H7/04 H05H7/10 H05H2007/046 H05H7/02 H05H2007/025 A61N2005/1087

US class: 1/1 315/502 600/1

JP class F-Term: 2G082 2G085 2G085/AA11 2G085/BA13 2G085/BA16 2G085/BA19 2G085/BC04 2G085/BC10 2G085/BE03 2G085/BE04 2G085/CA16 2G085/CA21 2G085/EA07 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AT01 4C082/AT10 2G084 2G084/AA12 2G085/BA02 2G085/BC09 2G085/BC11 2G085/BC18 2G085/BE02 4C082/AG01

JP class F-Index: A61N5/10/H G21K1/093/D G21K5/04/D H05H13/02 H05H7/10 A61N5/10/D G21K5/04/A H05H1/24

Cited documents: WOWO201452719, WOWO201405216, WOWO2010089574, WOWO200980080, WOWO2001026230, WOWO200049624, WOWO200040064, WOWO199939385, WOWO199817342, WOWO199302536, WOWO199203028, WOWO1990012413, WOWO198607229, WOWO0207817, WOWO01126569, WO9939385 A1, WO9817342 A2, WO9302536 A1, WO9203028 A1, WO9012413 A1, WO8607229 A1, WO14052722 A2, WO14052719 A2, WO14052718 A2, WO14052716 A2, WO14052708 A2, WO14018876 A1, WO14018706 A1, WO14005216 A1, WO13142409 A1, WO13098089 A1, WO13079311 A1, WO10089574 A2, WO10089574, WO09080080 A1, WO09073480 A2, WO09070588 A1, WO09070173 A1, WO09048745 A2, WO08081480 A1, WO08030911 A2, WO07145906 A2, WO07130164 A2, WO07084701 A1, WO07061937 A2, WO07061937, WO06012467 A2, WO04101070 A1, WO04026401 A1, WO03092812 A1, WO03039212 A1, WO0207817 A2, WO0126569 A1, WO0126230 A1, WO0049624 A1, WO0040064 A2, WO0019786 A2, US9925395 BB, US9622335 BB, US94973404, US94866207, US94835907, US93757307, US9301384 BB, US9185789 BB, US9155186 BB, US8975836 BB, US8927950 BB, 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US8041006 BB, US8039822 BB, US8009804 BB, US8009803 BB, US8003964 BB, US8002466 BB, US7997553 BB, US7990524 BB, US7989785 BB, US7987053 BB, US7986768 BB, US7984715 BB, US7982416 BB, US7982198 BB, US7977656 BB, US7977648 BB, US7961844 BB, US7960710 BB, US7950587 BB, US7949096 BB, US7947969 BB, US7943913 BB, US7940881 BB, US7934869 BB, US7928415 BB, US7920675 BB, US7920040 BB, US7919765 BB, US7914734 BB, US7906769 BB, US7894574 BA, US7881431 BB, US7875868 BB, US7875861 BB, US7875801 BB, US7868301 BB, US7860550 BB, US7860216 BB, US7857756 BB, US7848488 BB, US7839973 BB, US7839972 BB, US7835502 BB, US7835494 BB, US7834336 BB, US7834334 BB, US7817836 BB, US7817778 BB, US7816657 BB, US7812326 BB, US7812319 BB, US7809107 BB, US7807982 BB, US7801988 BB, US7801270 BB, US7801269 BB, US7796731 BB, US7791051 BB, US7789560 BB, US7786452 BB, US7786451 BB, US7784127 BB, US7783010 BB, US7778488 BB, US7773788 BB, US7773723 BB, US7772577 BB, US7770231 BB, US7767988 BB, US7763867 BB, US7759642 BB, 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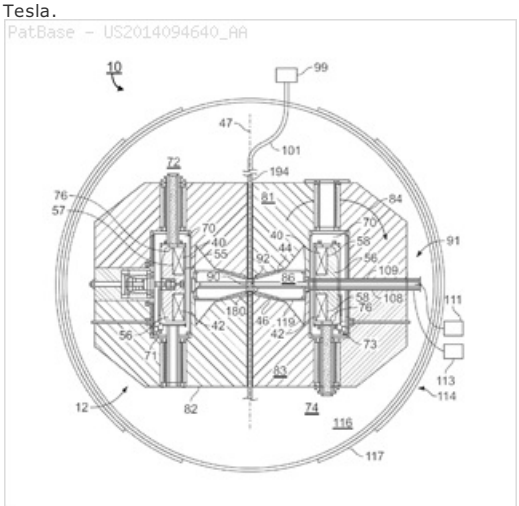
Forward Citations: WO19097618, WO19070772, WO18175679, US9962560, US9925395, US9723705, US9706636, US9681531, US9661736, US9622335, US9545528, US9301384, US9185789, US9155186, US2017231081, US2017028224, US2017001040, US2016205760, US2014094639, US2014094637, US10456591, US10434331, US10383206, US10368429, US10279199, US10258810, US10254739, US10155124, EP3496516,

Abstract:
An example particle accelerator includes the following: a voltage source to provide a radio frequency (RF) voltage to a cavity to accelerate particles from a plasma column, where the cavity has a magnetic field causing particles accelerated from the plasma column to move orbitally within the cavity; an extraction channel to receive the particles accelerated from the plasma column and to output the received particles from the cavity; and a regenerator to provide a magnetic field bump within the cavity to thereby change successive orbits of the particles accelerated from the plasma column so that, eventually, particles output to the extraction channel. The magnetic field is at least 6 Tesla and the magnetic field bump is at most 2 Tesla.



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Family:

Publication number	Publication date	Application number	Application date
US2334164 A	19431116	US19390286102	19390724

Probable Assignee:	WOOD NEWSPAPER MACH CORP
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Assignee(s):	WOOD NEWSPAPER MACHINERY CORP
Inventor(s):(std)**:**	LOTZ HERBERT A
International class (IPC 8-9):	B65H23/08 (Advanced/Invention); B65H23/06 (Core/Invention)
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Abstract:
What I claim is: 1. Mechanisn for controlling a roll of web material and tensioning its unwound Web between said roll and a. printing press or other machine into which said web is fed, comprising a friction Strap-like member, a pair of devices for holding said member, means for supporting a roll of web material between said devices. a bodily movable directiorvchanging device engaging said member, forming a loop therein between one of the devices of said pair and the roll and holding a, section of said member bowed and wrapped circumierentially around the periphery of the roll, and means operable on the direction-changing device for holding said member under tension and for moving the direction-changing device in a, direction to decrease the circumferential wrap of said member on the roll as the diameter gf said roll is decreased by unwindlng its web therefrom, the Operating means for the direction-changing (gi 6 :a,ss4,1e4 device holding said friction member under a predetermined minimum tension when the machine is stopped, and including mechanism, controlled by a part of the machine that moves at 5, variable speed, for progressively increasing the tension on said member during acceleration of the machine, holding said member at a, predetermined tension during normal running of the machine and progressively decreasing said tension during deceleration of the machine. 2. Mechanism for controlling a roll of web material and tensioning its unwound web between said roll and a printing press or other machine into which said web is fed, comprising a friction strap-like member, 8. pair of devices for holding said member, means for supporting a roll of web material between said devices, a bodily movable direction-changing device engaging said member, forming a loop therein between one of the devices of said pair and the roll and holding a section of said member bowed and wrapped circumferentially around the periphery of the roll, and means operable on the direction-changing device for holding said member under tension and for moving the direction-changing device in a direction to decrease the circumferential Wrap of said member on the roll as the diameter of said roll is decreased by unwinding its web therefrom, the operating means for the direction-changing device holding said friction member under a. predetermined mlnimurn tension when the machine is stopped, and including mechanism, controlled by a part of the machine that moves at a. variable speed, for progressively increasing the tension on said member during acceleration of the machine, holding said member at a predetermined tension during normal running of the machine and progressively decreasing said tension during deceleration of the machine, said operating means further including other mechanism, controlled by the tension of the web, for increasing the tension on said member during normal running of the machine In. case tension on the web drops below a predetermined tension. 3. Mechanism for controlling a roll of Web material and tensioning its unwound web between said roll and a printing press or other machine into which said web Is fed, comprising a friction strap-like member, a pair of devices for holding said member, means for supporting a roll of web material between said devices, 9. dlrection-changing pulley engaging said member, forming a loop therein between one oi' the devices of said pair and the roll and holding a section of said member bowed and Wrapped clrcumferentlally around the periphery of the roll, a cross-head on which the pulley is journaled, a. guide for the crosshead, and means operative on the cross-head for holding said member under tension, said guide being arranged to direct the pulley to progressively decrease the circumferential wrap of said member on the roll as the diameter of said roll is progressively decreased by unwlndlng its web therefrom. 4. Mechanism for controlling a roll of web material and _tensioning its unwuund web between said roll and a printing press or other machine into which said web is fed, comprising a friction strap-like member, a pair of devices for holding said member, means for supporting a roll of web material between said devices, a bodily movable direction-changing device engaging said member, forming a loop therein between one Of the devices of said pair and the roll and holding a section of said member bowed and wrapped circumferentlally around the periphery Df the roll, a co-operating cylinder and piston for moving the direction-changing device in a direction to progressively decrease the circumferential wrap of said member on the roll as the diameter of the roll Is progressively decreased by the unwinding of its Web therefrom, 9. source of fluid under pressure, and means for supplying nuid from said source to the cylinder. 5. The structure delined in claim 4 in which the means for supplying fluid to the cylinder further includes a reducing valve. 6. The structure deiined in claim 4 in which the means for supplying fluid to the cylinder further includes a reducing valve, and means CDHtrolled by the tension of the Web for holding the reducing valve in a predetermined open position. 7. The structure defined in claim 4 in which the means for supplying iuld to the cylinder further includes a reducing valve, and means controlled by the tension of the web for holding the reducing valve in a predetermined open position and for opening the reducing valve to a greater fluid-conducting capacity when the tension on the web is reduced below a predetermined tension. B, The structure defined in claim 4 in which the means for supplying fluid to the cylinder further includes a. reducing valve and a, relief valve. 9. Mechanism for controlling a roll of web material and tensioning its unwound web between said roll and a printing press or other machine into which said web is fed, comprising a friction strap-like member. a pair of devices for holding said member, means for supporting a roll of web material between said devices, a. bodily movable direction-changing device engaging said member, forming a loop therein between one of the devices of said pair and the roll and holding a section of said member bowed and wrapped circumferentially around the periphery oi the roll. a co-operating cylinder and piston for moving the direction-changing device in a direction to lengthen said loop and thereby progressively decrease the circumferential wrap of said member on the roll as the diameter of the roll is progressively decreased by the unwinding of its Web therefrom, a source of fluid under pressure, means for supplying fluid from said source to the cyliI1f3€l', at a relatively low pressure, and further means controlled by a part of said machine that moves at a. variable speed for supplying fluid from said source to the cylinder at a. pressure that progressively increases from said low pressure up to a maximum pressure during normal running of the machine, and that progressively decreases toisaid low pressure during deceleration of said machine. 10. The structure deilned in claim 9 in which the means for supplying fluid from said source further includes a reducing valve, and means controlled by the tension of the web for holding said valve open at substantially said maximum pressure and for opening said valve to a greater fluidconducting capacity when the tension on the Web Is reduced below a predetermined tension

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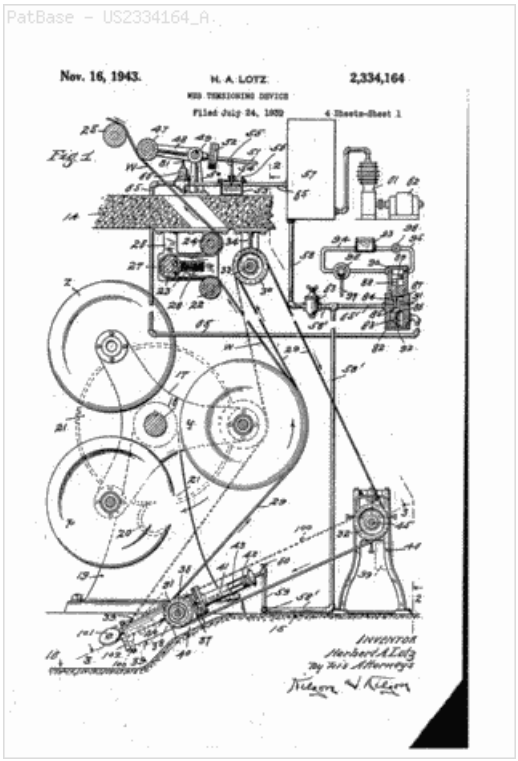

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US10155124 BB	20181218	US20160265326	20160914
WO14052734 A1	20140403	WO2013US62137	20130927

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): A61N1/44 A61N5/01 A61N5/10 G21K1/04 G21K3/00 G21K5/04 H01J37/32 H05H13/02 H05H15/00 H05H7/12 (Advanced/Invention);
A61N5/00 H05H7/00 (Advanced/Non-invention)

CPC: A61N5/1081 A61N5/1071 A61N5/1049 A61N5/1077 A61N2005/1095 H05H7/12 H05H13/02 H05H2007/004 A61N1/44 A61N5/1045 A61N2005/005 A61N2005/1087

US class: 1/1 600/1 600/2

JP class F-Term: 4C082 4C082/AA01 4C082/AC05 4C082/AE03 4C082/AG12 4C082/AG44 4C082/AG53 4C082/AJ16 4C082/AL07 2G082 2G085 2G085/AA11 2G085/BA02 2G085/BC18 2G085/BE02 2G085/BE03 2G085/CA22 2G085/CA24 2G085/DA04 2G085/EA07

JP class F-Index: A61N5/10/H A61N5/10/T A61N5/01/A G21K1/04/S G21K3/00/W G21K5/04/A G21K5/04/C H05H13/02

Classification Explorer

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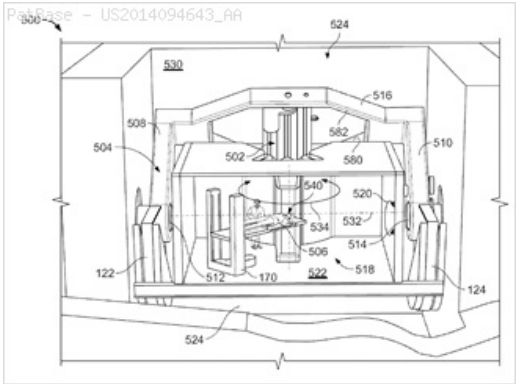
US2701304 A, US2659000 A, US2626351 A, US2616042 A, US2615129 A, US2492324 A, US2280606 A, US2017014649 AA, US2015161793 AA, US2014371511 AA, US2014320006 AA, US2014097920 AA, US2014094643 AA, US2014094641 AA, US2014094640 AA, US2014094639 AA, US2014094638 AA, US2014094637 AA, US2014094371 AA, US2014091734 AA, US2014042934 AA, US2014028220 AA, US2014028200 AA, US2013249443 AA, US2013237425 AA, US2013218009 AA, US201313916401, US201313907601, US2013131424 AA, US2013127375 AA, US2013053616 AA, US2013009571 AA, US201261707704 P, US201261707645 P, US201261707590 P, US201261707572 P, US201261707548 P, US201261707515 P, US201261707466 P, US2012142538 AA, US2012081041 AA, US2012019085 AA, US2012014501 AA, US2011299919 AA, US2011284760 AA, US2011240874 AA, US2011233423 AA, US2010308235 AA, US2010230617 AA, US201013148000, US2010060207 AA, US2010051833 AA, US2010051833, US2010045213 AA, US2009314961 AA, US2009200483 AA, US2009140672 AA, US2009140671 AA, US2009096179 AA, US2009003524 AA, US2008218102 AA, US2008093567 AA, US2008078937 AA, US2008067452 AA, US2007284548 AA, US2007181519 AA, US2007171015 AA, US2007145916 AA, US2007114945 AA, US2007092812 AA, US2007051904 AA, US2007029510 AA, US2007023699 AA, US2007014654 AA, US2007013273 AA, US2007001128 AA, US2006284562 AA, US2006175991 AA, US2006145088 AA, US2006126792 AA, US2006067468 AA, US2006017015 AA, US2005247890 AA, US2005234327 AA, US2005228255 AA, US2005184686 AA, US2005161618 AA, US2005089141 AA, US2005058245 AA, US2004240626 AA, US2004232356 AA, US2004227104 AA, US2004213381 AA, US2004200983 AA, US2004200982 AA, US2004183035 AA, US2004183033 AA, US2004174958 AA, US2004173763 AA, US2004159795 AA, US2004149934 AA, US2004118081 AA, US2004111134 AA, US2004098445 AA, US2004085023 AA, US2004061078 AA, US2004061077 AA, US2004056212 AA, US2004017888 AA, US2004000650 AA, US2003234369 AA, US2003183779 AA, US2003163015 AA, US2003152197 AA, US2003136924 AA, US2003125622 AA, US2003048080 AA, US2002172317 AA, TW201438787 A, TW201434508 A, TW201433331 A, TW201429514 A, TW201424466 A, TW201422279 A, TW201422278 A, TW200940120 A, TW200939908 A, TW200934682 A, TW200930160 A, SU569635 A1, SU300137 A1, SU300137, RU569635, RU300137, JPU48108098, JPU48108098, JP9162585, JP9162585, JP8264298, JP8264298, JP8173890, JP8173890, JP7263196, JP7263196, JP7260939, JP7260939, JP64089621 A2, JP63226899 A2, JP63218200 A2, JP63149344 A2, JP6233831, JP6233831, JP62186500 A2, JP62150804 A2, JP6180800 B2, JP61225798 A2, JP61080800, JP61080800, JP6036893, JP6036893, JP58141000 A2, JP57162527 A2, JP5341352, JP53041352 B4, JP5046928 B2, JP5046928, JP48108098 U1, JP4337300 B2, JP4337300, JP4323267 B2, JP43023267, JP4273409 B2, JP4273409, JP4129768 B2, JP4129768, JP4128717 B2, JP4128717, JP4094198 A2, JP2011521721 T2, JP2011521721 T2, JP2011521721, JP2011521425 T2, JP2011521425 T2, JP2011521425, JP2011521425, JP2011507151 T2, JP2011507151, JP2011505670 T2, JP2011505670, JP2011505191 T2, JP2011505191, JP2011224342 A2, JP2011224342, JP2011102800 A2, JP2010536130 T2, JP2010536130, JP2010204020 A2, JP2010071213 A2, JP2009516905 T2, JP2009516905, JP2009515671 T2, JP2009515671, JP2009162585 A2, JP2008507826 T2, JP2008507826, JP2008507358 T2, JP2008507358 T2, JP2008507358, JP2008264298 A2, JP2008173890 A2, JP2008089341 A2, JP2008012121 A2, JP2008012121, JP2007319439 A2, JP2007319439, JP2007263196 A2, JP2007260939 A2, JP2006233831 A2, JP2006036893 A2, JP2006032282 A2, JP2005526578 T2, JP2005526578, JP2004031115 A2, JP2003517755 T2, JP2003517755, JP2003504628 T2, JP2003504628, JP2002164686 A2, JP2001346893 A2, JP2001302700 A2, JP2001276797 A2, JP2001129103 A2, JP2001009050 A2, JP2001006900 A2, JP2000294399 A2, JP2000243309 A2, JP1302700, JP1302700, JP1276797, JP1276797, JP11243295, JP11102800, JP11102800, JP11047287, JP10071213, JP10071213, JP05341352 B2, JP05046928 B2, JP04337300 B2, JP04273409 B2, JP04129768 B2, JP04128717 B2, GB957342 A, GB2361523 A1, GB2015821 A1, GB1583400 A, GB1485329 A, GB1360085 A, GB0957342 A, FR2911843 A1, FR2560421 A1, EP2900326 A1, EP2900325 A2, EP2900324 A1, EP2814304 A1, EP2394498 A2, EP2363171 A1, EP2363170 A1, EP2232962 A2, EP2232961 A1, EP2227295 A1, EP2183753 A1, EP1949404 A2, EP1826778 A2, EP1738798 A2, EP1605742 A1, EP1477206 A1, EP1454657 A2, EP1454656 A2, EP1454655 A2, EP1454654 A2, EP1454653 A1, EP1430932 A1, EP1402923 A1, EP1371390 A1, EP1358908 A1, EP1348465 A1, EP1294445 A2, EP1153398 A1, EP1069809 A1, EP0911064 A2, EP0864337 A2, EP0776595 A1, EP0499253 A2, EP0465597 A1, EP0388123 A2, EP0306966 A2, EP0277521 A2, EP0276123 A2, EP0222786 A1, EP0221987 A1, EP0208163 A1, EP0194728 A1, DE4411171 A1, DE4101094 C1, DE3530446 A1, DE3148100 A1, DE2753397 A1, CN1988933 A, CN1816243 A, CN1537657 A, CN1377521 A, CN104822417 A, CN104812444 A, CN104812443 A, CN104244562 A, CN102214494 A, CN101933406 A, CN101933405 A, CN101932361 A, CN101361156 A, CN101061759 A, CA2629333 AA,

Forward Citations: WO19146211, WO18156446, US9962560, US9925395, US9723705, US9706636, US9681531, US9661736, US9627098, US9622335, US9616252, US9545528, US9452301, US9301384, US9185789, US9155186, US2018326224, US2017157422, US2017028224, US2017014649, US2017001040, US2016354617, US2016205760, US2015148584, US2014270069, US2014094639, US2014094637, US10456596, US10456591, US10434331, US10391336, US10368429, US10279199, US10258810, US10254739, US10155124, JP6527241, JP2017081826, EP3375484, CN108348767, CN106406216,

Abstract:
An example particle therapy system includes the following: a gantry that is rotatable relative to a patient position; a particle accelerator mounted to the gantry, where the particle accelerator is for outputting a particle beam essentially directly to the patient position; and a control system to receive a prescription and to generate machine instructions for configuring one or more operational characteristics of the particle therapy system. At least one of the operational characteristics relates to a rotational angle of the gantry relative to the patient position.



77) Family number: 20997024 (GB924173A)

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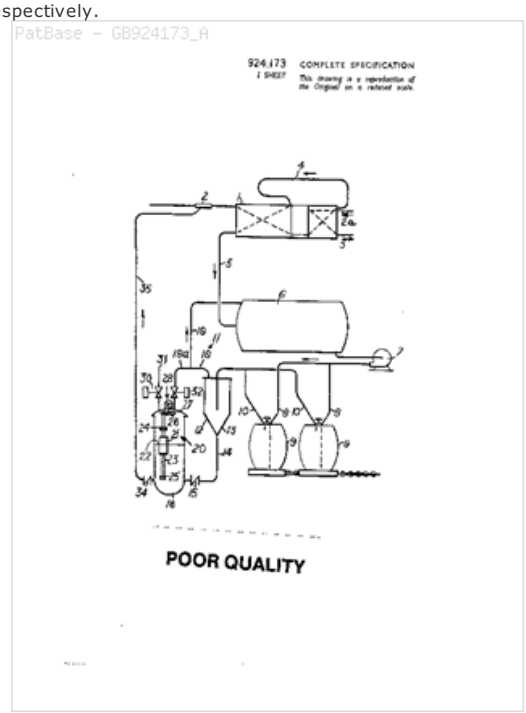
Title:	Improvements relating to the filling of containers
Priority:	GB19600034819 19601011

Family:

Publication number	Publication date	Application number	Application date
GB924173 A	19630424	GB19600034819	19601011

Probable Assignee:	BURNETT AND ROLFE LTD
Assignee(s):(std)**:**	BURNETT AND ROLFE LTD
Assignee(s):	BURNETT AND ROLFE LIMITED
Inventor(s):(std)**:**	FRIENDSHIP KENNETH FRANCIS MON
Inventor(s):	FRIENDSHIP KENNETH FRANCIS MONTAGUE
International class (IPC 8-9):	B65B3/22 B67C3/02 (Advanced/Invention); B65B3/00 B67C3/02 (Core/Invention)
International class (IPC 1-7):	B65B3/22 B67C3/32
CPC:	B65B3/22 B67C3/02
European class:	B65B3/22 B67C3/02
Classification Explorer	
Forward Citations:	CN104163254, CN104163254,

Abstract:
924,173. Bottling; filling casks. BURNETT and ROLFE Ltd. Sept. 29, 1961 [Oct. 11, 1960], No. 34819/60. Classes 21 and 125(2). A liquid which foams, e.g. beer, is first sterilised by passage through a steriliser and is then passed into a container to fill it; the foam on top of the liquid in the container is forced therefrom into a device where it condenses, and where means is provided which serves, on production of sufficient liquid by condensation, to open a valve admitting gas to the device to force the liquid back to the steriliser for recirculation, the valve closing on return to the steriliser of a predetermined amount of such liquid. Beer is supplied under pressure to a steriliser 1 heated by steam or hot water, and flows in a heated and sterilised condition to a tank 6 from which it is pumped into two conduits each feeding a container 9. A conduit 10 leads from each container and feeds foam to a receiver 12 which then passes through a conduit 14 and one-way valve 15 to a second receiver 16 having a float 21. The receiver tops are connected through conduits 18, 18a and 19 to the top of the tank 6 providing a counter pressure. When the float rises to a sufficient level a switch is operated and a normally closed valve 30 opened, and a normally open valve 32 closed, and carbon dioxide is supplied through a conduit 31 to the receiver 16 to force beer through a one-way valve 34 and conduit 35 back to the steriliser for recirculation. When the float falls to its lower level the valves 30 and 32 are closed and opened respectively.



78) Family number: 60150025 (US2015233359A)

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Title:	POTENTIAL ENERGY TRANSLATION TO ROTATIONAL ACCELERATION MECHANISM
Priority:	US20130962162P 20131101 US20140530626 20141031

Family:

Publication number	Publication date	Application number	Application date
US2015233359 AA	20150820	US20140530626	20141031
US9689379 BB	20170627	US20140530626	20141031

Probable Assignee:	ICHARTS INC
Assignee(s):(std)**:**	HOLT PATRICK
Assignee(s):	ICHARTS INC
Inventor(s):(std)**:**	HOLT PATRICK

International class (IPC 8-9): F03G3/06 (Advanced/Invention)

CPC: F03G3/06

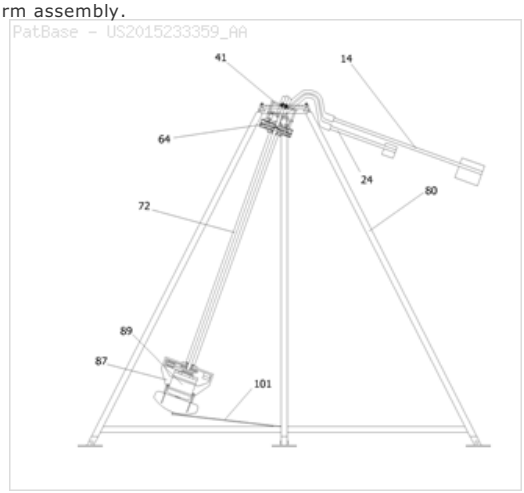
US class: 185/29 60/698

Classification Explorer

Cited documents: US3250140 A, US2008245182 AA, CA2504482 AA,

Forward Citations: US9926917, US9520758,

Abstract:
A mechanism to create rotational mechanical advantage from an acceleration field consisting of a gravity arm assembly (14) rotationally connected in a horizontal plane to a gimbal assembly (41). A powered action arm assembly (21) rotationally connected in a horizontal plane, adjacent to the first arm assembly, to the gimbal assembly (41). A counterweight arm assembly (72), connecting at one end to a gearbox assembly (64) and connecting at the opposite end to an attachment mounting assembly (87), all vertically connected to the gimbal assembly (41). A mounting stand assembly (80) to rotationally connect to the gimbal assembly (41). An electrical control assembly (100) to controllably power the action arm assembly. The gravity arm and action arm assemblies are balanced about the gimbal assembly by the counterweight arm assemblies. The action arm assembly rotates about the axis of the gravity arm assembly, creating an imbalance in the gimbal assembly, causing the gravity arm assembly to rotate, and the counterweight arm assembly to swing, all in the same direction of the action arm assembly.



79) Family number: 69743025 (US2019291826A)

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Title: A CONNECTION DEVICE FOR ESTABLISHING A CONNECTION BETWEEN A VEHICLE AND A FLUID OR ENERGY DISTRIBUTION SYSTEM

Priority: LU20160093297 20161109 WO2017EP76813 20171020

Family:

Publication number	Publication date	Application number	Application date
CA3043361 AA	20190509	CA20173043361	20171020
CN110035951 A	20190719	CN201780073884	20171020
EP3538428 A1	20190918	EP20170794916	20171020
KR20190079642 A	20190705	KR20197015269	20171020
LU93297 B1	20180514	LU20160093297	20161109
US2019291826 AA	20190926	US20170348753	20171020
WO18086844 A1	20180517	WO2017EP76813	20171020

Probable Assignee: IPALCO BV

Assignee(s):(std)**:** IPALCO BV

Assignee(s): WIDEGREN MICHAEL ; BLIXT DAVID ; EDELBERG MAGNUS

Inventor(s):(std)**:** BLIXT DAVID ; EDELBERG MAGNUS ; WIDEGREN MICHAEL

Agent(s): SMART AND BIGGAR; PRONOVEM; PRONOVEM LUXEMBOURG

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ 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 IR IS IT JO JP KE KG KH KM KN KP KR KW 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): B63B21/00 B63B27/24 B67D9/00 B67D9/02 (Advanced/Invention)

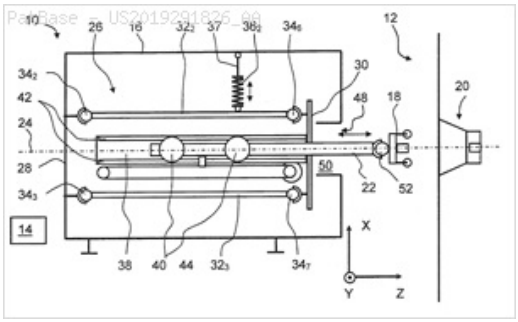
CPC: B67D9/02 B63B27/24 B63B2021/002 B67D9/00

Classification Explorer

Cited documents: WO8607326 A1, WO10015046 A1, WO04099061 A1, US3976100 A, US2004025772 AA,

Abstract:
A connection device for establishing a connection between a vehicle (**12**) and a fluid or energy distribution system (**14**) comprises: a main support structure (**16**); a connector head (**18**), for releasably connecting to a connection facility (**20**) on the vehicle; a support beam (**22**) having a longitudinal axis (**24**), a front-end supporting the connector head (**18**) and a rear end; and a support mechanism (**26**). This support mechanism (**26**) supports the rear end of the support beam (**22**) in the main support structure (**16**), so that the support beam (**22**) is movable along its longitudinal axis (**24**) and has two translational degrees of freedom that are perpendicular to its longitudinal axis (**24**). An articulation (**52**) with three rotational degrees of freedom is connected between the front-end of the support beam (**22**) and the connector head (**18**).

PatBase US2019291826_A1



80) Family number: 22051025 (US2900073A)

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Title:	WIRE COILING MACHINE
Priority:	US19540416528 19540316

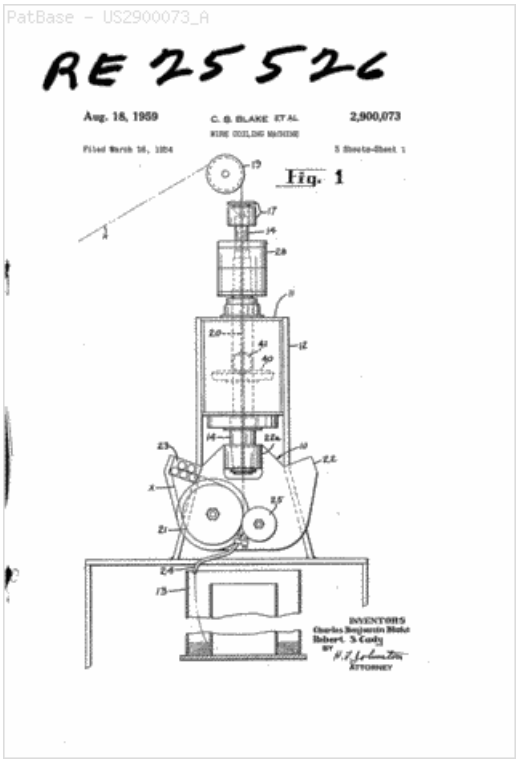
Family:

Publication number	Publication date	Application number	Application date
US2900073 A	19590818	US19540416528	19540316

Probable Assignee:	SCOVILL MFG CO
Assignee(s):(std)**:**	SCOVILL MANUFACTURING CO ; SCOVILL MFG CO
Assignee(s):	SCOVILL MANUFACTURING COMPANY
Inventor(s):(std)**:**	BENJAMIN BLAKE CHARLES ; CADY ROBERT S
Inventor(s):	BLAKE CHARLES BENJAMIN
International class (IPC 8-9):	B21C47/14 (Advanced/Invention); B21C47/02 (Core/Invention)
International class (IPC 1-7):	B21C47/02 B21C47/04 B21C47/14
CPC:	B21C47/143
European class:	B21C47/14C
US class:	242/361 72/160 72/257 72/66 72/95
Classification Explorer	
Cited documents:	US805265 A, US553935 A, US445965 A, US439114 A, US366383 A, US351839 A, US2669347 A, US2379801 A, US1653461 A, US1187827 A, US1103609 A,
Forward Citations:	US5238199, US5170653, US4754633, US3747869, US3395560, US3339395, US3128961, US3033484, AT396075,

Abstract:
(Claim 1) 1. Wire-drawing and coiling apparatus comprising a wire-_awing die, means for rotating said die to impart a rotating movement to the wire about its own longitudinal axis during the drawing operation, a capstan for puuing the vare through said die, the axis of said die and wire being substantially tangent to the surface of the capstan, means for bodily revolving said capstan about the axis of said wire and in the same direction as the rotating wire, means for applying power to the capstan to rotate th- same on its own axis while revolving about the axis of said wire, and adistributor for receiving the wire from the capstan and directing it outwardly to a coil of the desired diameter, and means for rotating said dis- tributor around the axis of said wire.

PatBase – US2900073_A



81) Family number: 15259026 (US2003179354A)

© PatBase

Title: MASK-HOLDING APPARATUS FOR A LIGHT EXPOSURE APPARATUS AND RELATED SCANNING-EXPOSURE METHOD

Priority:
JP19960093145 19960322
JP19960148585 19960520
JP19960289305 19961011
JP19960303682 19961029
JP19960303683 19961029
JP19960303684 19961029
US19970821529 19970321
US19970946735 19971009
US19990385963 19990830
US20000721758 20001127
US20030377737 20030304
US20030429868 20030506
JP20040363553 20041215

Family:

Publication number	Publication date	Application number	Application date
JP10116886 A2	19980506	JP19960289305	19961011
JP10135120 A2	19980522	JP19960303682	19961029
JP10135121 A2	19980522	JP19960303683	19961029
JP10135122 A2	19980522	JP19960303684	19961029
JP2005150759 A2	20050609	JP20040363553	20041215
JP3648847 B2	20050518	JP19960148585	19960520
JP3918202 B2	20070523	JP19960093145	19960322
JP9260271 A2	19971003	JP19960093145	19960322
JP9306832 A2	19971128	JP19960148585	19960520
US2003179354 AA	20030925	US20030377737	20030304
US2003197841 AA	20031023	US20030429868	20030506
US6888621 BB	20050503	US20030429868	20030506

Probable Assignee: NIKON CORP

Assignee(s):(std)**:** NIKON CORP ; NIPPON KOGAKU KK

Inventor(s):(std)**:** TOKUDA KENSHO ; NARUSHIMA HIROAKI ; MIZUTANI SHINJI ; YASUDA MASAHIKO ; TOKUDA NORIAKI ; ARAKI YASUO

International class (IPC 8-9): G03B27/42 G03B27/50 G03F1/14 G03F1/60 G03F7/20 G03F9/00 H01L21/027 H01L21/68 H01L21/683 (Advanced/Invention);
G03B27/42 G03B27/50 G03F1/14 G03F7/20 G03F9/00 H01L21/02 H01L21/67 (Core/Invention)

International class (IPC 1-7): G03B27/32 G03B27/42 G03B27/48 G03B27/50 G03B27/62 G03B27/64 G03F1/14 G03F7/20 G03F9/00 H01L21/027 H01L21/68

CPC: G03F7/70875 G03F7/70358 G03F7/707 G03F7/70858 G03B27/42 G03B27/50 G03F7/70866

European class: G03B27/42 G03B27/50 G03F7/20T16 G03F7/20T24 G03F7/20T26 G03F7/70F28 G03F7/70N2 G03F7/70P6 G03F7/70P6B G03F7/70P6B2

US class: 355/5 355/50 355/50S 355/53 355/53P 355/75 355/75P 355/76 355/76S 355/77 355/77S 430/5

JP class F-Term: 2H097 2H197 2H197/AA05 2H197/AA09 2H197/AA47 2H197/BA02 2H197/BA04 2H197/BA09 2H197/BA10 2H197/BA11 2H197/CA08 2H197/CA12 2H197/CD03 2H197/CD05 2H197/CD06 2H197/CD12 2H197/CD13 2H197/CD15 2H197/CD17 2H197/CD43 2H197/CD48 2H197/DB11 2H197/DC06 2H197/DC11 2H197/EA05 2H197/HA03 5F031 5F031/AA02 5F031/CA02 5F031/CA07 5F031/FF01 5F031/FF03 5F031/FF10 5F031/GG02 5F031/GG12 5F031/HA13 5F031/HA16 5F031/HA24 5F031/JA06 5F031/JA32 5F031/KA06 5F031/KA07 5F031/KK04 5F031/LA15 5F031/MA27 5F031/PA30 5F046 5F046/AA06 5F046/BA07 5F046/CA04 5F046/CC01 5F046/CC02 5F046/CC08 5F046/CC09 5F046/CC10 5F046/CD04 5F046/DB05 5F046/DC05 5F131 5F131/AA02 5F131/BA13 5F131/CA18 5F131/EA02 5F131/EA10 5F131/EA22 5F131/EA23 5F131/EA25

5F131/EB02 5F131/EB15 5F131/EB18 5F131/EB55 5F131/EB57 5F131/FA17 5F131/FA37 5F131/FA39 5F131/KA12 5F131/KA15 5F131/KA22 5F131/KA54 5F131/KB32 5F131/KB43 5F131/KB56 5F146 5F146/AA06 5F146/BA07 5F146/CA04 5F146/CC01 5F146/CC02 5F146/CC08 5F146/CC09 5F146/CC10 5F146/CD04 5F146/DB05 5F146/DC05 2H197/DB18 2H197/DB22 5F046/BA03 5F046/DA06 5F046/DA13 5F046/DA26 5F146/BA03 5F146/DA06 5F146/DA13 5F146/DA26 2H197/CB16 2H197/CC16 2H197/CD07 2H197/CD44 2H197/DB10 2H197/DB31 2H197/HA05 5F046/CB12 5F046/CB23 5F046/CB25 5F146/CB12 5F146/CB43 5F146/CB45 2H197/CD35 2H197/DC05 5F046/CC13 5F046/DB04 5F146/CC13 5F146/DB04 2H097/AB03 2H097/LA10 2H197/AA39 2H197/CD41 2H197/DB16 2H197/FA01 5F031/HA27 5F031/HA28 5F031/HA29 5F031/HA53 5F031/JA17 5F031/JA28 5F031/JA38 5F031/LA06 5F046/BA05 5F131/AA03 5F131/AA32 5F131/EB01 5F131/EB37 5F131/KA03 5F131/KA16 5F131/KB12 5F146/BA05 5F046/BA04 5F046/DA27 5F146/BA04 5F146/DA27 2H095 2H095/BA02 2H095/BB29 2H095/BB37 2H195 2H195/BA02 2H195/BB29 2H195/BB37 2H197/CD02 2H197/CD50 2H197/DC01 5F046/CC03 5F046/CC04 5F046/CC05 5F046/CC11 5F046/CC16 5F146/CC03 5F146/CC04 5F146/CC05 5F146/CC11 5F146/CC16

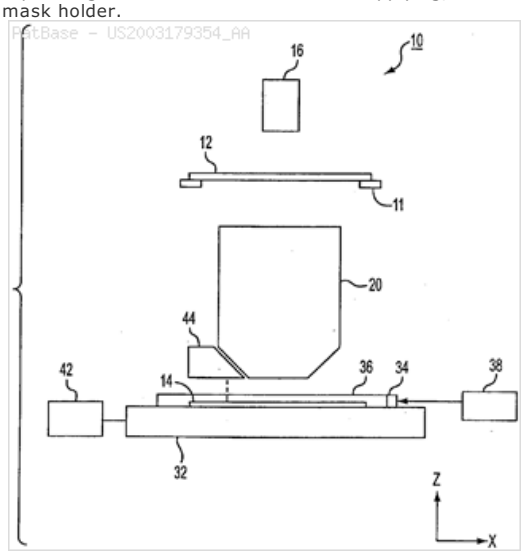
JP class F-Index: G03F7/20/521 H01L21/30/503/D H01L21/30/518 H01L21/68/N G03F9/00/H H01L21/30/515/F H01L21/30/516/B G03F7/20/501 H01L21/68/P H01L21/30/516/F G03F1/14/A G03F1/60

Classification Explorer

Cited documents: US6172738 BA, US6172738 B1, US5894056 A, US5883703 A, US5825463 A, US5742376 A, US5296893 A, US5253012 A, US5204711 A, US5164974 A, US4963921 A, US3488120 A, JP8264410, JP8181200, JP8022942, JP8008173, JP7326566, JP7307285, JP64066604, JP63194331, JP63014429, JP6130344, JP6077304, JP5291112, JP5102288, JP5069215, JP4147642, JP4027931, JP3029313,

Forward Citations: WO11018418, WO08007521, WO04044651, WO0072364, WO0065645, US9996001, US9946171, US9933707, US9891539, US9885959, US9885872, US9857599, US9823588, US9760014, US9684247, US9678437, US9678332, US9665015, US9653329, US9625826, US9625825, US9513568, US9478337, US9423698, US9377700, US9347037, US9341954, US9223202, US9164400, US9016234, US8947641, US8850980, US8834144, US8755030, US8686819, US8675177, US8647797, US8454344, US8379187, US8366434, US8358401, US8349241, US8264670, US8253929, US8215946, US8189167, US8142850, US8072700, US8016277, US8012395, US7936447, US7933000, US7906180, US7906058, US7884919, US7880872, US7826038, US7815424, US7803308, US7802978, US7798801, US7785526, US7785096, US7780893, US7733463, US7733462, US7727453, US7718031, US7714981, US7708542, US7691313, US7671969, US7670530, US7670529, US7641840, US7636999, US7635445, US7635263, US7630067, US7549141, US7547398, US7525636, US7504268, US7459701, US7394526, US7389930, US7355680, US7351503, US7342666, US7340962, US7338275, US7323130, US7298458, US7298456, US7292326, US7283198, US7196775, US7166393, US7150622, US7136150, US7122079, US7098996, US7098996, US7077992, US7019819, US6990870, US6982783, US6980282, US6919152, US6916585, US6885436, US6605814, US2017131638, US2015131073, US2014307246, US2014227783, US2014166203, US2013271945, US2013250271, US2011304418, US2011292361, US2011222039, US2011032496, US2010320628, US2010153059, US2010148397, US2010073661, US2009073402, US2008239276, US2008131795, US2008117391, US2008110861, US2008100819, US2008100818, US2008032157, US2007262326, US2007258081, US2007258076, US2007228295, US2007195306, US2007182947, US2007178704, US2007103667, US2007076184, US2007059608, US2006279721, US2006238728, US2006209283, US2006172549, US2006172031, US2006170902, US2006157444, US2006148368, US2006146313, US2006114432, US2006098185, US2006098184, US2006038973, US2006022049, US2006001194, US2005263077, US2005006343, US2004223131, US2004163563, US2004146792, US2004141163, US2004112861, US2004106051, US2004090611, US2004086793, US10473519, US10281632, US10241417, US10234770, US10132678, US10120291, US10101666, US10007194, TWI522292, TWI357096, TWI340876, SG120285, NL1027890, KR101015841, KR100901510, JP6447688, JP6434486, JP6390310, JP6294636, JP6219973, JP6035670, JP6025976, JP59093834, JP5200622, JP5058667, JP5021207, JP4953185, JP4829006, JP4791421, JP4753625, JP4719710, JP4695022, JP4640876, JP4580900, JP4570630, JP4528034, JP4309992, JP3535150, JP3356115, JP2017227914, JP2017022226, JP2016517526, JP2016510427, JP2015522843, JP2015095494, JP2015088746, JP2014134771, JP2014036023, JP2009260172, JP2009237442, JP2009224552, JP2008277579, JP2008021997, JP2008016510, JP2008007521, JP2007515773, JP2007300104, JP2007251133, JP2007005789, JP2006352115, JP2006350315, JP2006343427, JP2006339183, JP2006178318, JP2006003585, JP2004526988, JP2003500847, JP2003307719, JP2003131403, JP2001358193, JP2000331910, JP2000299370, JP2000021963, EP2465011, EP2397905, DE102009036953, DE102007033814,

Abstract:
An exposure apparatus for exposing a substrate with an image of a pattern formed on a mask, including an illumination system or irradiation for illuminating or irradiating the mask with exposure light. A projection optical system is included for projecting, onto the substrate, an image of the pattern illuminated by the exposure light. The mask is securely supported on a movable mask stage. In one example, a mask holder is provided for supporting the mask from below. A pressing member is also included for applying, from above, a prescribed force to the mask, outside of the points supported by the mask holder.



82) Family number: 43954026 (US2009272578A)

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Title: DUAL MOTOR SYSTEMS AND NON-ROTATING SENSORS FOR USE IN DEVELOPING WELLBORES IN SUBSURFACE FORMATIONS

Priority: US20080046329P 20080418 US20080104974P 20081013 US20090422084 20090410

Family:

Publication number	Publication date	Application number	Application date
US2009272578 AA	20091105	US20090422084	20090410
US8151907 BB	20120410	US20090422084	20090410

Probable Assignee: SHELL OIL CO

Assignee(s):(std)**:** MACDONALD DUNCAN CHARLES ; SHELL OIL CO

Assignee(s): SHELL OIL COMPANY

Inventor(s):(std)**:** MACDONALD DUNCAN CHARLES

Agent(s): SHELL OIL COMPANY; SHELL OIL CO

International class (IPC 8-9): E21B4/16 E21B4/20 E21B44/00 E21B47/00 E21B7/00 E21B7/06 (Advanced/Invention); E21B4/00 E21B44/00 E21B47/00 E21B7/00 E21B7/04 (Core/Invention)

CPC: E21B7/068 E21B3/00 E21B4/04 E21B47/06 C10G21/22 C10G21/28 C10G2300/207 C10G2300/301 C10G2300/302 C10G2300/308 C10G2300/4006 C10G2300/4012 C10G2300/42 C10G2300/807 C10G2400/02 E21B7/18 E21B10/003 E21B19/08 E21B21/00 E21B21/08 E21B36/001 E21B36/02 E21B36/04 E21B43/119 E21B43/2401 E21B43/2403 E21B43/243 E21B43/281 E21B43/30 E21B43/305 E21B47/022

European class: C10G21/22 C10G21/28 E21B10/00C E21B19/08 E21B21/00 E21B21/08 E21B36/00B E21B36/02 E21B36/04 E21B43/119 E21B43/243 E21B43/24B E21B43/24F E21B43/28B E21B43/30 E21B43/30B E21B47/022 E21B7/18

US class: 175/26 175/26P 175/40 175/40S 175/57 175/57S 175/61 175/61S 175/73 175/73S 175/95 175/95S

Classification Explorer

Cited documents: WO9901640, WO9723924, WO9619635, WO9506093, WO08048448, WO08033967, WO07098370, WO0181505, WO0120119, WO0019061, USRE39244 E, USRE39077 E, USRE35696 E, USRE30738 E, USRE30019 E, US94813 A, US8027571 BB, US8011451 BB, US7986869 BB, US7950453 BB, US7942203 BB, US7942197 BB, US7931086 BB, US7912358 BB, US7866388 BB, US7866386 BB, US7866385 BB, US7860377 BB, US7849922 BB, US7845411 BB, US7841425 BB, US7841408 BB, US7841401 BB, US7832484 BB, US7831134 BB, US7831133 BB, US7798221 BB, US7798220 BB, US7793722 BB, US7785427 BB, US7735935 BB, US7730947 BB, US7730946 BB, US7730945 BB, US7717171 BB, US7703513 BB, US7683296 BB, US7681647 BB, US7677314 BB, US7677310 BB, US7673786 BB, US7673681 BB, US7644765 BB, US7640980 BB, US7635025 BB, US7635024 BB, US7635023 BB, US7631690 BB, US7631689 BB, US7610962 BB, US7604052 BB, US760304 A, US7597147 BB, US7591310 BB, US7584789 BB, US7581589 BB, US7575053 BB, US7575052 BB, US7562707 BB, US7562706 BB, US7559368 BB, US7559367 BB, US7556096 BB, US7556095 BB, US7549470 BB, US7546873 BB, US7540324 BB, US7533719 BB, US7527094 BB, US7510000 BB, US7500528 BB, US7490665 BB, US7481274 BB, US7461691 BB, US7435037 BB, US7431076 BB, US7424915 BB, US7383877 BB, US7370704 BB, US7360588 BB, US7357180 BB, US7353872 BB, US7331385 BB, US7320364 BB, US7259688 BB, US7258752 BB, US7252151 BB, US7225866 BB, US7219734 BB, US7204327 BB, US7170424 BB, US7165615 BB, US7156176 BB, US7153373 BB, US7147059 BB, US7147057 BB, US7128153 BB, US7128150 BB, US7124584 BA, US7121342 BB, US7121341 BB, US7114880 BB, US7114566 BB, US7104319 BB, US7100994 BB, US7096953 BB, US7096942 BA, US7096941 BB, US7090013 BB, US7086468 BB, US7086465 BB, US7083006 BB, US7077199 BB, US7077198 BB, US7073578 BB, US7066257 BB, US7066254 BB, US7063145 BB, US7055602 BB, US7055600 BB, US7051808 BA, US7051807 BB, US7048051 BB, US7040400 BB, US7040399 BB, US7040398 BB, US7040397 BB, US7036583 BB, US7032809 BA, US7032660 BB, US7011154 BB, US7004251 BB, US7004247 BB, US6997518 BB, 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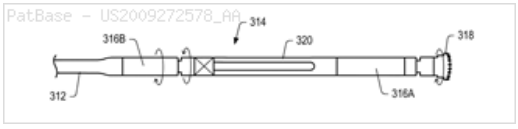
Abstract:
A method for forming a subsurface wellbore is disclosed. The method includes operating a drilling string in a first direction of rotation. A first motor located near the end of the drilling string is operated in a direction of rotation opposite that of the drilling string. A drill bit is rotated using a second motor that is coupled to the first motor.



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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 KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
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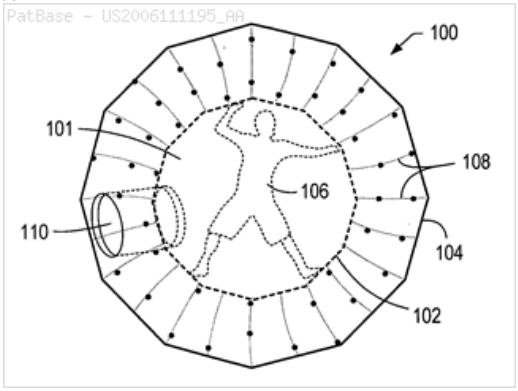
Forward Citations: WO17087715, WO14121395, WO11060927, WO10046646, WO09141588, WO09141588, WO08021803, USD855727, USD846479, USD844732, USD819156, USD819155, USD813337, USD809618, US9932552, US9878253, US9873035, US9682326, US9623339, US9597603, US9358472, US9220989, US9095780, US9061214, US8826824, US8777766, US8714346, US8663023, US8282497, US8251832, US8232103, US8210954, US8197352, US8162770, US8162769, US8136453, US8096892, US8079916, US8075413, US8070615, US8038542, US7942752, US7921601, US7918741, US7857704, US7828667, US7815514, US7811177, US7785207, US7780536, US7775896, US7775895, US7775894, US7766753, US7762900, US7762899, US7758435, US7740542, US7727077, US7597630, US7497784, US7491128, US7371183, US7371182, US2017043265, US2015190721, US2014216297, US2012173065, US2011152038, US2011006477, US2010160054, US2008038827, US2007207869, US2007207867, US2007207866, US2007204759, US2007197304, US2007066410, US2007060402, US2007051038, US2007033866, US2006178222, US2006052171, US10471299, US10441844, US10433612, US10426989, US10384138, US10376736, US10343017, US10293211, US10279212, US10272317, US10258828, US10252109, US10188890, KR20170134688, KR101869215, EP2666527, CN102781528, CN102781528,

Abstract:
An amusement ride system and method are described. In some embodiments, an amusement ride system may be generally related to water amusement attractions and rides. Further, the disclosure generally relates to water-powered rides and to a system and method in which participants may be more involved in a water attraction. An amusement ride system may include system for conveying a participant from a first source of water to a second source of water. The system may include one or more fluid jets. The fluid jets may function to produce a fluid stream having a predetermined velocity which is selectively greater, less than, or the same as a velocity of a participant at each of the fluid jet locations and are oriented tangentially with respect to the surface of the source of water so as to contact a participant and/or participant vehicle. An amusement ride system may include a system for controlling a participant flow rate through a multi path water amusement ride system. The system may include at least one gate mechanism which functions, upon activation, to inhibit a participant from entering one or more path choices. An amusement ride system may include a system for facilitating entry of a participant on a floatation device. The system may include one or more portions of water including a depth of water which allows a participant to more easily enter a floatation device.



84) Family number: 54085026 (IN03216CH2011A)

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Title: A GRAVITY ASSISTED SUSTAINABLE MICRO HYDROELECTRIC POWER GENERATION SYSTEM

Family:

Publication number	Publication date	Application number	Application date
IN03216CH2011 A	20130614	IN2011CH03216	20110919

Probable Assignee: DILIP DANIEL JAMES

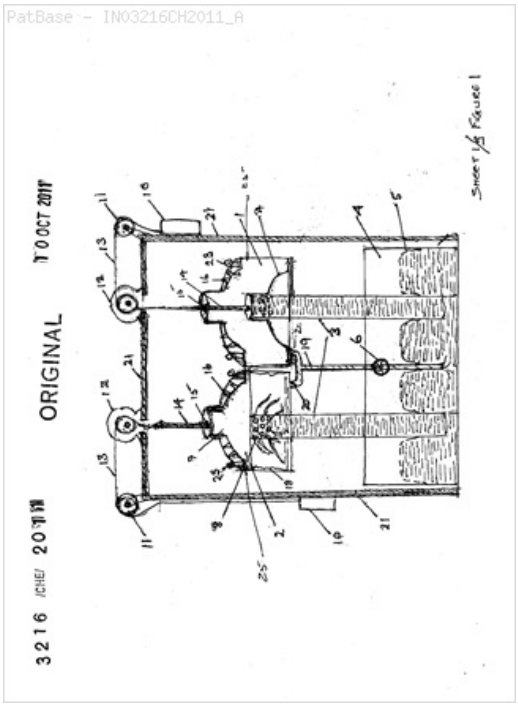
Assignee(s): DILIP DANIEL JAMES

Inventor(s): DILIP DANIEL JAMES

International class (IPC 8-9): F03B (Advanced/Invention)

Classification Explorer

Abstract:
A Clean, green completely new system for generating hydroelectric energy by lifting water through the action of atmospheric pressure and a vacuum and using that water to drop from a height through a pipe and generator to generate electricity, the water or other liquid used men returns to the lower tank, the same water is used again and again without any evaporation losses, the system uses minimum net energy to operate, based on the constant potential system as used in elevators and is pollution free.



85) Family number: 34286027 (US2010254212A) © PatBase

Title:	METHOD FOR RESONANT-VIBRATORY MIXING
Priority:	US20030443051P 20030127 US20040766558 20040126 US20070652159 20070110

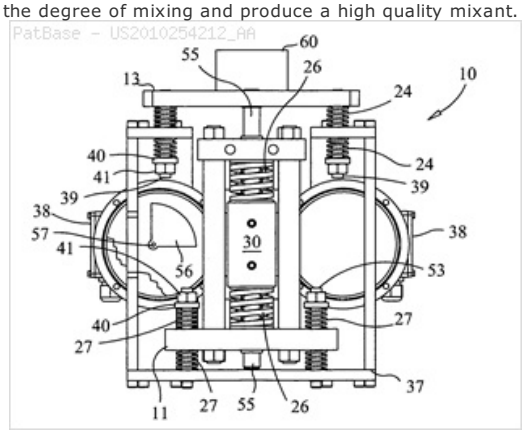
Family:

Publication number	Publication date	Application number	Application date
US2010254212 AA	20101007	US20070652159	20070110
US7188993 BA	20070313	US20040766558	20040126
US7866878 BB	20110111	US20070652159	20070110

Probable Assignee:	RESODYN ACOUSTIC MIXERS INC
Assignee(s):(std)**:**	COGUILL SCOTT L ; COOK AARON M ; FARRAR LAWRENCE C ; HOWE HAROLD W ; WARRINER JEREMIAH J
Assignee(s):	RESODYN ACOUSTIC MIXERS INC
Inventor(s):(std)**:**	COOK AARON M ; WARRINER JEREMIAH J ; COGUILL SCOTT L ; FARRAR LAWRENCE C ; HOWE HAROLD W
Agent(s):	ROBERT M HUNTER PLLC; ROBERT M
International class (IPC 8-9):	B01F11/00 B06B1/14 (Advanced/Invention)
CPC:	B01F11/0031 B06B1/161
European class:	B01F11/00C9 B06B1/16B
US class:	366/108 366/111 366/128 366/128P 366/212
Classification Explorer	
Cited documents:	US7270472 BB, US7188993 BA, US6579002 BA, US6263750 BA, US6250792 BA, US6213630 BA, US5979242 A, US5833362 A, US4972930 A, US4718473 A, US4619532 A, US4341126 A, US4288165 A, US3767168 A, US3583246 A, US3498384 A, US3215209 A, US3162910 A, US2653521 A, US2636719 A, US2353492 A, US2091414 A, US1908104 A, US1062709 A, JP9052039 A2, JP2002336787 A2, JP10034084 A2,
Forward Citations:	WO19173906, WO19173893, WO19102345, WO17161121, WO17161115, WO16122919, WO15119652, WO15004197, WO13181625, WO13178479, WO13164766, WO13144655, WO13135555, WO13057136, WO13057136, WO11015320, WO11015320, WO10150111, WO10150111, US9989499, US9913321, US9829588, US9808778, US9804051, US9777349, US9421504, US9381518, US9377713, US9359135, US9194852, US9155332, US8905624, US8877018, US8876367, US8789806, US8757864, US8657894, US8642241, US8568952, US8480052, US8394335, US7866878, US7816415, US7487958, US2017035937, US2016341629, US2015098855, US2015004702, US2014256818, US2014209599, US2013329514, US2013300019, US2013295246, US2013255190, US2013164664, US2012260581, US2012175489, US2012130015, US2010294113, US2010272620, US2010254212, US2009262597, US2009023821, US2007280036, US2007264156, US2006254869, US10472111, US10456760, US10335749, US10279081, US10226819, US10130924, US10046287, RU2540563, KR20130111443, JP6109941, JP2015527197, JP2015515858, JP2013130869, ITRM20090419, ITRM20090418, ITMO20120104, GB2561172, EP3536664, EP3459619, EP3331984, EP3082708, EP2864030, EP2845852, EP2844086, EP2825338, EP2768995, EP2669677, EP2669677, EP2647731, EP2647731, EP2638992, EP2638992, EP2584057, EP2584057, EP2461955, CN107983242, CN106693807, CN106693807, CN106582402, CN106582402, CN105056816, CN104270965, CN103890204, CN103890204, AU2016200141,

Abstract:
A method for mixing fluids and/or solids in a manner that can be varied from maintaining the integrity of fragile molecular and biological materials in the mixing vessel to homogenizing heavy aggregate material by supplying large amounts of energy. Variation in the manner of mixing is accomplished using an electronic controller to generate signals to control the frequency and amplitude of the motor(s), which drive an unbalanced shaft assembly to produce a linear vibratory motion. The motor may be a stepper motor, a linear motor or a DC continuous motor. By placing a sensor on the mixing vessel platform to provide feedback control of the mixing motor,

the characteristics of agitation in the fluid or solid can be adjusted to optimize the degree of mixing and produce a high quality mixant.



86) Family number: 33025027 (US2006111196A)

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Title:	ROLLABLE CARRIER RIDE
Priority:	US20040997791 20041124

Family:

Publication number	Publication date	Application number	Application date
US2006111196 AA	20060525	US20040997791	20041124
US7497784 BB	20090303	US20040997791	20041124

Probable Assignee:	WATER RIDE CONCEPTS INC
Assignee(s):(std)**:**	HENRY JEFFERY W ; WATER RIDE CONCEPTS INC
Assignee(s):	HENRY SCHOOLEY AND ASSOCIATES LLC
Inventor(s):(std)**:**	HENRY JEFFERY W ; HENRY JEFFERY WAYNE
Inventor(s):	HENRY JEFFERY
Agent(s):	MEYERTONS HOOD KIVLIN KOWERT AND GOETZEL PC; MEYERTONS ERIC B
International class (IPC 8-9):	A63G31/00 A63G31/10 (Advanced/Invention); A63G31/00 (Advanced/Non-invention); A63G31/00 (Core/Invention)
CPC:	A63G3/02 A63G21/18 A63G29/00
European class:	A63G29/00 A63G3/02 K63G21/18
US class:	441/65 472/117 472/128 472/129

Classification Explorer

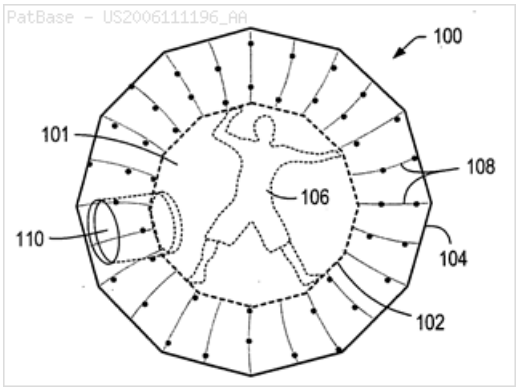
Cited documents:

WO9845006, WO9733668, WO9204087, WO9203201, WO07106717, WO07035524, WO07028043, WO07028042, WO07027841, WO07019278, WO06113936, WO06057970, WO05042124, WO0222227, WO0222226, WO0110184, USRE34407 E, USD269082 S1, USD229354 S1, USD204282 S1, USD190127 S1, US995945 A, US952673 A, US944407 A, US931863 A, US929972 A, US904848 A, US901435 A, US896940 A, US891388 A, US887082 A, US883441 A, US879283 A, US868736 A, US849970 A, US831149 A, US828689 A, US824436 A, US815211 A, US815210 A, US808487 A, US803465 A, US801945 A, US792422 A, US783425 A, US779464 A, US776936 A, US774917 A, US774274 A, US774209 A, US771322 A, US764675 A, US762566 A, US760503 A, US757286 A, US754698 A, US753449 A, US753311 A, US744880 A, US741964 A, US7371183 BB, US7371182 BB, US728894 A, US7285053 BB, US728303 A, US728246 A, US724757 A, US724040 A, US723968 A, US7229359 BB, US720014 A, US7179173 BB, US714717 A, US7029400 BB, US7004847 BB, US697891 A, US6976434 BB, US697202 A, US691353 A, US689114 A, US6830146 BA, US6796908 BB, US6773355 BA, US6758231 BA, US6708706 BA, US6702687 BA, US665765 A, US664179 A, US6634949 BA, US6604327 BA, US6569023 BA, US6561914 BB, US6553336 BA, US654980 A, US6533191 BA, US6488590 BB, US6475095 BA, US640439 A, US6375578 BA, US6362778 BB, US6354955 BA, US6336771 BA, US6280342 BA, US6272695 BA, US6265977 BA, US6261186 BA, US6237499 BA, US6210287 BA, US6195851 BA, US6186902 BA, US6162127 A, US6161771 A, US6146282 A, US6139382 A, US6115974 A, US6113506 A, US610548 A, US6083110 A, US6075442 A, US6045449 A, US604164 A, US6036603 A, US6006672 A, US5989126 A, US5978593 A, US5950253 A, US5927478 A, US5860364 A, US583121 A, US5820471 A, US5809701 A, US5791254 A, US5785592 A, US5779553 A, US576704 A, US5766082 A, US5761776 A, US5738590 A, US5735748 A, US5732635 A, US572426 A, US5716282 A, US5704294 A, US570016 A, US5685778 A, US5678956 A, US567861 A, US5669858 A, US5667445 A, US5664910 A, US566182 A, US5628584 A, US5613443 A, US5581954 A, US5564984 A, US5564859 A, US555049 A, US5540622 A, US5536210 A, US552713 A, US5513470 A, US5503597 A, US5499821 A, US5494729 A, US548256 A, US5482510 A, US5478281 A, US5453054 A, US5452678 A, US5439170 A, US5437463 A, US5433671 A, US5427574 A, US5426899 A, US5421782 A, US5421451 A, US540715 A, US5405294 A, US5403238 A, US5401117 A, US5393170 A, US5387158 A, US536441 A, US5320362 A, US5299964 A, US5271692 A, US5265802 A, US5265373 A, US5253864 A, US5236280 A, US5230662 A, US5224652 A, US5219315 A, US5218910 A, US5213547 A, US5194048 A, US5183437 A, US5171101 A, US5167321 A, US5152210 A, US5143107 A, US5137497 A, US5115908 A, US5073082 A, US5069443 A, US5069387 A, US5033392 A, US5022588 A, US5020465 A, US5011161 A, US5011134 A, US4984783 A, US4979679 A, US4963057 A, US4960275 A, US4954014 A, US4939358 A, US4905987 A, US485624 A, US4854256 A, US4850896 A, US4836521 A, US4817312 A, US4805897 A, US4805896 A, US4797027 A, US4792260 A, US4783861 A, US4778430 A, US4759545 A, US4696251 A, US4683686 A, US4576512 A, US4564190 A, US4545583 A, US4545574 A, US4543886 A, US4516943 A, US4501434 A, US4484836 A, US4484739 A, US4429867 A, US4392434 A, US4391201 A, US4376404 A, US435227 A, US4337704 A, US4305117 A, US4299171 A, US4278247 A, US4272093 A, US4225953 A, US4221170 A, US4205785 A, US419860 A, US4198043 A, US4196900 A, US4194733 A, US4175361 A, US4170943 A, US4149710 A, US4149469 A, US4063517 A, US4042252 A, US4001899 A, US3956779 A, US3934291 A, US3930450 A, US3923301 A, US3913332 A, US3890655 A, US3865041 A, US3861514 A, US3853067 A, US3830161 A, US3827387 A,

US3806156 A, US3779201 A, US3777835 A, US3690265 A, US3675259 A, US3610160 A, US3598402 A, US3534413 A, US3508405 A, US3507222 A, US3473334 A, US3456943 A, US3404635 A, US3390640 A, US3302413 A, US3299565 A, US3116925 A, US3114333 A, US3113528 A, US3066951 A, US3030895 A, US3003430 A, US3000022 A, US3000017 A, US2991726 A, US2888205 A, US2838022 A, US2738885 A, US2705144 A, US2535862 A, US2499470 A, US2498450 A, US2484466 A, US2146631 A, US2135230 A, US2064035 A, US2009904 A, US2007197304 AA, US2006258471 AA, US2006214805 AA, US2006142090 AA, US2006135274 AA, US2006111196 AA, US2006111195 AA, US2006052171 AA, US2005288111 AA, US2005090322 AA, US2005090321 AA, US2005090320 AA, US2005090319 AA, US2005090318 AA, US2005085306 AA, US2005034768 AA, US2003203760 AA, US2003190967 AA, US2002082097 AA, US2002072317 AA, US193516 A, US1926780 A, US1893167 A, US1859267 A, US1849226 A, US1783268 A, US1763976 A, US1648196 A, US1609922 A, US1607771 A, US1606854 A, US1606024 A, US1601483 A, US1591566 A, US1563855 A, US1551249 A, US1540635 A, US1520217 A, US1497754 A, US1448306 A, US1441126 A, US1440661 A, US142605 A, US1417570 A, US1399469 A, US1378635 A, US1320124 A, US1249455 A, US1230559 A, US1198749 A, US1195707 A, US1167993 A, US1159519 A, US1158295 A, US1124950 A, US1095965 A, US1063949 A, US1062838 A, US1056929 A, US1004174 A, NZ270146, EP1604712, EP1318864, DE893778, DE4243812 A1, DE129145, BE543055,

Forward Citations: WO18146501, WO16069494, WO14186895, WO12073263, WO12051686, USD855727, USD846479, USD844732, USD819156, USD819155, USD813337, USD809618, US9873035, US9844732, US9839856, US9817443, US9672716, US8663023, US8282497, US8251832, US8210954, US8197352, US8162769, US8096892, US8079916, US8075413, US8070615, US7942752, US7921601, US7857704, US7828667, US7815514, US7811177, US7789804, US7785207, US7780536, US7775896, US7775895, US7775894, US7766753, US7762899, US7758435, US7727077, US7642921, US7546211, US7497784, US7371183, US2011006477, US2010314280, US2010160054, US2009234666, US2009027211, US2008065354, US2007197304, US2007066410, US2007051038, US2007033866, US2006178222, US2006052171, US10471299, US10463171, US10441844, US10433612, US10426989, US10384138, US10376736, US10343017, US10293211, US10279212, US10272317, US10258828, US10252109, US10188890, RU176036, ITTO20120677, CN105263593,

Abstract:
An amusement ride system and method are described. In some embodiments, an amusement ride system may be generally related to water amusement attractions and rides. Further, the disclosure generally relates to water-powered rides and to a system and method in which participants may be more involved in a water attraction. In some embodiments, an amusement ride system may include a rollable carrier. The rollable carrier may include an exterior rollable surface and an inner area. The inner area may include a participant container. In some embodiments, an amusement ride system may include a water path system. The water path system may function to substantially contain the rollable carrier such that the rollable carrier will remain in the water path system while rolling. In some embodiments, a rollable carrier may function to roll in a water path system while containing a participant in the participant container.



87) Family number: 21648027 (US2735057A)

© PatBase

Family:	Publication number	Publication date	Application number	Application date
	US2735057 A	19560214		00000000

International class (IPC 8-9): H02P25/26 (Advanced/Invention); H02P25/16 (Core/Invention)

International class (IPC 1-7): H02P1/36

CPC: H02P25/26

European class: H02P25/26

US class: 318/286 318/474 318/826 338/84

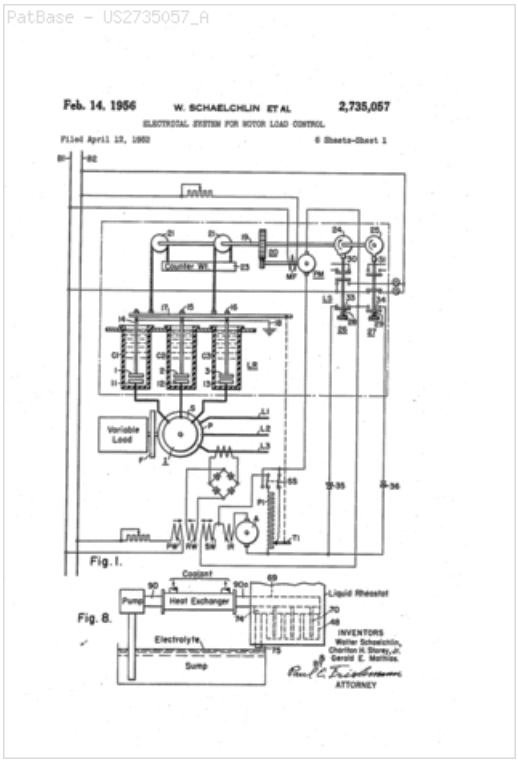
Classification Explorer

Cited documents: US2377286 A, US2367025 A, US2205220 A, US1669132 A, US1533253 A,

Forward Citations: US4232998, US3108243, US3096497, US3021789, US3003130, JP3070451, EP0280803, EP0280803,

Abstract:
(Claim 1) 1. In a motor torque control system, in combination, a wound-rotor induction motor, having primary and secondary windings, mechanically coupled to a variable load, a liquid rheostat having fixed electrodes connected to the motor secondary windings, movable electrodes for adjusting the resistance value of the liquid rheostat, supply conductors connected to the motor primary windings, a direct current pilot motor for operating the movableelectrodes, a regulating direct-current generator having an output circuit, an adjustable pattern tleld, an adjustable regulating field, and a self-exciting field; a potentiometer connected across said output circuit and having an adjustable tap, a current transformer interconnected with a sup» ply conductor, a rectiier connected to the output of the current transformer to thus rectify the output to produce a direct current as a function of the primary winding load current, circuit means for connecting the regulating field to the rectifier, said regulating iield and pattern Held being wound to produce oléposing effects and the adjustment being such that for a selected load of the induction motor the direct-current output voltage will be iero, means connecting said adjustable tap to bedriven in dependence of operation of said pilot motor, and circuit means including said adjustable tap for so connecting the direct-current pilot motor to said potentiometer that the direction of rotation and the speed of the pilot motor Will be a function of the polarity and magnitude of the tapped voltage of said potentiometer.

PatBase - US2735057_A



88) Family number: 20830027 (US3067572A)

© PatBase

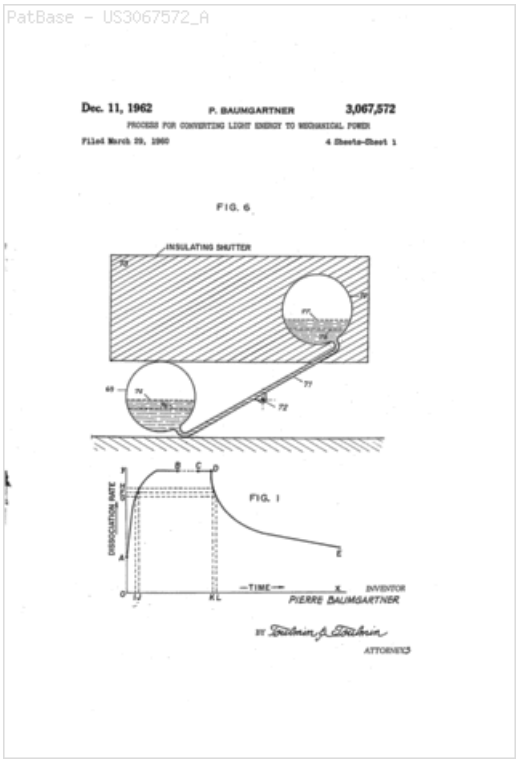
Title:	PROCESS FOR CONVERTING LIGHT ENERGY TO MECHANICAL POWER
Priority:	FR19590791173 19590403

Family:

Publication number	Publication date	Application number	Application date
BE589297 A	19601003	BE19600589297	19600401
FR1295332 A	19620608	FR19590791173	19590403
GB891266 A	19620314	GB19600011666	19600401
US3067572 A	19621211	US19600018305	19600329

Probable Assignee:	IFP ENERGIES NOUVELLES
Assignee(s):(std)**:**	IFP ENERGIES NOUVELLES ; INST FRANCAIS DU PETROL ; INST FRANCAIS DU PETROLE
Assignee(s):	INSTITUT FRANCAIS DU PETROLE DES CARBURANTS ET LUB ; INSTITUT FRANCAIS DU PETROLE DES CARBURANTS ET LUBRIFIANTS ; FRANCAIS DU PETROLE DES CARBURANTS ET LUBRIFIANTS INST
Inventor(s):(std)**:**	BAUMGARTNER PIERRE ; PIERRE BAUMGARTNER
International class (IPC 8-9):	F03G6/00 F03G7/00 (Advanced/Invention); F03G6/00 F03G7/00 (Core/Invention)
International class (IPC 1-7):	F03G7/02
CPC:	F03G6/00 F03G7/00 Y02E10/46
European class:	F03G6/00 F03G7/00 Y02E10/46
US class:	60/524
Classification Explorer	
Cited documents:	US412547 A, US2740626 A, US2083654 A, US1916235 A, US1911456 A, US1911426 A, US1343577 A, IT444804 A, CH49964 A,
Forward Citations:	WO12172278, WO12172278, WO04086100, US8650877, US5628881, US5552675, US3577734, US3441482, US2010294921, US2005131373, US2004256539, GB2128321, FR2405379, EP1611465, EA013571, CN102736245,

Abstract:
891,266. Venetian blinds. INSTITUT FRANCAIS DU PETROLE, DES CARBURANTS ET LUBRIFIANTS. April 1, 1960 [April 3, 1959], No. 11666/60. Class 20(3) [Also in Group XXVI] A luminous intensity regulator comprises space enclosing means which absorb luminous radiation to an insignificant degree, which space contains nitrosyl chloride, associated with at least one movable part and connected mechanically to the control means of a regulable obturating device. The strips 62 of a Venetian blind supported by flexible vertical strips 63, 64 are inclined in accordance with light intensity by means of a transparent reservoir 1 filled with gaseous nitrosyl chloride which is photochemically dissociated under the effect of light to increase in volume and pressure to move a piston 3 in a cylinder 2 connected to the reservoir. The piston operates a rod 4, pivoted lever 60 and a flexible cable 68 connected over a pulley 65 to the strips 63, 64 and stretched by a weight 67.



89) Family number: 65134029 (US2018243839A) © PatBase

Title: A CHUCK FOR A HIGH PRECISION MACHINE TOOL AND METHOD FOR MAKING A MULTI-CAVITY DIE OR MOULD

Priority: WO2015EP70034 20150902

Family:

Publication number	Publication date	Application number	Application date
CN108367366 A	20180803	CN201580083159	20150902
EP3344411 A1	20180711	EP20150771512	20150902
HK1257699 A1	20191025	HK20190100067	20190103
JP2018529533 T2	20181011	JP20180511612T	20150902
US2018243839 AA	20180830	US20150756015	20150902
WO17036523 A1	20170309	WO2015EP70034	20150902

Probable Assignee: WSL

Assignee(s):(std)**:** WIELANDTS UPMT ; WSL

Inventor(s):(std)**:** WIELANDTS MARC

Agent(s): GEVERS PATENTS; CHINAHONGKONG IP LTD; ASAMURA PATENT OFFICE PC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN 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 IR 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 PA PE PG PH PL PT QA RO RS RU RW SA 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

International class (IPC 8-9): B23B B23B31/28 B23B31/30 B23B31/36 B23B5/00 B23Q11/00 B24B41/06 (Advanced/Invention)

CPC: B23B2250/04 B23B31/36 B23B31/28 B23B31/307 B24B41/061 B24B19/02 B24B41/068 Y10T279/11 Y10T279/14 Y10T279/23 Y10T29/49998

US class: 1/1 279/3

JP class F-Term: 3C011 3C032 3C032/GG14 3C032/GG15 3C045 3C045/CA30 3C045/DA30

JP class F-Index: B23B31/36/C B23B5/00/Z B23Q11/00/B

Classification Explorer

Cited documents: US7434299 BA, US5135242 A, US3685845, US2013140274 AA, US2004113376 AA, JP6170624, JP60141443, JP58087442, JP51054886 U1, JP358335, JP2014503369 T2, JP2011178162, JP2010234460, JP2005324287, JP2004042252, JP2001347406, JP11179601, DE202013101345 U, DE19531104 A1,

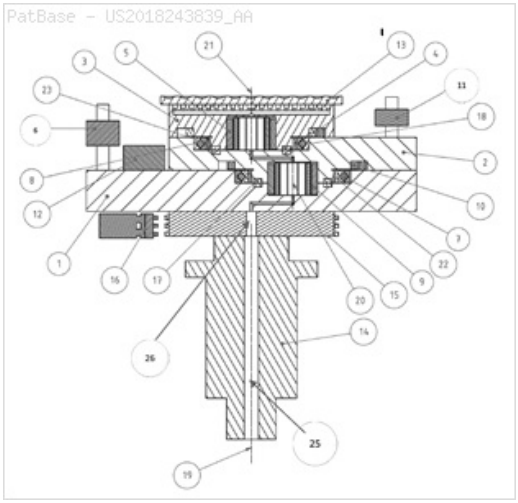
DE102013220400 A1

CN2894900 Y, CN103353627 A, CN101542137 A,

Forward Citations: US2018229312, US10213842,

Abstract:
A chuck for a machine tool having a rotation spindle with a main axis of rotation. The chuck comprises a base plate, a first rotatable plate eccentrically mounted on the base plate, a second rotatable plate eccentrically mounted on the first rotatable plate, balancing means for aligning a principal axis of inertia of the chuck with the main axis of rotation and a holding mechanism. The chuck is provided with an actuating mechanism for angularly displacing the first rotatable plate around a first rotation axis over a first angle of

rotation and/or the second rotatable plate around a second rotation axis over a second angle of rotation such that the position of the object with respect to the main axis of rotation can be altered.



90) Family number: 25078029 (US3318257A)

© PatBase

Title:	Pasture pump for watering cattle
Priority:	DE1964N025810 19641112

Family:

Publication number	Publication date	Application number	Application date
BE672131 A	00000000		00000000
DE1196896 B	19650715	DE1964N025810	19641112
DK115963 B	19691124	DK19650005828	19651112
GB1060349 A	19670301	GB19650047990	19651111
NL6514719 A	19660513	NL19650014719	19651112
US3318257 A	19670509	US19650507451	19651112

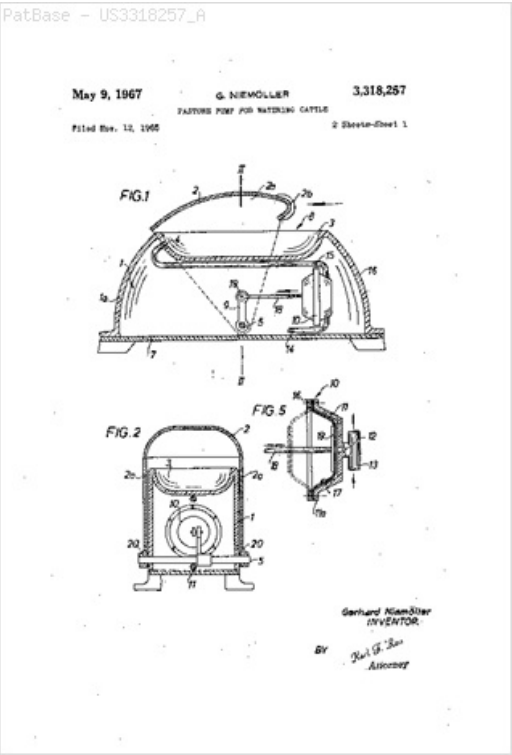
Probable Assignee:	NIEMOELLER G
Assignee(s):(std)**:**	GERHARD NIEMOELLER ; GERHARD NIEMOLLER ; NIEMOELLER G
Inventor(s):(std)**:**	GERHARD NIEMOLLER ; NIEMOELLER G ; NIEMOELLER GERHARD
Inventor(s):	NIEMOLLER GERHARD ; GERHARD NIEMOELLER
International class (IPC 8-9):	A01K7/02 (Advanced/Invention); A01K7/00 (Core/Invention)
International class (IPC 1-7):	A01K7/02 B67D5/04
CPC:	A01K7/022
European class:	A01K7/02D
US class:	119/75 119/76

Classification Explorer

Cited documents:	US2891509 A, FR1312041 A, DE1895892 U, DE1771797 U, DE1077912 A,
Forward Citations:	WO9928232, US6776121, US3515099, US2003056732, DE3836189, DE19753286, DE19753286,

Abstract:
1,060,349. Animal drinking appliances. G. NIEMILLER. Nov. 11, 1965 [Nov. 12, 1964], No. 47990/65. Heading A1M. [Also in Division F1] An animal watering trough 3 is supplied with water by means of a diaphragm pump 10 actuated by a cover member 2, moved by the animal to gain access to the trough. The cover member is provided with arms (2a), Fig. 2 (not shown), connected to a shaft (5) mounted in bearings in the walls of the housing (1), which shaft carries a lever arm 9 pivotally connected to diaphragm actuating rod 18. The delivery strokes of the diaphragm are produced by a spring or counterweight (not shown). The material and have a base (22), Fig. 3 (not housing 1 and trough 3 may be of plastics (shown), of metal to increase stability.

PatBase - US3318257_A



91) Family number: 57476030 (IN00700DE2013A)

© PatBase

Title: SLING COMPRESSOR

Family:

Publication number	Publication date	Application number	Application date
IN00700DE2013 A	20140926	IN2013DE00700	20130312

Probable Assignee: SRIL PNEUMATICS

Assignee(s): SRIL PNEUMATICS

Inventor(s): KUMAR VINOD

International class (IPC 8-9): F02D (Advanced/Invention)

Classification Explorer

Abstract:
The present invention relates to an improved system for reciprocating mechanism of compressors and/or engines for getting better power/fuel efficiency. Herein, multiple cylinders or compression chambers are used in a single line, by placing the biggest cylinder or compression chamber on the opposite side of pivot and then smaller one placing towards the pivot in reduced sizes and so on. This system makes sure that all the neighboring cylinders or compression chambers stock lengths are in a special location ratio from the pivot position so as to obtain maximum efficiency.

92) Family number: 2363031 (US4430924A)

© PatBase

Title: PETROLEUM PUMPING UNIT

Priority: VE19800102112 19801021 US19810297261 19810828

Family:

Publication number	Publication date	Application number	Application date
CA1170500 A1	19840710	CA19810388327	19811020
US4430924 A	19840214	US19810297261	19810828

Probable Assignee: HYDROWELL SA

Assignee(s):(std)**:** DUNN RICHARD P ; GARRELS WILBUR D ; HYDROWELL SA

Assignee(s): HYDROWELL SA A CORP ; HYDROWELL SA CENTRO EMPRESSARIAL MIRANDO PH C AV ; HYDROWELL A CORP OF VENEZUELA SA ; HYDROWELL CENTRO EMPRESSARIAL MIRANDO PH C AV SA

Inventor(s):(std)**:** DUNN RICHARD P ; GARRELS WILBUR D

International class (IPC 8-9): F04B47/02 (Advanced/Invention); F04B47/00 (Core/Invention)

International class (IPC 1-7): F01B15/00 F01L25/08 F04B47/02 F15B13/06

CPC: F04B47/02 Y10T74/2156

European class: F04B47/02

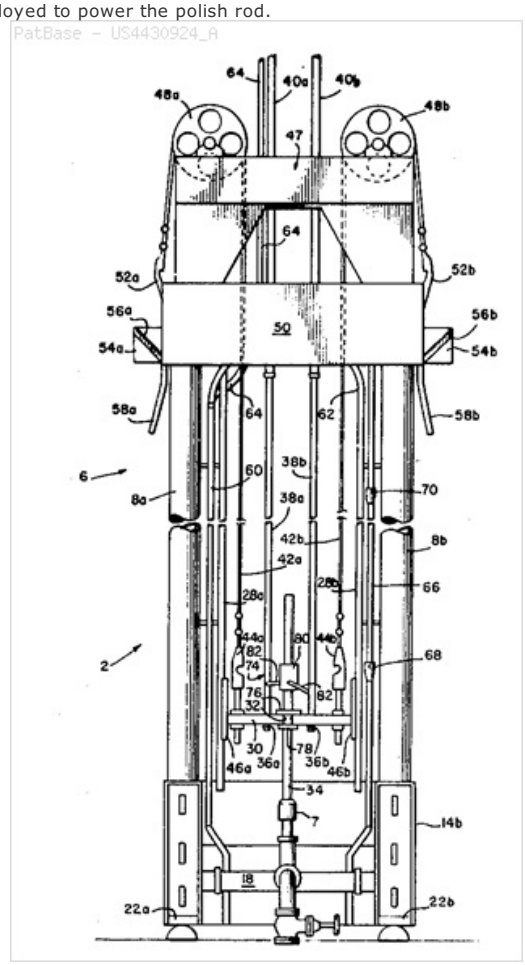
US class: 60/369 74/590 91/275 91/277 91/533 92/118 92/161

Classification Explorer

Cited documents: US4201115 A, US4114375 A, US3971213 A, US3782117 A, US3777491 A, US3535985 A, US3153387 A, US3128675 A, US2683424 A, US2644307 A, US2268945 A, US2073809 A, US1845176 A,

Forward Citations: US9617837, US8776627, US8235107, US7762321, US7584784, US7340989, US5281109, US5018350, US4761120, US4674357, US4660426, US2013291668, US2011014064, US2009194291, US2008099211, US2007261841, US2006027094,

Abstract:
A petroleum pumping unit which is especially suitable for use in remote oil fields and under unpredictable pumping conditions is disclosed. The petroleum pumping unit of the present invention, which is easily movable between a folded, collapsed position for storage and shipment and an erect position for pumping operations, includes a horizontal support platform on which is pivotally mounted a mast assembly including a pair of masts spaced outwardly from the centrally positioned well polish rod. The polish rod is engaged by a notch in a horizontal, vertically movable bridle and is powered by at least one pair of flexibly mounted hydraulic cylinders and associated piston rods attached to the bridle and positioned between the polish rod and the masts and parallel thereto. Vertical movement of the bridle and, therefore, the stroke of the polish rod is defined by upper and lower limit switches which are actuated by actuating means on the bridle. A counterweight support box which surrounds the masts and is vertically movable thereon is provided to assist the cylinders in powering the polish rod. Tapered weight brackets including diagonal projecting ridges engage notched counterweights which are held in place by gravity and prevented from contacting the mast by weight guards. The counterweight box may be eliminated and a plurality of spaced cylinders employed to power the polish rod.



93) Family number: 48928031 (US7946113B)

© PatBase

Title: OCEAN WAVE ELECTRICITY GENERATOR APPARATUS

Priority: US20060876921P 20061222 US20070999058 20071203

Family:

Publication number	Publication date	Application number	Application date
US7946113 BA	20110524	US20070999058	20071203

Probable Assignee: BISHOP WAYNE LEONARD

Assignee(s):(std)**:** BISHOP WAYNE LEONARD

Inventor(s):(std)**:** BISHOP WAYNE LEONARD

International class (IPC 8-9): F16D31/02 (Advanced/Invention)

CPC: F03B13/1885 F05B2240/40 Y02E10/38

European class: F03B13/18H R05B240/40 Y02E10/38

US class: 290/42 290/53 60/398 60/497 60/507

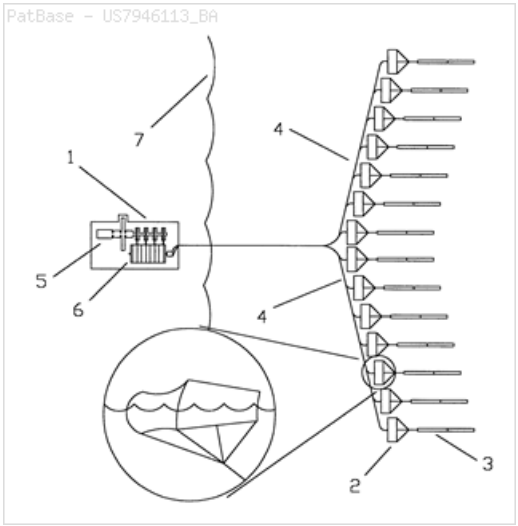
Classification Explorer

Cited documents: US7134283 BB, US6711897 BB, US6392314 BA, US6269636 BA, US5359229 A, US4672222 A, US4418286

A, US4285196 A, US4284902 A, US4249639 A, US4228360 A, US3965365 A, US3961480 A, US3952517 A, US3930168 A, US3808445 A, US3297300 A, US1701146 A, US1318469 A, US1170938 A,

Forward Citations: WO18226152, US9644601, US9624900, US9476400, US8963358, US8952560, US8946920, US8946919, US8916987, US8629572, US2013285384, US10253747, US10047717, US10011910,

Abstract:
An electricity generating or other power distributing device that utilizes the energy stored in ocean waves as they approach the shoreline. A series of buoys, which are thus struck by said waves are thrust upward and outward, operating hydraulic pumps. Fluid is pumped into a rotator that lifts a plurality of weights contained in deep silos within the earth. The cable devices connected to these weights are threaded around, and thus rotate a series of clutches, transmissions and flywheels, which provide a constant rotational output. This output can be attached to an A/C generator, or any other device requiring a constant force and rotation to operate properly.



94) Family number: 11165032 (US5921074A)

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Title: Pivotless mechanical crop harvester

Priority: US19960751627 19961118 WO1997US20796 19971113

Family:

Publication number	Publication date	Application number	Application date
AU199854379 A1	19980610	AU19980054379	19971113
CA2272550 AA	19990520	CA19972272550	19971113
CA2272550 C	20050614	CA19972272550	19971113
EP0951211 A1	19991027	EP19970948288	19971113
US5921074 A	19990713	US19960751627	19961118
WO9821933 A1	19980528	WO1997US20796	19971113

Probable Assignee: FMC TECHNOLOGIES INC

Assignee(s):(std)**:** FMC CORP

Assignee(s): FMC TECHNOLOGIES INC ; ORLANDO FRANKLIN PAUL ; UNION BANK OF CALIFORNIA NA ; WESTSIDE EQUIPMENT CO ; SCHULTZ DENNIS RAYMOND ; SCOTT PHILLIP RAY ; AMERICA GRAPE HARVESTERS INC ; AMERICAN GRAPE HARVESTERS INC ; CALIFORNIA TOMATO MACHINERY LLC

Inventor(s):(std)**:** SCOTT PHILLIP RAY ; ORLANDO FRANKLIN PAUL ; SCHULTZ DENNIS RAYMOND

Inventor(s): PHILLIP RAY SCOTT ; FRANKLIN PAUL ORLANDO ; DENNIS RAYMOND SCHULTZ

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; SIM AND MCBURNEY

Designated states: AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SL SZ TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8-9): A01D46/28 (Advanced/Invention); A01D46/00 (Core/Invention)

International class (IPC 1-7): A01D46/26 A01D46/28

CPC: A01D46/28

European class: A01D46/28

US class: 56/330 56/340.1

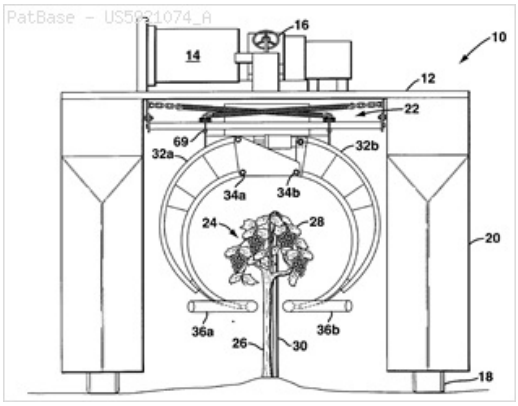
Classification Explorer

Cited documents: US5495708 A, US5074108 A, US4982558 A, US4793128 A, US4432190 A, US4418521 A, US4336682 A, US4286426 A, FR2522246 A1, FR1597896 A, EP0266259 A1,

Forward Citations: WO14149491, WO09016640, WO09016640, WO0135721, WO0135721, US9730388, US9549502, US9504201, US8069641, US7921628, US7748206, US7748205, US7694503, US7694502, US7581375, US6745551, US6672044, US6155036, US2010139234, US2010050585, US2009308046, US2007000224, US2006053765, US2005034441, US10165729,

Abstract:
A self-propelled mechanical harvester for harvesting above ground crops includes a shaker assembly that operates in a single plane. The shaker will oscillate from side to side in the plane without pivoting of the plane around a pivot point. The assembly includes crop

contacting rods in one embodiment and crop contacting striker bars in another embodiment. The force used to impart the oscillatory motion to the shaker is supplied by a force balance shaker using two weights operating at the same frequency of rotation, in opposite directions. The weights are timed and maintained in time by a geared relationship to produce maximum force laterally outboard and no force in a direction corresponding to the machine's direction of travel.



95) Family number: 16444032 (DE8234774U1)

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Title:	RUEHRWERKSMUEHLE Stirred mills (Machine translation)
Priority:	DE19820034774U 19821210

Family:

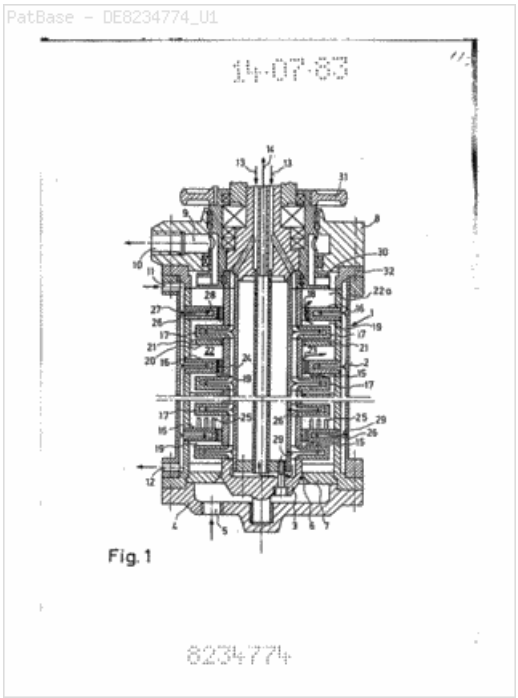
Publication number	Publication date	Application number	Application date
DE8234774 U1	19831222	DE19820034774U	19821210

Probable Assignee:	GEBRUEDER BUEHLER AG 9240 UZWIL CH
Assignee(s):	GEBRUEDER BUEHLER AG 9240 UZWIL CH
International class (IPC 8-9):	B02C17/16 B02C17/18 B02C17/24 (Advanced/Invention); B02C17/00 B02C17/16 (Core/Invention)
International class (IPC 1-7):	B02C17/16 B02C17/18 B02C17/24

Classification Explorer

Abstract:
Source: DE8234774U1 [DE] (Claim 1) RUEHRWERKSMUEHLE Schutzansprueche 1. Ruehrwerksmuehle mit einem eine Einlass-und eine Auszlass-Trennvorrichtung mit -Ein- bzw. Auslassoeffnung fuer das Mahlgut aufweisenden, etwa zylindrischen oder konischen Mahlbehaelter, in dem das Mahlgut mit Hilfe von mittels eines Ruehrwerksrotors bewegten Mahlkoerpern vermahlbar ist, dadurch gekennzeichnet, dass an dem Mahlbehaelter (2) ein Krafterzeuger (3; 64; 135; 145) fuer eine von wenigstens einer Trennvorrichtungsoeffnung ! 6; 144) wegweisende, im wesentlichen nur die Mahlkoerper (15) belastende Kraft angeordnet ist.

Machine translation: (Claim 1) Schutzansprueche first stirred mills Stirred mill with an inlet and an Auszlass isolating device with inputs and outlet for the ground material having, for example cylindrical or conical grinding container in which the ground material with the help of moving through a Ruehrwerksrotors grinding media grindability, is characterized in that at the Cutting container (2) a power generator (3, 64, 135, 145) for at least one of a Trennvorrichtungsoeffnung! 6, 144) groundbreaking, essentially only the grinding media (15) is arranged loading force.



96) Family number: 20191032 (US2774498A)

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Title: MATERIALS HANDLING FORK TRUCK

Priority: DE1954C008757 19540119 DE1954C011649 19540119 US19540465354 19541028

Family:

Publication number	Publication date	Application number	Application date
BE532899 A	00000000		00000000
CH324368 A	19570915		19541028
DE1025335 B	19580227	DE1954C008757	19540119
DE1031725 B	19580604	DE1954C011649	19540119
FR1093503 A	19550505		19531104
US2774498 A	19561218	US19540465354	19541028

Probable Assignee: JAQUES CORDES

Assignee(s):(std)**:** CORDES JACQUES ; JACQUES CORDES ; JAQUES CORDES ; JEAN DESOR

Inventor(s):(std)**:** CORDES JACQUES ; CORDES JAQUES ; JACQUES CORDES ; JEAN DESOR

Inventor(s): DESOR JEAN

International class (IPC 8-9): B66F9/06 B66F9/075 B66F9/14 (Advanced/Invention); B66F9/06 B66F9/075 B66F9/12 (Core/Invention)

International class (IPC 1-7): B60K1/00 B66F9/06 B66F9/14

CPC: Y10S180/908 B66F9/06 B66F9/07554 B66F9/145

European class: B66F9/06 B66F9/075H B66F9/14 B66F9/14F3

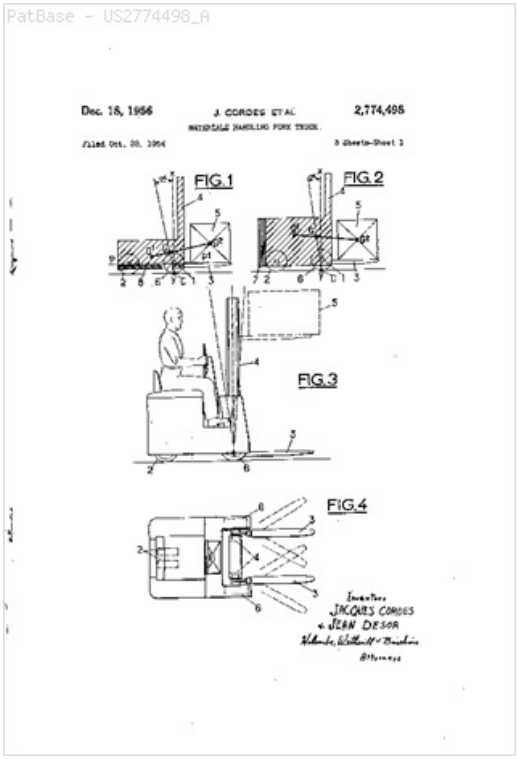
US class: 180/54.1 180/68.5 180/908 187/237 414/665

Classification Explorer

Cited documents: US2706062 A, US2693250 A, US2613828 A, US2605918 A, US2561300 A, US2536068 A, US2504885 A, US2271624 A, US2234851 A, DE890624 A, DE818772 A, DE815621 A,

Forward Citations: US5848668, US4514127, US4322094, US4050599, US4026378, US3901397, US3786952, US3367441, US3275092, US3261422, US3219219, US3094226, US3040922, US3006490, DE3007899, DE1406988,

Abstract:
(Claim 1) 1. Material handling fork truck comprising an underslung horizontal platform of relatively substantial weight embodied in the essential structure of said truck, the upper face of which platform lies in place somewhat below the longitudinal axis of the front wheel axle, means mounted on said platform for controlling the lifting and handling operations load holding means comprising a fork having pivoted prongs; an apron member for supporting said pivoted _prongs, this apron member comprising two sleeve members provided with transverse slots; two pron._s the journals of which are force driven in said sleeves, these joi-irnals bein.- provided with slots matin.with the, aforesaid slots; a pair of semi-cylindrical bushings and a lockin.- cap with a friction washer therebetween for holding in place said journals; a laminated spring extending through the slots of the sleeve members and the slots of the journals, this laminated spring connecting the two prongs; means for tensioning or loading the spring which, under normal conditions, holds the prongs in parallel relationship.



97) Family number: 13212032 (GB2282085A)

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Title: Paint supply apparatus

Priority: GB19930017162 19930818 GB19940012831 19940625

Family:

Publication number	Publication date	Application number	Application date
GB2282085 A1	19950329	GB19940016772	19940818
GB9317162 A0	19931006	GB19930017162	19930818
GB9412831 A0	19940817	GB19940012831	19940625
GB9416772 A0	19941012	GB19940016772	19940818

Probable Assignee: GRIFFITHS JOHN S

Assignee(s):(std)**:** GRIFFITHS JOHN A ; GRIFFITHS JOHN S ; GRIFFITHS JOHN STEPHEN ; SZEMETI ROBIN M ; SZEMETI ROBIN MICHAEL

Assignee(s): ROBIN MICHAEL SZEMETI ; JOHN STEPHEN GRIFFITHS

Inventor(s):(std)**:** GRIFFITHS JOHN STEPHEN ; SZEMETI ROBIN MICHAEL

Inventor(s): ROBIN MICHAEL SZEMETI ; JOHN STEPHEN GRIFFITHS

International class (IPC 8-9): B05B5/16 (Advanced/Invention); B05B5/00 (Core/Invention)

International class (IPC 1-7): B05B5/16

CPC: B05B5/1641

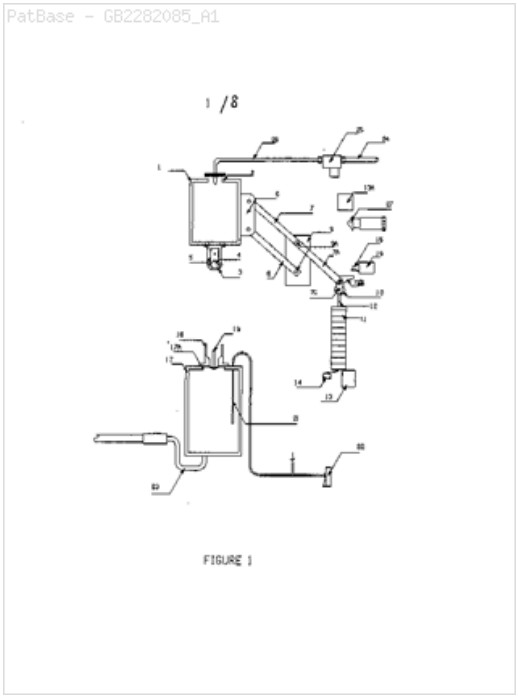
European class: B05B5/16A2B5

Classification Explorer

Cited documents: US5100690 A, US4383644 A, EP0455111 A1, EP0455110 A1,

Forward Citations: US8020784, EP2810719, EP2810719, EP1772194, EP1772194, EP1772194,

Abstract:
In electrostatic spraying apparatus a moving vessel transfers paint from a paint supply at a low voltage potential to a reservoir at a high voltage potential, isolating the paint supply from the high voltage. A pneumatic tube 21 and sensor 22 detect a low paint level in reservoir 17 when vessel 1 is in a lowered position on reservoir 17. A control unit is then caused to close jack 71 and raise vessel 1. Switch 72 senses closure of jack 71 and causes energisation of valve 25 for an interval of time during which paint passes into vessel 1. Alter the interval valve 25 deenergises and jack 71 is caused to extend, lowering vessel 1 so paint is discharged via check valve 4 into reservoir 17.



98) Family number: 61997032 (US2016090642A)

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Title: METHOD AND SYSTEM FOR VICTOR NOISE REDUCTION

Priority: US20140055048P 20140925 US20150866627 20150925

Family:

Publication number	Publication date	Application number	Application date
US2016090642 AA	20160331	US20150866627	20150925

Probable Assignee: SLOAN VICTOR

Assignee(s):(std)**:** SLOAN VICTOR

Inventor(s):(std)**:** SLOAN VICTOR

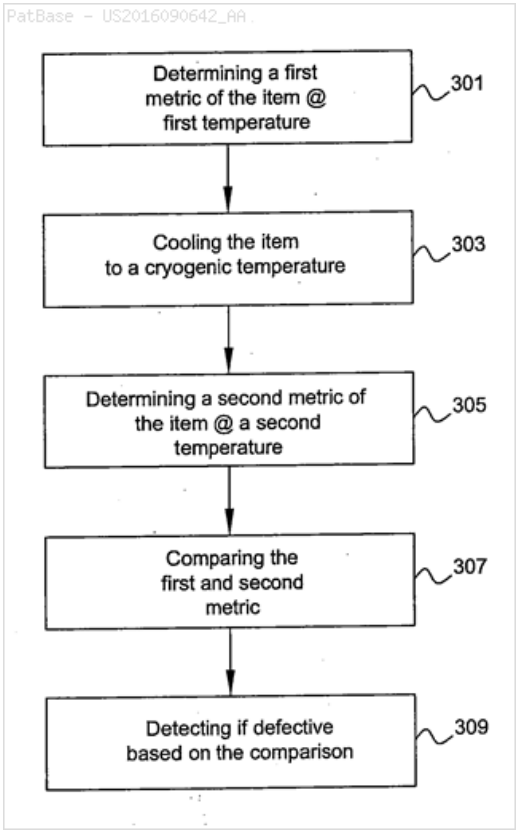
International class (IPC 8-9): C21D1/18 G01N25/72 (Advanced/Invention)

CPC: C21D1/18 G01N25/72

US class: 148/508

Classification Explorer

Abstract:
A non-destructive test using cryogenic temperatures is capable of detecting defects in materials that result from residual stress from manufacturing and from retained austenite. The cryogenic process significantly reduced the material noise responses in eddy currents such that the remaining indications can be evaluated. The Victor Noise Reduction (VNR) process successfully reduces the eddy current signal response noise generated by minute discontinuities in the material of the bolts, resulting in an improved signal-to-noise ratio and hence in an improved response evaluation.



99) Family number: 22267033 (US2923285A)

© PatBase

Title: SPEAR GUNS

Priority: US19550520046 19550705

Family:

Publication number	Publication date	Application number	Application date
US2923285 A	19600202	US19550520046	19550705

Probable Assignee: JOHN SALLES

Assignee(s):(std)**:** JOHN SALLES

Inventor(s):(std)**:** JOHN SALLES

Inventor(s): SALLES JOHN

International class (IPC 8-9): F41B11/83 (Advanced/Invention)

CPC: F41B11/83

European class: F41B11/83

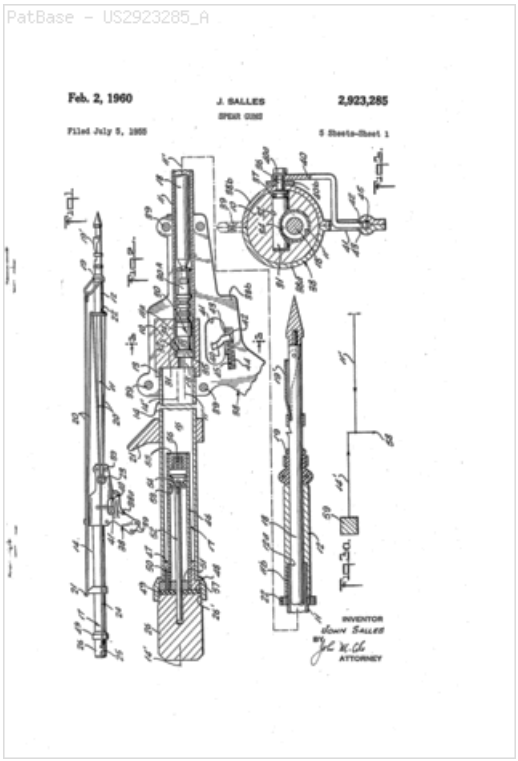
US class: 124/37 124/41.1 124/63 124/71 43/6

Classification Explorer

Cited documents: US977549 A, US2736308 A, US2725656 A, US2701558 A, US2687715 A, US2623514 A, US2505428 A, US2348040 A, US2283300 A, US227789 A, US2135414 A, US2101198 A, US2006030 A, US1114615 A, IT466047 A, FR941917 A, FR924613 A, FR887850 A, FR1035961 A,

Forward Citations: US9057521, US7571564, US7520084, US6615815, US4019480, US3468051, US3420220, US3320941, US3236223, US3153875, US3109419, US3103081, US2011281225, US2009159065, US2009100738, US2009038600, US2006042144, US2006042143, US2004173197, ITCB20100002, FR2537262,

Abstract:
(Claim 1) 1. What is claimed is: l. A spear gun comprising a firing tube,. a piston _slidably retained within said tube, a compressed air Lchamber in communication with said tube, manually op_erated air pumping means including a piston and cylinder ,disposed within said chamber and spaced from the walls thereof, air inlet means communicating with said cyl,inder, and a tri,___-ring assembly including piston latching means for engaging and holding said first mentioned piston when a spear is inserted in said firing tube and - for releasing said piston for forward motion under the .action of the compressed dir to drive the spear from the firing tube, said compressed air chamber and manually ,operated air pumping means being offset above the axis _of the firing tube and said pump havin- a pump handle and cooperating -asket means releasabl'y secured to the :gun to seal the cylinder and air inlet means.



100) Family number: 48504033 (US2011067669A)

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Title: LUBRICATION SYSTEM FOR FOUR-STROKE ENGINE

Priority: JP20090219043 20090924 JP20090227135 20090930 CN201010287727 20100917 EP20100178602 20100923 EP20110177584 20100923

Family:

Publication number	Publication date	Application number	Application date
BRPI1003517 A2	20130129	BR2010PI03517	20100915
BRPI1003517 A8	20180626	BR2010PI03517	20100915
CN102032017 A	20110427	CN201010287727	20100917
CN102032017 B	20140312	CN201010287727	20100917
CN103628947 A	20140312	CN201310530265	20100917
CN103628947 B	20160817	CN201310530265	20100917
DE602010015776 D1	20140626	DE201060015776T	20100923
DE602010051055 D1	20180628	DE201060051055T	20100923
EP2305972 A1	20110406	EP20100178602	20100923
EP2305972 B1	20140507	EP20100178602	20100923
EP2395207 A2	20111214	EP20110177584	20100923
EP2395207 A3	20140820	EP20110177584	20100923
EP2395207 B1	20180530	EP20110177584	20100923
JP2011069240 A2	20110407	JP20090219043	20090924
JP2011074833 A2	20110414	JP20090227135	20090930
JP5483275 B2	20140507	JP20090227135	20090930
RU2010139221 A	20120327	RU20100139221	20100923
RU2526610 C2	20140827	RU20100139221	20100923
US2011067669 AA	20110324	US20100876678	20100907
US8695563 BB	20140415	US20100876678	20100907

Probable Assignee: MAKITA CORP

Assignee(s):(std)**:** MAKITA CORP ; TOMITA TOSHIHIRO ; SUGIYAMA MASAKI ; KUBOTA HIROSHI ; KURIMOTO MASAKI

Assignee(s): MAKITA ANJO SHI CORP ; MAKITA KORPOREJSHN ; MAKITA CORP ANJO SHI

Inventor(s):(std)**:** KURIMOTO MASAKI ; TOMITA TOSHIHIRO ; SUGIYAMA MASAKI ; KUBOTA HIROSHI ; KURIMOTO MAKI ; MASAKI SUGIYAMA ; TOSHIHIRO TOMITA ; MASAKI KURIMOTO ; HIROSHI KUBOTA ; SUGIJAMA MASAKI ; KUBOTA KHIROSI ; TOMITA TOSIKHIRO

Inventor(s): SUGIYAMA MASAKI NUMAZU SHI ; TOMITA TOSHIHIRO NUMAZU SHI ; KURIMOTO MASAKI NUMAZU SHI ; KUBOTA HIROSHI MUMAZU SHI

Agent(s): RGTH RICHTER GERBAULET THIELEMANN HOFMANN PATENTANWAELTE PARTGMBB; RICHTER WERDERMANN GERBAULET AND HOFMANN; RICHTER WERDERMANN GERBAULET HOFMANN; RGTH; OLIFF PLC

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

International class (IPC 8-9): F01M1/00 F01M1/02 F01M1/04 F01M1/06 F01M1/16 F01M11/00 F01M13/00 F01M13/02 F01M13/04 F01M3/04 F01M9/06 F01M9/10 (Advanced/Invention)

CPC:	F01M3/04 F01M1/04 F01M9/10 F01M11/065 F01M13/00 F01M13/022 F01M13/025 F16N7/32
European class:	F01M1/04 F01M13/02N2 F01M9/10 F16N7/32 R01M13/02N2D
US class:	123/196.00RP 123/196CP 123/196M 123/196R
JP class F-Term:	3G013 3G013/BA01 3G013/BA04 3G013/BB12 3G013/BC01 3G013/BC02 3G013/BC06 3G013/BC11 3G013/BD24 3G013/BD47 3G013/CA01 3G013/CA05 3G015 3G015/BB02 3G015/BD10 3G015/BD25 3G015/BE06 3G015/BE12 3G015/BF05 3G015/BF07 3G015/BF08 3G015/DA10 3G313 3G313/AA04 3G313/AA05 3G313/AA13 3G313/AB18 3G313/BA04 3G313/BB12 3G313/BC01 3G313/BC04 3G313/BC11 3G313/BD24 3G313/BD47 3G313/CA01 3G313/CA05 3G313/FA10 3G013/AB03 3G013/BD03 3G013/BD04 3G013/BD13 3G015/AB03 3G015/BA14 3G015/BB08 3G015/BB10 3G015/BC04 3G015/BD23 3G015/BE03 3G015/BE11 3G015/BE13 3G015/BE15 3G015/BF04 3G015/CA06 3G313/FA06
JP class F-Index:	F01M1/04 F01M1/06/D F01M13/00/H F01M13/00/Q F01M13/04/A F01M13/04/E F01M9/10/A F01M1/06/Q F01M1/16/E F01M13/02 F01M13/04/C F01M9/06/Z

Classification Explorer

Cited documents:	US7121250 BB, US6213079 BA, US5975042 A, US5960764 A, US5957118 A, US5582145 A, US2009014246 AA, US2009013959 AA, US2009013959 AA, US2008047519 AA, US2007240692 AA, US2007028887 AA, US2007028887 AA, US2006060174 AA, TW401480 B, TW200905065 A, JPB23209486, JP3209486 B2, JP3209486 B2, JP276321, JP263069, JP23209486, JP2007263069 A2, JP2004251231 A2, JP2003276321 A2, JP2002276321 A2, JP2002147213 A2, JP147213, JP11013444 A2, JP10089041 A2, EP0779412 A2, EP0779412 A2, CN157877, CN157877, CN1157877 A, 69A, 2007.10.11, ;US,
Forward Citations:	WO13185472, WO13185471, WO13080600, US9022004, US8978614, US8627809, US2016230622, US2016230621, US2014096738, US2013139782, US10221732, RU2636963, KR101317201, JP6543158, JP5826017, JP2017072060, JP2013130182, EP2607637, EP2607637, EP2602447, EP2602447, EP2428657, EP2428657, CN108223046, CN106567757, CN103511115, CN103511017, CN103511017, CN103321709, CN103321709, CN103277166, CN103277166, CN103174492, CN103174492, CN103147823, CN103147823,

Abstract:
A lubrication system for a four cycle engine lubricates the valve mechanism with the oil mist of the concentration lowered by the liquefying means. The lubrication system has an oil feeding passage for connecting an oil reservoir and the crank chamber and sending the oil retained in liquid form in the oil reservoir to the crank chamber under a negative pressure of the crank chamber, a communication passage for connecting the crank chamber and the oil reservoir and sending oil mist generated in the crank chamber to the oil reservoir when under a positive pressure of the crank chamber, liquefying means in the oil reservoir for liquefying the oil mist sent from the communication passage to the oil reservoir to decrease the concentration of the oil mist, and a supply passage for supplying the oil mist from the oil reservoir to the valve operating chamber through the liquefying means.