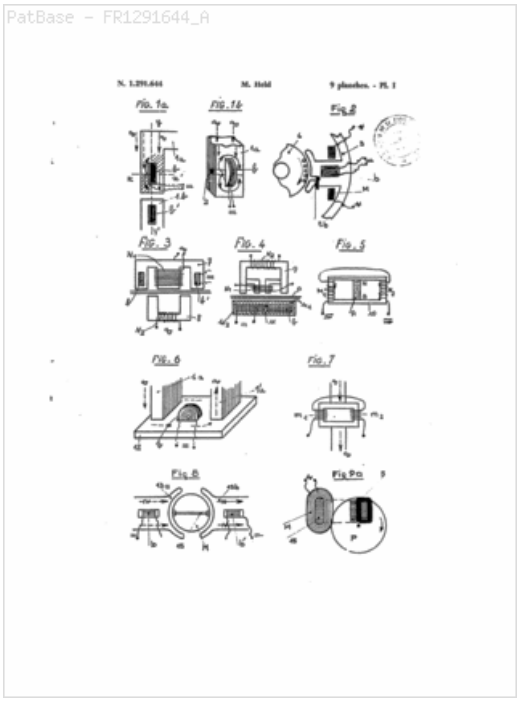
1) Family number: 22914063 (FR1291644A)

Title: SYSTEME ELECTRO-MAGNETIQUE A ELEMENTS INSERES EN ALLIAGE TRES SATURABLE ET APPLICATIONS, NOTAMMENT A UN MOTEUR OSCILLANT POUR MOUVEMENT D'HORLOGERIE ELECTRO-MAGNETIC SYSTEM COMPONENTS INSERTED ALLOY SATURABLE VERY AND APPLICATIONS, INCLUDING AN ENGINE FOR SWING MOVEMENT WATCH (Machine translation)

Abstract: Source: FR1291644A [FR] (Claim 1) 1. En alimentation sous tension alternative d'un petit moteur a induit bobine ou non (petits moteurs a champ glissant, etc.) on introduit dans le circuit magnetique en fer feuillete ordinaire, une portion d'alliage saturable en mumetal de preference, avec des entailles ou sont logees une ou des petites bobines parcourues par du courant continu, produisant une variation de permeabilite plus ou moins accentuee, en deplacant l'axe moyen du flux moteur principal, lorsque la tension augmente pour le cas d'une regulation des variations de tension;

Machine translation: (Claim 1) 1. Alternative power supply in a small engine coil induced or not (small motors has sliding field, etc..) Is introduced into the magnetic circuit in ordinary laminated iron, a portion of alloy saturable mumetal preferably, with notches or are housed one or more small coils through which direct current, producing a variation in permeability more or less pronounced, by moving the center axis of the main motor flow, when the voltage increases to the case of a regulation voltage variations

Classifications:
International (IPC 8-9): G04C3/16 (Advanced/Invention); G04C3/00 (Core/Invention)
International (IPC 1-7): G04C3/16 H02K33/10 H02K37/00 H02P8/00
CPC: G04C3/16
European: G04C3/16



Family:

Publication number	Publication date	Application number	Application date
FR1291644 A	19620427	FR19610855642	19610315

Priority:
FR19610855642 19610315

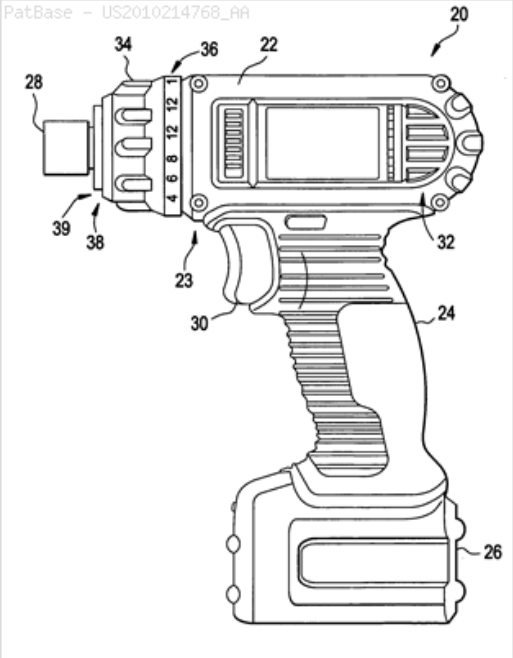
Inventor(s): (std): HELD SERGE

2) Family number: 46626102 (US2010214768A)

Title: LIGHT FOR A POWER TOOL AND METHOD OF ILLUMINATING A WORKPIECE

Abstract: A power tool including a end effector rotatable with respect to the housing, a collar rotatable with respect to the housing, a printed circuit board (PCB) rotatably fixed with respect to the housing, and a light element operatively connected to the PCB and adjacent to the end effector and in a recess of the collar and located to illuminate a workpiece machined by the power tool. A method of providing light for a workpiece being machined by a power tool including locating lighting elements around a spindle of a power tool, aligning the lighting elements to shine light on a workpiece being machined by the power tool, operatively connecting the lighting elements to a PCB, containing and supporting the PCB with a guide, supporting wires configured to provide power to the PCB with the guide, locating the lighting elements, PCB and guide in a rotatable collar, and preventing the lighting elements, PCB and guide from rotating when the collar rotates.
Classifications:
International (IPC 8-9): B23B31/00 B23B45/00 B23B45/02 B23B45/16 B23Q17/24 B25B21/00 B25B21/02 B25B23/00 B25B23/12 B25B23/14 B25B23/18 B25B29/00 B25F3/00 B25F5/00 B25F5/02 B28D1/04 F21L13/00 F21S9/04 F21V33/00 F21V7/00 F21V8/00 H01R39/64 H02K16/00 H02K7/18 (Advanced/Invention); F21Y101/00 F21Y105/18 F21Y115/10 (Advanced/Non-invention); B25B23/00 B25F5/00 (Core/Invention)

CPC: B23B45/003 G02B6/0096 B25F5/00 G02B6/0008 F21V7/0091 F21Y2105/18 B23Q17/2404 B25B21/02 B25B23/0057 B25B23/141 B23B31/00 B23B45/00 B25F5/02 F21L13/00 F21S9/04 H01R39/64 H02K7/116 H02K7/14 H02K7/1807 H02K7/18 H02K16/005 F21Y2115/10 F21V33/0084 F21Y2101/00 B25B21/00 B25B23/18 B25F5/021
European: B25B21/00 B25B23/18 B25F5/02B
US: 1/1 362/109 362/119 362/119P 362/120 362/192 362/555 362/577



Family:

Publication number	Publication date	Application number	Application date
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CN202716245 U	20130206	CN201120300506U	20110818
CN203156712 U	20130828	CN201220533393U	20120725
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EP2223783 A1	20100901	EP20100154585	20100224
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EP2551066 A2	20130130	EP20120177787	20120725
EP2551066 A3	20131120	EP20120177787	20120725
EP2551066 B1	20150923	EP20120177787	20120725
EP2687338 A1	20140122	EP20130176802	20130717
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Priority:

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US20190710016 20191211

Probable Assignee: BLACK AND DECKER INC

Assignee(s): (std): CLEANTHOUS ARIS ; CLEANTHOUS ARIS C ; COX JOHN D ; DELCAMP JEFF ; DELCAMP JEFFREY ; DIXON EVA J ; DOYLE MICHAEL C ; ESHLEMAN SCOTT ; FORSTER MICHAEL K ; FRIEDMAN BRIAN E ; GARBER STUART ; GEHRET ROBERT S ; GOTTESMAN TAL ; HATFIELD ERIC E ; KELLEHER JOSEPH P ; KROUT DANIEL ; KROUT DANIEL L ; KUSMIERSKI ROBERT ; KUSMIERSKI ROBERT G ; MILLER AMANDA ; NORONA JOAO ; NOSOV ANATOLIY ; OSBORNE STEPHEN P ; PUZIO DANIEL ; ROBERTSON COREY G ; USSELMAN ROBERT A ; VANKO JOHN C ; ZELLERHOFF JOERG ; BLACK AND DECKER INC

Assignee(s): BLACK AND DECKER INC NEWARK

Inventor(s): (std): CLEANTHOUS ARIS ; CLEANTHOUS ARIS C ; CROUT DANIEL L ; CUSMILLSKI ROBERT G ; FRIEDMAN BRIAN E ; GARBER STUART ; GEHRET ROBERT ; GEHRET ROBERT S ; HATFIELD ERIC E ; KROUT DANIEL ; KROUT DANIEL L ; KUSMIERSKI ROBERT ; KUSMIERSKI ROBERT G ; MILLER AMANDA ; NORONA JOAO ; OSBERN STEVEN P ; OSBORNE STEPHEN P ; PUZIO DANIEL ; DELCAMP JEFF ; DELCAMP JEFFREY ; DELCAMPE JEFF ; DIXON EVA J ; ROBERTSON COREY G ; ROBERTSON CURRY G ; R S GREUTHER ; R KUSMIERSKI ; VANKO JOHN CHARLES ; ZELLERHOF JOERG ; ZELLERHOFF JOERG ; ESHELMAN SCOTT ; DELCAMP JEFFERY D ; C G ROBERTSON ; VANKO JOHN C ; USSELMAN ROBERT ; OSBORNE STEPHEN ; NOSLOV ANATOLIY ; KELLEHER JOSEPH P ; GOTTESMANN TAL ; FORSTER MICHAEL K ; ESHLEMAN SCOTT ; DOYLE MICHAEL C ; COX JOHN D ; USSELMAN ROBERT A ; NOSOV ANATOLIY ; GOTTESMAN TAL ; T GOTTESMAN ; S GARBER ; S ESHLEMAN ; R S GEHRET ; R A USSELMAN ; M K FORSTER ; M C DOYLE ; J ZELLERHOFF ; J P KELLEHER ; J D COX ; J C VANKO ; D PUZIO ; D KRAUTER ; A NOSOV ; S P OSBORNE ; S GABOR ; J ZIELERHOFF ; J NORONA ; J DELCAMP ; E J DIKSON ; E E HATFIELD ; D PUCCIO ; D CLOUT ; B E FREEDMAN ; A MILLET ; E J DICKSON ; B E FRIEDMAN

Inventor(s): ANOSOV ; DPUZIO ; DKRAUTER ; CGROBERTSON ; BEFRIEDMAN ; BEFREEDMAN ; EJDICKSON ; EEHATFIELD ; JZELLERHOFF ; JPKELLEHER ; JDCOX ; JCVANKO ; MKFORSTER ; MCDOYLE ; RSGEHRET ; RAUSSELMAN ; SPOSBORNE ; SGARBER ; SESHLEMAN ; TGOTTESMAN ; COX JOHN D LUTHERVILLE ; EVA J DIXON ; ZELLERHOFF JOERG TOWSON ; VANKO JOHN C TIMONIUM ; USSELMAN ROBERT FOREST HILL ; PUZIO DANIEL BALTIMORE ; OSBORNE STEPHEN P PIKESVILLE ; NOSLOV ANATOLIY PARKVILLE ; NORONA JOAO BALTIMORE ; KELLEHER JOSEPH P BOWIE ; GOTTESMANN TAL TIMONIUM ; GEHRET ROBERT S HAMPSTEAD ; GARBER STUART TOWSON ; FRIEDMAN BRIAN E BALTIMORE ; FORSTER MICHAEL K WHITE HALL ; ESHLEMAN SCOTT PARKVILLE ; DOYLE MICHAEL C BALDWIN ; RSGREUTHER ; SGABOR ; STEVEN P OSBERN ; DPUCCIO ; EJDIKSON ; RKUSMIERSKI ; ROBERT G CUSMILLSKI ; JDELCAMP ; JEFF DELCAMPE ; JNORONA ; JZIELERHOFF ; DANIEL L CROUT ; DCLOUT ; AMANDA MILLER ; AMILLET ; CURRY G ROBERTSON

Agent(s): BELL IAN STEPHEN; SBD IPADMIN; CLAYTON HATHWAY ANTHONY NICHOLAS; HARNESS DICKEY AND PIERCE; SCOTT B; MARKOW SCOTT B

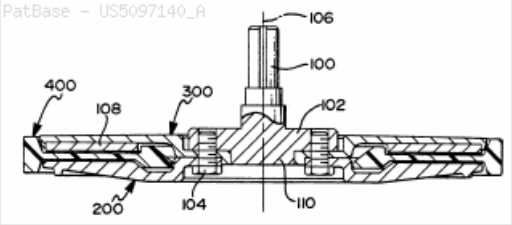
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

3) Family number: 4960109 (US5097140A)

Title: Alternator starter

Abstract: A combined starter motor and alternator for a vehicular engine system can be positioned for direct coupling to an engine power shaft between the engine and transmisson. A pair of axially offset magnetically permeable disks are bolted to the power shaft. These disks form an annular channel therebetween. A plurality of rare earth permanent magnets are mounted on the inside face of one of the disks in the channel. Positioned within the channel is a stationary, ironless stator assembly having stranded conductive wire windings embedded in an insulation matrix. These windings alternatively pass from the perimeter of the disk towards the interior of the disk as each winding forms a single pass around a longitudinal axis of the power shaft. In a starter mode of operation, a polarity sensor, such as a Hall-effect switch mounted adjacent each stator phase winding, is used to control the driver switches of a conventional H-type arrangement for providing drive current to a starter motor stator coil. The H-driver circuit features use of semiconductor switches capable of withstanding high reverse bias voltage in the H-legs extending between coil ends and the vehicle's battery or direct current energy source.

Classifications:
International (IPC 8-9): F02N11/04 H02K21/24 H02K29/08 (Advanced/Invention); F02N11/04 H02K21/12 H02K29/06 (Core/Invention)
International (IPC 1-7): H02P11/00
CPC: F02N11/04 H02K21/24 H02K29/08
European: F02N11/04 H02K21/24 H02K29/08
US: 290/31 290/36R 290/46



Family:

Publication number	Publication date	Application number	Application date
US5097140 A	19920317	US19910696668	19910507

Priority:
US19910696668 19910507

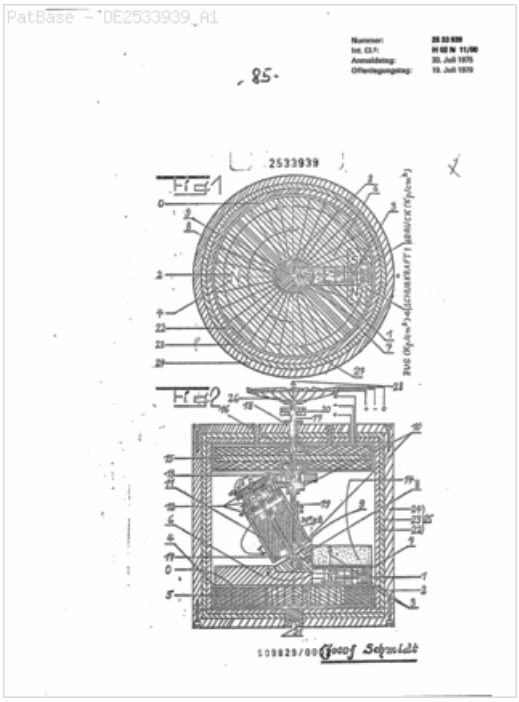
Probable Assignee: CHRYSLER CORP
Assignee(s): (std): CHRYSLER CORP
Inventor(s): (std): CRALL FREDERICK W

4) Family number: 1687110 (DE2533939A1)

Title: PERMANENT-MAGNET PERPETUAL MOTION MACHINE - EMPLOYS INTERACTION OF ELECTROSTATIC-PHYSICAL, VECTORIAL-GEOMETRICAL AND MECHANICAL FACTORS

Abstract: The permanent-magnet machine executes perpetual motion without supplying any energy other than that needed initially to magnetise the permanent magnets. The machine is arranged so that three 'factors' interact in a given way. These 'factors' are: 'electrostatic/physical properties, vectorial geometry, and mechanical design'. The drive magnet in the rotor is a permanent dipole in the form of a flat plate. Large numbers of applications are given.

Classifications:
International (IPC 8-9): H02K53/00 (Advanced/Invention); H02K53/00 (Core/Invention)
International (IPC 1-7): H02N11/00
CPC: H02K53/00
European: H02K53/00



Family:

Publication number	Publication date	Application number	Application date
DE2533939 A1	19790719	DE19752533939	19750730

Priority:

DE19752533939 19750730

Probable Assignee: SCHMIDT JOSEF

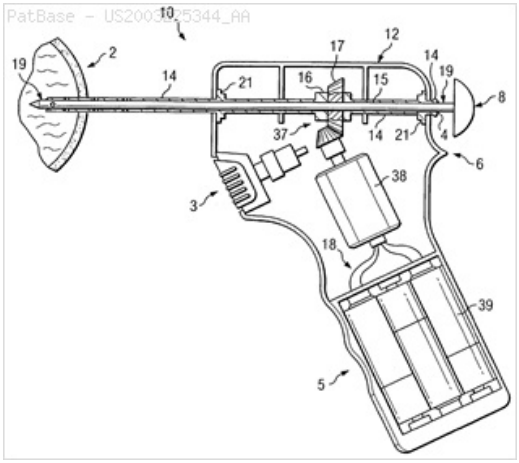
Assignee(s): (std)**:** SCHMIDT JOSEF

Inventor(s): (std)**:** SCHMIDT JOSEF

5) Family number: 32099125 (US2003225344A)

Title: APPARATUS AND METHOD TO ACCESS THE BONE MARROW FOR ONCOLOGY AND STEM CELL APPLICATIONS

Abstract: An apparatus for removing portions of bone marrow from a bone is provided. The apparatus includes a housing and a hollow drive shaft operable to engage a gear assembly. The hollow drive shaft includes a first end operable to penetrate the bone and a second end operable to allow retrieval of portions of bone and bone marrow. The apparatus also includes a removable trocar. The removable trocar includes an inner channel operable to convey portions of bone and bone marrow. The gear assembly is able to engage and rotate the hollow drive shaft. A motor operable to drive the hollow drive shaft into the bone marrow by rotation of the hollow drive shaft and a power supply and associated circuitry operable to power the motor are also included.



Classifications:

International (IPC 8-9)**:** A61B A61B1/00 A61B10/00 A61B10/02 A61B17/00 A61B17/10 A61B17/14 A61B17/16 A61B17/32 A61B17/3205 A61B17/34 A61B17/56 A61B17/58 A61B17/72 A61B17/88 A61B19/00 A61B19/02 A61B19/08 A61B19/10 A61B46/00 A61B46/10 A61B46/23 A61B5/103 A61B5/153 A61B50/20 A61B50/30 A61B50/31 A61B50/33 A61B90/00 A61B90/30 A61F2/46 A61F5/00 A61M A61M1/00 A61M1/06 A61M25/00 A61M25/06 A61M31/00 A61M39/10 A61M5/00 A61M5/14 A61M5/145 A61M5/158 A61M5/168 A61M5/20 A61M5/24 A61M5/31 A61M5/315 A61M5/32 A61M5/34 A61M5/46 A61N1/30 B23B45/00 B23G1/46 B23P17/04 B25B23/16 B25G1/00 B65D33/00 F41A17/46 F41A17/50 F41A17/52 F41A17/54 (Advanced/Invention);
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A61B (Subclass/Invention)

International (IPC 1-7)**:** A61B10/00 A61B17/00 A61B17/16 A61B17/24 A61B17/32 A61B17/34 A61B17/56 A61B17/58 A61B19/00 A61M1/00 A61M25/06 A61M31/00 A61M37/00 A61M5/00 A61M5/00 A61M5/14 A61M5/20 A61M5/46

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Family:

Publication number	Publication date	Application number	Application date
AT425705 E	20090415	AT20050712091T	20050125
AT431100 E	20090515	AT20030756317T	20030530
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Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; PIZZEYS; KIRBY EADES GALE BAKER; MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; GILLE HRABAL; DEHMEL AND BETTENHAUSEN PATENTANWAELTE PARTMBB; LAWRENCE JOHN; LJUNGBERG ROBERT; GRUBERT ANDREAS; BARKER BRETTELL LLP; CARVAJAL Y ISABEL; ARIAS JUAN; CLT PATENT AND TRADEMARK HK LTD; OSAKABE SUGURU; SHIMIZU HATSUSHI; KAWAMOTO KAZUYA; BAKER BOTTS LLP PATENT DEPARTMENT; BAKER BOTTS LLP; FULBRIGHT AND JAWORSKI LLP; FULBRIGHT AND JAWORSKI; FULBRIGHT AND JAWORSKI L L P; NORTON ROSE FULBRIGHT US LLP; BAKER AND HOSTETLER LLP; FELGER THOMAS R; IANNITELLI ANTHONY

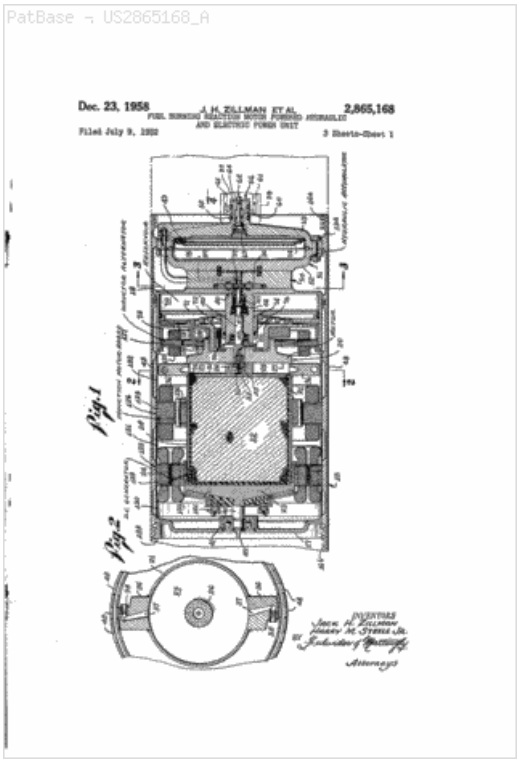
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ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

6) Family number: 22771129 (US2865168A)

Title: FUEL BURNING REACTION MOTOR POWERED HYDRAULIC AND ELECTRIC POWER UNIT

Abstract: (Claim 1) A reaction -riotor comprisii,,-: a pressure ti,-ht combustion chamber adapted to receine a body ot fuel of less volume than said chamber and havin.- means therein to support said body spaced from an interior wall portion of said chamber to form a plenum chamb.-r adjacent said wall portion_, bearing mi eans supportin.- said chamb,-r for rotation about a fixed axis; at least one jet iiozzle in the wall of said combustion cliamber disposed tan-entially with respect to said axis and commlnicated with said plenum chamber to cause rotation of said chamber when said fuel is burned; and speed sensitive braking means rotatively coupled to said chamber to regulate the speed 7r) of rotation thereof.

Classifications:
International (IPC 8-9): F02K9/72 (Advanced/Invention);
F02K9/00 (Core/Invention)
International (IPC 1-7): F02K9/00
CPC: F02K9/72
European: 46F12 F02K9/72
US: 102/282 322/28 417/286 417/308 60/39.47 60/789



Family:

Publication number	Publication date	Application number	Application date
US2865168 A	19581223	US19520297934	19520709

Priority:

US19520297934 19520709

Probable Assignee: ALEX DEUTSCH

Assignee(s): (std)**:** ALEX DEUTSCH ; BEN WEINGART ; LESTER DEUTSCH

Inventor(s): (std)**:** STEELE JR HARRY M ; ZILLMAN JACK H

Inventor(s): JR HARRY M STEELE

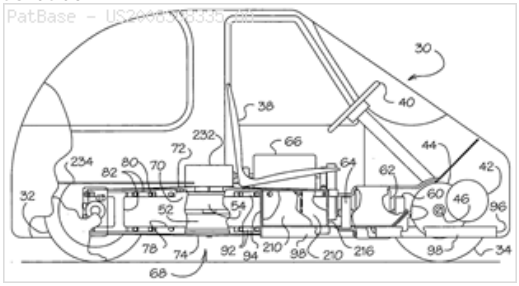
7) Family number: 42114131 (US2008308335A)

Title: REGENERATIVE SELF PROPELLED VEHICLES

Abstract: An electric motor powered vehicle includes an energy reservoir provided by a battery-mass flywheel having a diameter approximating the lateral spacing of the vehicle's wheels. A The flywheel may include a pair of counter rotating wheels mounted on concentric shafts and may be enclosed in a containment device. A shoe-rail electrical connection facilitates transfer of current to and from the batteries. The flywheel may include fuel cells charged from a remote hydrogen source. Flywheel, and friction braking may be controlled by pedal movement. Motive power is preferentially provided by flywheel energy then battery energy. Energy may be transferred to the batter mass flywheel independently of vehicle motor drive. The motor-flywheel drive connections are made through inputs to a differential gear drive. The fuel cells may charge the batteries, and a second alternator may recover flywheel energy at shut-down

Classifications:

International (IPC 8-9)**:** B60K1/00 B60K8/00 B60L7/20 (Advanced/Invention);
B60K1/00 B60K8/00 B60L7/00 (Core/Invention)
CPC: B60K1/00 B60K6/30 Y02T10/7033 Y02T10/92 B60K1/04
European: B60K1/00 B60K1/04 B60K6/30 Y02T10/70F2 Y02T10/92
US: 180/165 180/65.1



Family:

Publication number	Publication date	Application number	Application date
US2008308335 AA	20081218	US20080229288	20080821
US7416039 BA	20080826	US20020251945	20020920

Priority:

US20020251945 20020920 US20080229288 20080821

Probable Assignee: ANDERSON DONALD C

Assignee(s): (std)**:** ANDERSON DONALD C ; LEE III EDMUND S

Inventor(s): (std)**:** ANDERSON DONALD C ; LEE III EDMUND S

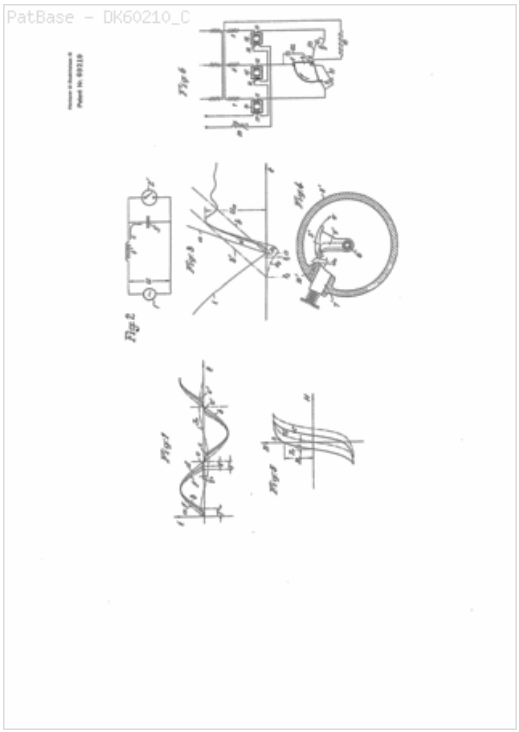
Agent(s): EDMOND S LEE III

8) Family number: 40410162 (DK60210C)

Title: Apparat til Slutning og Afbrydning af Vekselstroemskredse for Straerkstroem. Apparatus for the circuit and disconnect the withdrawal of supplied with alternating current circuits for Straerkstroem. (Machine translation)

Abstract: Source: DK60210C [DA] [Source: Claim 1] 1. Apparat til Slutning og Afbrydning af Vekselstroemskredse for Staerkstroem med et af bevaegede Kontakter dannet foranderligt Af- brydningsgab eller med et konstant Afbrydnings- gab, der befinder sig mellem fast anordnede Elektroder og kortsluttes ved en Gnistudlad- ning til Slutning af Stroemkredsen, til enkelte eller periodiske Kontaktslutninger og Kontakt- afbrydninger til Omformning af Vekselstroem til Jaevnstroem eller omvendt eller af Vekselstroem af given Frekvens til Vekselstroem af en anden Frekvens, kendetegnet ved, at der i Se- rie med Afbrydningsstedet 2', Fig. 2, i den Stroemkreds, som skal afbrydes, er indskudt Vik- linger 4' eller andre Impedanser med foranderlige Modstandsvaerdier, saa at Stroemforloebet auto- matisk paavirkes periodisk med Vekselstroem- mens Rytme paa en saadan Maade, at der ved Affladning af Stroemkurven i Naerheden af Stroem- mens oejebliksvaerdi Nul (Delen Tx, Fig. 1) op- staar et stroemsvagt Interval, i hvilket Stroem- men afbrydes, og at der parallelt med Afbryd- ningsstedet 2' er forbundet Kondensatorer 3', Selvinduktioner, ohmske Modstande eller flere af disse Midler kombineret med hinanden paa en saadan Maade, at den ved Afbrydningsstedet 2' afbrudte Stroem i det mindste delvis opretholdes, saa at Spaendingsfaldet foerst hovedsagelig op- traeder i de i Serie med Afbrydningsstedet 2' lig- gende Impedanser, medens Spaendingen u, Fig. 3, ved Afbrydningsstedet kun vokser lidt efter lidt. **Machine translation:** [Source: Claim 1] 1. Apparatus for the circuit and disconnect the withdrawal of supplied with alternating current circuits for high voltage with one of the moved Contacts formed changing of- brydningsgab or with a constant Disconnect embarkation opening doors, which is located between the fixed ordered electrodes and is shorted at a Gnistudlad- withdrawal to end of the Electrical Circuit, to single or periodic Switch Circuits and Switch- disconnect sentences for conversion of supplied with alternating current to dc or vice versa or of supplied with alternating current of the given frequency to the supplied with alternating current of a different frequency, characterized by the fact that in Se Rie with off rather than 2', Fig. 2 in the circuit to be disconnected, subscribed Vik- linger 4' or other Impedances with changeable resistance values so that the current progress auto-matic affected periodic with supplied with alternating current- while the Rhythm in such a way that the Affladning of current basket in the vicinity of the flow- while the moment when the value zero (Part Tx, Fig. 1) up- is a leakage current low range in which Flow- but will be interrupted and that in parallel with the Disconnect- withdrawal rather than 2' is connected Capacitors 3' Selvinduktioner, resistive Resistors or more of these resources combined with each other in such a way that it by off rather than 2' abandoned Flow at least partly be maintained as to the voltage drop first mainly up- shall enter into the in series with the off rather than 2' equal- underlying Impedances, while the voltage u, Fig. 3, at off rather than only grows little by little.

Classifications:



Family:

Publication number	Publication date	Application number	Application date
DK60210 C	19421005		00000000

Priority:

19351213

Probable Assignee: SIEMENS AG

Assignee(s): (std): SIEMENS AG

Assignee(s): SIEMENS SCHUCKERTWERKE AKTIENGESELLSCHAFT

Inventor(s): (std): JANETSCHKE ERWIN DIPL ING ; KESSELRING FRITZ DR ING ; KIRSCHSTEIN BERNHARD DR ING ; KOPPELMANN FLORIS DR ING ; LETSCH GABRIEL ; LEUKERT WILHELM DR ING ; DUFFING PAUL ; MATTERN HANS JOACHIM DR ING ; ROLF ERICH DR ING ; ZUEHLKE MARCEL

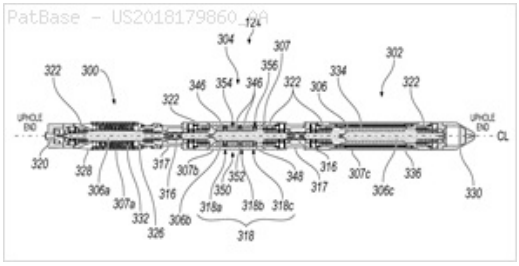
Inventor(s): PAUL DUFFING ; GABRIEL LETSCH ; MARCEL ZUEHLKE ; DIPL ING ERWIN JANETSCHKE ; DR ING BERNHARD KIRSCHSTEIN ; DR ING ERICH ROLF ; DR ING FLORIS KOPPELMANN ; DR ING FRITZ KESSELRING ; DR ING HANS JOACHIM MATTERN ; DR ING WILHELM LEUKERT

9) Family number: 70238164 (US2018179860A)

Title: DOWNHOLE POWER GENERATION

Abstract: Providing power to a downhole-type tool includes rotating a rotor of a downhole power unit about a longitudinal axis, generating, with a generator stator assembly of a generator positioned adjacent the downhole power unit, an amount of

power in response to rotating the rotor, and supplying, with the generator, the amount of power to at least one downhole-type tool proximate to the downhole power unit. The at least one downhole-type tool is operable using the supplied amount of power.



Classifications:

International (IPC 8-9): E21B17/02 E21B4/00 E21B4/02 E21B4/04 E21B41/00 E21B43/12 E21B47/00 E21B47/01 E21B47/06 E21B47/09 E21B47/12 F04B17/03 F04B47/04 F04D13/02 F04D13/06 F04D13/08 F04D13/10 F04D19/02 F04D29/04 F04D29/041 F04D29/046 F04D29/048 F04D29/051 F04D29/058 F04D29/063 F04D29/32 F04D3/00 F16C32/04 F16C37/00 G01B7/14 H02H7/00 H02K1/27 H02K11/20 H02K11/21 H02K11/225 H02K11/27 H02K11/30 H02K21/14 H02K3/42 H02K47/20 H02K5/132 H02K7/00 H02K7/09 H02K7/14 H02K7/18 H02M3/04 H02M3/158 H02M7/06 H02P27/04 H02P27/06 H02P29/40 H04B3/00 (Advanced/Invention);
E21B33/12 E21B43/16 E21B47/06 F04D19/02 F04D29/047 F04D29/051 F04D29/058 F04D29/063 F04D29/32 F16F15/03 H02K15/03 H02K5/128 H02K7/14 H02P103/20 H02P9/48 (Advanced/Non-invention)

CPC: F04D13/024 E21B43/129 F04D3/00 F04D13/10 F04D29/041 F04D29/046 F04D29/0473 F04D29/048 F16C32/0402 F16C32/0406 F16C32/044 F16C32/0444 F16C32/0446 F16C32/0451 F16C32/0455 F16C32/0457 F16C32/0476 F16C32/048 F16C32/0489 F16C37/005 F16C2352/00 F16C2360/44 F16C2380/26 G01B7/14 H02K5/132 H02K7/09 H02K7/14 H02K11/20 H02K11/225 H02K11/30 H02K2201/12 H02K2205/03 E21B43/168 E21B47/01 E21B47/09 H02K3/42 E21B43/122 F04D19/02 F04D29/058 F04D29/063 F04D29/325 E21B43/128 E21B33/12 E21B41/00 H02M3/1582 H02M7/06 H02P27/06 E21B4/04 E21B17/028 E21B43/121 E21B47/06 E21B47/12 F04B17/03 F04B47/04 F04D13/026 F04D13/064 F04D13/0633 F04D13/08 F04D13/086 F04D29/051 F16C32/0474 H02H7/005 H02K7/1807 H02K11/21 H02K11/27 H02K21/14 E21B4/02 F16F15/03 H02K5/128 H02K15/03 E21B4/003 E21B41/0085 H02P9/48 H02P27/04 H02P2103/20 H02K1/272 H02K1/2793 H02K7/003 H02K47/20 H02M3/04 H02P29/40 E21B47/008 E21B47/0007 E21B47/065

US: 1/1 166/105 166/381 322/27

Family:

Publication number	Publication date	Application number	Application date
EP3685493 A1	20200729	EP20180783237	20180919
US2018179860 AA	20180628	US20170857503	20171228
US2018180049 AA	20180628	US20170857456	20171228
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US2019085668 AA	20190321	US20170857510	20171228
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US2019085670 AA	20190321	US20170857525	20171228
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US10697276 BB	20200630	US20170857503	20171228
WO18125787 A1	20180705	WO2017US68124	20171222
WO19060343 A1	20190328	WO2018US51633	20180919
WO19060346 A1	20190328	WO2018US51637	20180919
WO19060347 A1	20190328	WO2018US51639	20180919
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WO19060504 A1	20190328	WO2018US51882	20180920
WO19060509 A1	20190328	WO2018US51889	20180920
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WO19125565 A2	20190627	WO2018US51892	20180920
WO19125565 A3	20190808	WO2018US51892	20180920
WO19133508 A1	20190704	WO2018US67221	20181221

Priority:

US20160392341 20161228	US20170561067P 20170920	US20170857456 20171228
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US20180974460 20180508	US20180107824 20180821	WO2018US51637 20180919
US20190544579 20190819	US20200813493 20200309	

Probable Assignee: UPWING ENERGY LLC

Assignee(s): (std): UPWING ENERGY LLC

Assignee(s): CALNETIX TECHNOLOGIES LLC

Inventor(s): (std): ARTINIAN HERMAN ; BIDDICK DAVID ; CHEN KUO CHIANG ; HAWKINS LARRY ; KRISHNAN VENKATESHWARAN ; MCMULLEN PATRICK ; SELLERS CHRISTOPHER MATTHEW ; SHENOY SURATKAL P ; ZHENG LIPING

Agent(s): CONROY JOHN; FISH AND RICHARDSON PC; GRISWOLD JOSHUA A ET AL

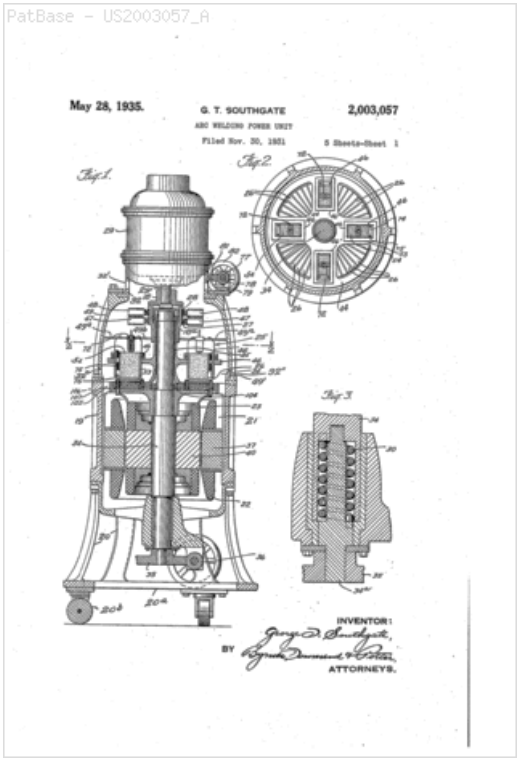
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML 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

10) Family number: 22406180 (US2003057A)

Title: ARC-WELDING POWER UNIT

Abstract: 1. In a device for supplying direct. current for arc welding, the combination of a polyphase primary winding having a core and adapted to receive alternating current from a source of sup- » ply to produce a rotating magnetic Held, a secondary winding having a core and arranged in inductive relation to said primary winding, said cores being angularly movable relative to each other and so constructed that the leakage Hux produced in the core of said primary winding is varied during such angular movement, a commutating device including a rotatable part and a part fixed relatively to said secondary winding and electrically connected thereto, a motor having a rotor connected to the rotatable part ol' said commutating device for driving the same, means for supplying current to said motor from the source of current supply of the primary winding, means for causing a relative angular movement between said secondary winding and the Hxed Dart of the commutating device and said primary winding, and independent means for varying the phase relation between the rotating magnetic Held produced in said primary Winding and said motor rotor and the rotatable part of the commutating device connected thereto. _

Classifications:
International (IPC 8-9): H02K47/08 (Advanced/Invention); H02K47/00 (Core/Invention)
CPC: H02K47/08
European: H02K47/08
US: 219/134 363/102



Family:

Publication number	Publication date	Application number	Application date
US2003057 A	19350528	US19310578137	19311130

Priority:
US19310578137 19311130

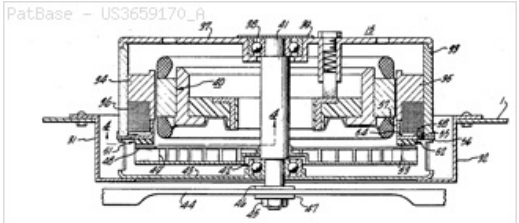
Probable Assignee: UNION CARBIDE and CARBON RES LAB
Assignee(s): (std): UNION CARBIDE and CARBON RES LAB
Assignee(s): UNION CARBIDE AND CARBON RESEARCH LABORATORIES INC
Inventor(s): (std): SOUTHGATE GEORGE T

11) Family number: 351194 (US3659170A)

Title: DIRECT COUPLED POWER SOURCES AND BRAKING MEANS FOR TOOLS SUCH AS LAWN MOWERS

Abstract: A direct-current motor operating at a speed which is safe for a specified tool is directly coupled to the working element of the tool and a brake cooperates with the motor to stop the movement of the working element within a prescribed time after removal of power from the motor.

Classifications:
International (IPC 8-9): A01D34/82 A01D35/24 A01D35/26 A01D69/04 A01D69/10 B27B21/00 B27G21/00 F16D55/00 F16D55/28 F16D65/14 H02K7/102 H02K7/12 H02P3/12 (Advanced/Invention); H02K7/10 H02P3/06 (Core/Invention)
International (IPC 1-7): A01D53/00 H02K17/00 H02K7/102 H02K7/12 H02P3/04
CPC: H02K7/1026
European: H02K7/102B3
US: 310/77 318/372



Family:

Publication number	Publication date	Application number	Application date
AU196964914 A1	19710610	AU19690064914	19691208
AU206964914 A1	19710610	AU19690064914	19691208
DE1962406 A1	19700702	DE19691962406	19691212
FR2026053 A1	19700911	FR19690042326	19691208
FR2026053 A5	19700911	FR19690042326	19691208
GB1284916 A	19720809	GB19690060987	19691215
JP49006606 B4	19740215	JP19690097894	19691208
US3659170 A	19720425	US19680787295	19681213

Priority:

US19680787295 19681213

Probable Assignee: MCCULLOCH CORP

Assignee(s): (std)**:** CHARLES T DARRAGH ; MCCULLOCH CORP

Assignee(s): CITICORP INDUSTRIAL CREDIT INC ; MAC CULLOCH CORP ; MCCULLOCH A CORP OF MD CORP ; MCCULLOCH A MD CORP CORP

Inventor(s): (std)**:** JACKSON ROBERT V ; BURKETT WILFORD B ; BENSON BURKETT WILFORD ; VERNON JACKSON ROBERT

Inventor(s): WILFORD BENSON BURKETT AND ROBERT VERNON JACKSON ; WILFORD B BURKETT ; ROBERT V JACKSON

12) Family number: 21711204 (US2445342A)

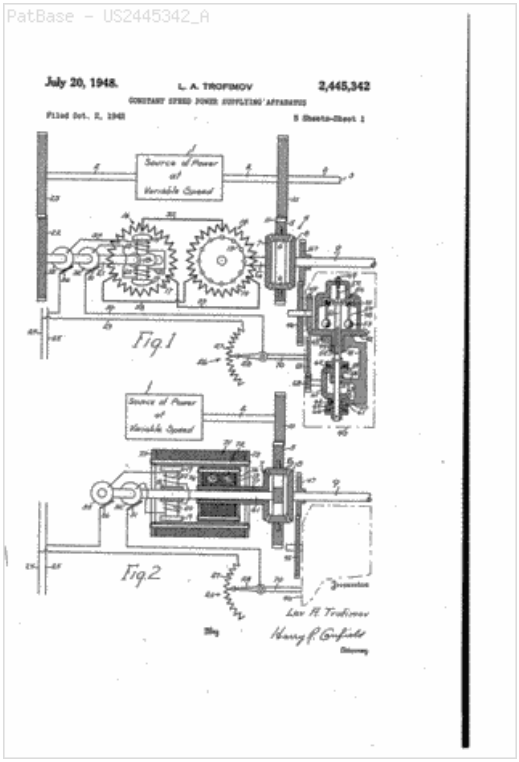
Title: CONSTANT SPEED POWER SUPPLYING APPARATUS

Abstract: I claim: 1; In a transmission for transmitting power at constant speed from a variable speed power source; a power input element to be driven by the variable speed source; o, power output element; power transmission means between the two elements, comprising an electric generator having an electric load circuit and mechanism differentially dividing the power from the input element lietween the generator and the output element; and control means controlling the electrical load of the generator tocontrol the speed of the output element and being operable responsive to an increase or decrease of the speed of the output element to change the generator load to respectively effect decrease or increase of the output element speed to maintain the speed of the output element substantially constant, 2. Inn transmission for transmitting power at constant speed from a variable speed power source; a power input element to be driven by the, variable speed source; a power output clement; power transmission means between the two elements, comprising an electric generator having an electric load circuit and mechanism differentially dividing the power from the input elementbetween the generator and the output' element; and means controlling the electrical load ofitne generator operable responsive to the speed ofss the output element tomaintain the speed of the output element substantially constant; and means to convert the electrical load of the generator into-mechanical power; and transmit it to the power input element. 3, Ass transmission for transmitting power. to a load at constant speed; from a- variable speed power source; comprising' a differential gearing having a spiderelement rotatably supporting a pinion and two differential gears meshed witlithe pinionqone diiferential gear constituting a power output' element; the spider e1ement'being_dr'lven by'tlie power source; theother differential gear being connected to an electric generatorrto drive Lt; an electric, loadss circuit for the generator; means to neutralize the tendency Of the output element VD' change speed comprising control rneansto' change the electrical load of, the gene emtor, operable responsive to an increase' or def crease or tnespeeel of theoutput element, to iespcctively effect decrease or increase of'the_out= put element speedi 4; A transmission for transmitting power toa load at; constant speed from a variable speed power sourcel comprising a. differential searing having. a, spider element rotatably supporting a pinion and two diiferential gears meshecl' with the pinion; one diiferential gear constituting a power output element; the spider element being driven by the power source; the -other differential gear- being connected-,to arrelectric generator to ririve it; an electric load circuit for the generator? means to~neutralize,the- tendency of thesoutput element to change speed comprising control means to change: theelectrical load ofthe generator, operable responsive to speed of' the, output element; and means to-convert the electrical load. of the generator into mechanical power' and transmit it tothe spider element. 5. In a transmission for transmitting: power. at constant speed from a variable speed' power sourcey st power input' element to be driven' by the variable speed source; a power. output element; power transmission means between thetwo elements comprising an alternating current stator, a,direct'current'f1cld element driven' at- speed proportional to that of the input element for producingss ar rotary alternating current' 'Heidi in the stator, an induction generator comprisingn rotor rotating within the rotating Held and having a load circuit' and mechanism rliiferentially' dividing- tliefpower from the input element, bee tween the generator- rotor and the output ele-f ment; and means controlling the electrical load of the generator comprising means controlling the energization of- the direct current field ree sponsive to speed of theoutput element. . 6. In a transmission for transmitting power at constant speed. from' a- variable speed power source; a, power input element to be driven by the variable speed source; a. power output elef ment; power transmissionrneans between the two elements comprising an alternating current stator, a direct current Iield element driven at speed proportional to that of the input element for producing a. rotary alternating current field in the stator, an induction generator comprising a rotor rotating within the rotating iield and having a. load circuit and mechanism differentially dividing the power from the input element between the generator rotor andthe output element; and means 'controlling the electrical load of the generator comprising means controlling the energization of the direct current Held responsive to speed of the output element; and means to convertss the electrical loadss of the generatorinto mechanicalss power and transmitit to the input e1e_gt; ment; ` 7. A transmission for transmitting power to a. load at constant speed from a variable speed POWer source comprising: B, diiferentiaz gearing including a. spider element rotatably supporting a, pinion, and two differential gears mashed with the pinion; one differential gear constituting a. power output element; the spider element being driven by the power source; an alternating current stator; a -direct current Held element driven by the spider and producing an alternating rotary fleld in the stator; an induction generator comprising B. rotor driven by the other differential gear and having an electrical load circuit; means to neutralize the tendency of the output element to change speed, comprising control means to change the energization of the direct current :Held to correspondingly change the electrical load of the generator, and operable responsive to speed of the output element. 8. A transmission for transmitting power to a load at -constant speed from a. variable speed power source comprising: a differential gearing including a, spider element rotatably supporting a, pinion, and two differential gears meshed with the pinion; one differential gear constituting 9. power output. element; the spider element being driven by the power source; an alternating current stator; a direct current field element driven by the spider and producing an alternating rotary fleld in the stator; an induction generator comprising a, rotor driven by the other differential gear and having an electrical load circuit; means to neutralize the tendency of the output element to change speed, comprising control means to change the energization of the direct current field to correspondingly change the electrical load of the generator, and operable responsive to speed of the output element; and means to convert the electrical load of the generator into mechanical power and transmit it to the spider element. 9. In 9. transmission for transmitting power at constant speed from a, variable speed power source; a. power input element to be driven by the Variable speed source; EL power output element; power transmission means between the two elements cemprising a direct current electric generator having an electric load circuit, and mechanism diiferentially dividing the power from the input element between the generator and the output element; and means controlling the Held energization of the generator to control the electrical load thereof responsive to speed of the output element to maintain the speed of the output element substantially constant. 10. In a. transmission for transmitting, power at constant speed from a variable speed power source; a. power input element to he driven by the variable speed source; a, power output element; power transmission means between the two elements comprising a direct current electric generator having an electric load

circuit and mechanism diiereutially dividing the power from the input element between the generator and the output element; and means controlling the Held energizatinn of the generator to control the electrical load thereof responsive to speed of the output element to maintain the speed of the output element substa.ntia.11y constant; and means to convert the electrical load of the generator into mechanical power and transmit it to the input element comprising a direct current electric motor associated with the load circuit of the generator and mechanically connected to the input element. 11. In a transmission for transmitting power at constant speed from a, variable speed power source; za, power input element to be driven by the variable speed source; a power output element; power transmission means between the two elements comprising a, variably energizable electrodynamic brake and mechanism differentially dividing thc power frmn the input element between the brake and the output element; and means controlling energization of the brake responsive to speed of the -output element to maintain the siléed of the output element substantially constant. 12. In 3, transmission for transmitting power at preselected constant speed from a variable speed power source; a power input element to be driven by the variable speed source; a power output element; an electric generator having a load circuit; means to vary the electrical load of the generator comprising an electrically energizable means, a source of current for energizing it and a rheostat for varying its energization; mechanism fer differentially dividing the power from the input element between the generator and the mttput element; a. power take-oif from the output element to operate the rlneostat comprising 1‘OV¢'3S`SiZ1S means for moving the rheostat in alternate directions actuated by a centrifugal governor driven by the output element. 13. In 9. transmission for transmitting power at preselected constant speed from a variable syeed pc-wer source ; a. power input element to he driven by the variable speed source; a power output element; an electric generator having a load circuit; means to vary the electrical load of the generator comprising an electrically energizable means, a, source of current for energizing it and :=. rheostat for varying its energization; mechanism for differentially dividing the power from the input element between the generator and the output element ; a. power take-off fr-om the Output element to operate the rheostat comprising reversing means for moving the rhecrstat in alternate directions, an electro-magnetic winding for actuating the reversing means in response to energization of the Winding above or below a, normal erxergization, and an electric generator driven by the output element and energizing the Winding at normal energization at the preselected constant speed of the output element, 14. In a transmission for transmitting power at preselected constant speed from a, variable speed power source; a. power input element to be driven by the variable speed source; 9. power output element; an electric generator having fs. luad circuit; means bo vary the electrical load of the generator comprising an electrically energizable means, a source of current for energizing it and Q, rheost-at for varying its energization; mechanism for differentially dividing the power from the input element between the generator and the output element; means 1:0 operate the rheostat in alternate directions comprising a. pair of differential geariugs each including 9. pair of differential gears and a, spider, and means to rotate the spiders in opposite direction; one differential gear of each gearing being gear-connected to the rheostat; each of the other diEeI‘e11tia1 gears of the gearings being gear-connected to an electric generator; means to vary the electrical loads of the generators relatively comprising an electro-magnet associated with each generator, and an electric generator driven by the output element for energizing the electro-magnets. 15. In a transmission for transmitting power at preselected constant speed from a variable speed power source; a power input element to be 'driven bythe variable speed source; a power output element; an electric generator having e. load circuit; means 'to vary the electrical load of the generator comprising an electrically energizable means, a source of current for energizing it and a rheostat for varying its energization; mechanism for differentially dividing the power from the input element between the generator and the output element; means to operate the rheostat in alternate directions comprising a pair of diiferential gearings each including a pair of differential gears and a spider, and means to rotate the spiders in opposite direction; one differential gear of each gearing being gear-connected to the rheustat; each of the other diiierential gears being mutually drivingly connected to each other; means to vary the mutual driving ratio of the said other diiierential gears responsive to the speed of one of them. 16. In a transmission for transmitting power at constant speed from a variable speed power source; a power input element to be driven by the variable speed source; a power output element; power transmission means between the two elements, comprising an electric generator having an electric load circuit and mechanism differentially dividing the power from the input element between the generator and the output element; and control means comprising electrically energizable means controlling the load of the generator to thereby control the speed of the output element, a, ‘source oi current for energizing it, and a device for changing its energization; and governing fneclianism for operating the device responsive tc an increase or decrease of the speed ofthe output element to effect correspondingly a decrease or increase of its speed to maintain itsspeed substantially constant. 17. A transmission for transmitting power to a load at constant speed troina variable speed power source; ‘comprising a differential gearing naving 21. spider element rotatably supporting a pinion and two differential gears mashed with the pinion; one diiferential gear constituting a power output element; the spider element being driven by the power source; the other differential gear being connected to an electric generator to drive it; an electric loadoircuit for the generator; means to neutralize the tendency of the output element 'to change speed comprising electrically energizable control means to change the electrical 'load of the generator to thereby change the speed of the output element, a source of current for energizing the control means, and a device for changing its energization; and governing mechanism for operating the device responsive to an increase or decrease of the speed of the output element to eiiect correspondingly a decrease or increase of its speed to maintain its speed substantially constant. -18. In `a power supplying apparatus, a differential gearing comprising a spider element rotatably supporting a pinion, and two diderential gears both rneshed With the pinion, a source of rotary power connected to the spider element to iiotatively drive it. a power delivery shaft connected to one 'differential gear, an alternating current synchronous motor comprising a rotor connected to-'the spider, an alternating current iriductiongenerator comprising a rotor connected to the other diiferentlal gear to be rotatively driven thereby and supplying alternating current to the synchronous motor to drive its rotor, and S5 lil meansto adjustably varytne electric power supplied 'to ‘the synchronous motor. `19. In a power supplying apparatus, 'a differential “gearing comprising 'a spider element rotatably supporting -a pinion, and two differential gears both meshed with the pinion, a, source of rotary power connected to the spider element to rotatively drive it, a power delivery shaft connected to one 'differential gear, an alternating current synchronous motor comprising a rotor connected to the -spider, an alternating current induction generator comprising a rotor connected to the other _gt;dii'ferentlaL1 gear to be rotatively driven thereby and supplying alternating current to the synchronous motor to drive its rotor, and means to 'adjustably vary the electrical load of the induction generator. 20. In a power supplying apparatus, a differential gearing comprising 5, ssspider element rotatably supporting afpinion, and two differential gears both rneshed with thepinion, a source of rotary =power connected to the spider element to rotatably dri-veitya power 'delivery shaft connected to one 'differential gear, an 'electro-dynamic unit comprising 'a rotary Held element and comprising multiphase stator conductors, means to rotativety 'drive the neld element by power from the powersource, a source 'of direct current and circuitconnections forenergizing the rotary iield element, an alternating current induction generator 'comprising a rotor connected to the other differential ssgear 'to be rotatively driven thereby 'andeomprising i'nu_ltiphase‘stator conductors, the st-ator'conductors_gt;oi the electro-dynamic unit and of the induction generator being connected together in `m11tu€il1y'reacting relation to cause the unit to. produce ‘a rotary field in the induction generator stator in the direction of rotation of its rotor 'and tto cause the induction generator to produce ia, rotary field in the unit stator in the direction of its field element. 21. 'In a 'power 'supplying apparatus, a differential gearing comprising 'a spider element ro- ‘tatably supporting a pinion, and two differential gearsboth meshed with the "pinion, a source ofrotazy power connected to the spider element 'tryrotatively drive it, a _power delivery shaft connected to one 'diifeifential gear, an alternating current 'synchronous motor comprising a rotor connected to 'the rotary power source, an alternating current induction generator 'comprising a rotor connected to the other differential gear to ‘be rotatively 'driven thereby and 'supplying alter- ‘natlng current to the synchronous motor to drive its rotor. 22. In a ‘transmission for`tra.nsmitting power at constant speed from a, variable speed power source; a power input element to be driven by the variable speed source; a power output elen‘lent;‘power transmission means between the two elements, comprising 'an electric generator havingan electric load circuit and mechanism differentially dividing the power from the input ele- .ment between thegenerator and the output element; movable control means controlling the electrical load of the generator to control the .speed of fthe output element; operating .means responsiveto communicate movement of the out- ,put element tothe movable control means and 'to cause the control means to decrease or increase the generator toad, upon the occurrence of`an‘increase ‘or 'decr ease 'of output 'element speed above orhelow 'a ‘predetermined speed, to eliect “return of the output 'element speed to said 'predetermined speed; and responsive to interrupt said communication of movement upon the return of the output element speed to said predetermined speed; to maintain the output element substantially at said predetermined speed. 23. A transmission for transmitting power to a. load at constant speed from a. variable speed power source; comprising a. diierential gearing having \a. spider element rotatably supporting a. pinion and two differential gears meshed. with the pinion; one ditferential gear constituting a, power output element; the spider element being driven by the power source; the other differential gear being connected to an electric generator to drive it; an electric load circuit for the generator; movable control means controlling the electrical load of the generator to control the speed of the output element; operating means responsive to communicate movement of the output element to the movable control means and to cause the control means to decrease or increase the gen~ erator load, upon the occurrence of an increase or decrease of output element speed above or below a. predetermined

speed, to eiecb return of the output element speed to said predetermined speed; and responsive to interrupt said communication of movement upon the return of the output element speed to said predetermined speed; to maintain the output element substantially at said predetermined speed.

Classifications:
International (IPC 8-9): H02P29/00 (Advanced/Invention); H02P29/00 (Core/Invention)
International (IPC 1-7): H02K23/60
CPC: H02P29/0016
European: H02P29/00C
US: 318/8 475/152 475/153



Family:

Publication number	Publication date	Application number	Application date
US2445342 A	19480720	US19420460511	19421002

Priority:
US19420460511 19421002

Probable Assignee: TROFIMOV LEV A
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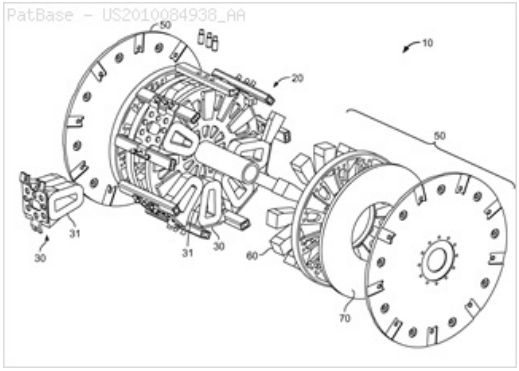
13) Family number: 44403229 (US2010084938A)

Title: REGENERATIVE MOTOR AND COIL

Abstract: This invention presents a highly efficient electric motor which can he embodied in several configurations, including a standard motor, a hub motor, a linear motor, or other motor configuration. As a regenerative device, the motor may also act as a part-time or full-time electrical generator. There is provided a motor composed of a stator and a rotor. The stator has an array of coils arranged therein. The rotor has an array of magnets arranged therein. Each of the coils includes a first winding of wire wrapped around a core, and the wire has a non-circular cross-section. The wire can be a flattened wire.

Classifications:
International (IPC 8-9): H02K1/02 H02K1/08 H02K1/27 H02K11/00 H02K11/04 H02K11/25 H02K16/00 H02K21/12 H02K21/24 H02K23/36 H02K3/04 H02K3/18 H02K3/26 H02K3/47 H02K3/50 H02K3/52 H02K47/20 H02K7/116 (Advanced/Invention); H02K5/22 H02K7/116 (Advanced/Non-invention); H02K21/12 H02K23/26 H02K3/04 H02K7/116 (Core/Invention)
CPC: H02K1/2793 H02K2213/03 H02K1/14 H02K1/182 H02K3/28 H02K2201/15 H02K3/521 H02K3/50 H02K1/02 H02K1/08 H02K3/18 H02K3/26 H02K5/225 H02K7/116 H02K11/0094 H02K11/046 H02K47/20 H02K2213/12 H02K3/04 H02K3/47 H02K16/00 H02K21/24 H02K11/25 H02K2213/09
European: H02K16/00 H02K21/24 H02K3/04 H02K3/47
US: 1/1 310/156.35 310/156.36 310/156.360P 310/198 310/198S 310/208 310/208S 310/68C 310/71 310/83 310/83S



Family:

Publication number	Publication date	Application number	Application date
CN102187547 A	20110914	CN200980141218	20090817
CN102187547 B	20150819	CN200980141218	20090817
CN102204069 A	20110928	CN200980141219	20090817
CN102204069 B	20150701	CN200980141219	20090817
EP2327137 A1	20110601	EP20090807419	20090817
EP2327137 A4	20150819	EP20090807419	20090817
EP2327137 B1	20200122	EP20090807419	20090817
EP2332242 A1	20110615	EP20090816662	20090817
EP2332242 A4	20151230	EP20090816662	20090817
US2010084938 AA	20100408	US20090542412	20090817

US2012326541 AA	20121227	US20120601543	20120831
US2013342054 AA	20131226	US20130871729	20130426
US9800111 BB	20171024	US20120601543	20120831
US10038349 BB	20180731	US20130871729	20130426
WO10019951 A1	20100218	WO2009US54049	20090817
WO10036458 A1	20100401	WO2009US54082	20090817
WO14176554 A2	20141030	WO2014US35548	20140425
WO14176554 A3	20150911	WO2014US35548	20140425

Priority:

US20080188994P 20080815 US20090542412 20090817 WO2009US54049 20090817
WO2009US54082 20090817 US20120601543 20120831 US20130871729 20130426

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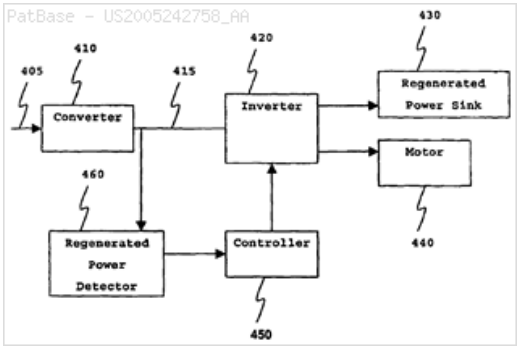
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW 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

14) Family number: 29544253 (US2005242758A)

Title: MESH CONNECTED BRAKE ARRAY FOR ELECTRICAL ROTATING MACHINES

Abstract: In the present invention, several polyphase devices are connected together: an inverter (**420**), and electrical rotating machine (**440**), and a resistive load or braking resistor (**430**). The purpose of the resistive load is to dissipate excess electrical power which may be produced when the inverter acts to slow down the rotating machine (**440**), causing the rotating machine to act as a generator. In common art, this resistive load is a single DC resistor coupled to the DC link of the inverter via a separate resistor control transistor. In the present invention, the resistive load is a mesh connected array of resistors, and is electrically connected to the same inverter output terminals that the rotating machine is connected to. When it is desired that the resistors absorb energy, for example from a braking operation, then the harmonic content of the inverter output is adjusted, thus placing voltage differences across the resistor array (**430**) and causing current to flow in the resistors.



Classifications:

International (IPC 8-9): B60W10/04 B60W10/10 B64C25/40 B64D47/00 F01D15/10 F01D5/22 F02C7/275 F02C7/32 F03D9/00 F04D25/04 F04D25/06 F04D29/32 F04D29/38 F16H48/06 G01G19/00 G01G19/07 G01G23/36 H02K1/00 H02K1/12 H02K1/22 H02K11/00 H02K15/00 H02K17/00 H02K17/12 H02K17/16 H02K17/42 H02K19/00 H02K21/00 H02K29/00 H02K3/00 H02K3/04 H02K3/12 H02K3/28 H02K3/34 H02K37/14 H02K47/20 H02K7/09 H02K7/10 H02K7/14 H02K7/18 H02P1/18 H02P25/00 H02P25/08 H02P25/18 H02P25/22 H02P27/00 H02P27/04 H02P29/00 H02P3/14 H02P3/22 H02P7/00 H02P9/04 (Advanced/Invention); H02K17/16 H02K5/22 (Advanced/Non-invention); B64C25/00 B64D47/00 F01D15/00 F01D5/12 F02C7/00 F02C7/26 F03D9/00 F04D25/02 F04D29/32 F04D29/38 F16H48/00 G01G19/02 G01G23/18 H02K1/00 H02K1/12 H02K1/22 H02K11/00 H02K15/00 H02K17/00 H02K17/02 H02K17/16 H02K17/42 H02K19/00 H02K21/00 H02K3/00 H02K3/04 H02K3/12 H02K3/28 H02K3/32 H02K47/00 H02K7/09 H02K7/10 H02K7/14 H02K7/18 H02P25/02 H02P25/16 H02P27/04 H02P9/04 (Core/Invention); H02K17/16 (Core/Non-invention)

International (IPC 1-7): H02K1/00 H02K47/20 H02P3/14 H02P3/22

CPC: H02K1/12 H02K3/04 H02K1/22 H02K3/34 H02K17/00 H02K17/165 H02P25/188 H02K21/14 H02K29/03 H02P27/04 H02K3/12 H02K11/00 H02P3/22 B64C25/40 B64C25/405 H02P3/14 B60K7/0007 H02K16/005 Y02T50/823 F05D2260/85 F01D5/225 F02C7/275 F02C7/32 F04D25/04 F04D25/0606 F04D29/324 F04D29/38 H02K2213/06 Y02T10/642 F01D15/10 H02K7/14 F05B2240/9111 H02K3/46 H02K5/08 Y02E10/465 Y02E10/725 Y02E10/728 B60W10/06 H02P9/04 Y02T10/7077 F16H3/56 F16C32/0461 F16C32/0463 F16C32/0497 H02K7/09 H02K17/16 F02C7/268 H02K7/1823 H02K11/048 H02K17/02 H02K17/42 H02P9/44 H02P2101/10 H02P2101/15 H02P2101/45 Y10T477/679 Y10T477/688 H02K11/33 H02K5/225 H02P25/18 H02P25/22 H02P27/00 H02P25/092 H02K99/20 H02P29/50 H02P25/08 H02K17/12 H02K19/103 H02K19/14 H02K37/04 H02K2213/03 H02K2213/09 H02P23/08 F03D9/25 B60W20/30 B60W10/101 H02K3/28 H02K7/183 B60W20/00 B60L50/11 B60L50/15

European: B60L11/04 B60L11/12 B60W10/06 B60W10/101 B64C25/40 B64C25/40P F01D15/10 F01D5/22B F02C7/268 F02C7/275 F02C7/32 F03D9/00C F04D25/04 F04D25/06B F04D29/32B3 F04D29/38 F16C32/04M4D2 F16C32/04M4D2E F16C32/04M4R6 F16C32/04M4R6R F16H3/56 H02K1/12 H02K1/22 H02K11/00H1 H02K11/04D1 H02K16/00B H02K17/00 H02K17/02 H02K17/12 H02K17/16 H02K17/26 H02K17/42 H02K19/10B H02K19/14 H02K3/04 H02K3/12 H02K3/28 H02K3/34 H02K3/46 H02K37/04 H02K57/00C H02K7/09 H02K7/14 H02K7/18A2 H02K7/18A2W H02P23/08 H02P25/08 H02P25/08E H02P25/18 H02P25/18S H02P25/22 H02P27/00 H02P27/04 H02P29/00H H02P3/14 H02P3/22 H02P9/04 H02P9/44 L60K7/00E L60W20/00 R05B240/9111 R05B260/85 T02K11/00 T02K17/12 T02K17/16 T02K17/16B T02K17/42 T02K21/14 T02K213/03 T02K213/09 T02K29/03 T02K3/28 T02K5/08 T02K5/22B T02K7/14 T02K7/18A2 T02P9/00A1 T02P9/00A2 T02P9/00A3 Y02E10/46U Y02E10/72H Y02E10/72N Y02T10/70 Y02T10/70J2 Y02T50/67B Y02T50/82B

US: 244/103.00S 244/103.00SP 244/103S 244/135.00AS 244/135A 290/40.00CP 290/40C 290/43 290/54 290/55 290/55P 310/12.18 310/12.180P 310/159 310/159P 310/164 310/164P 310/166 310/166P 310/166S 310/168 310/179 310/179S 310/184 310/184S 310/195 310/195S 310/216 310/216.001 310/216.001S 310/254 310/266 310/266P 310/42 310/427 310/427P 310/49.00R 310/49R 310/68.00B 310/68.00BS 310/68.00RS 310/68B 310/68R 310/83 310/83S 310/90.5 310/90.500 310/90.500P 310/91 310/91S 318/138 318/254 318/254.1 318/254.100P 318/375 318/376 318/376P 318/380 318/400.01 318/400.010S 318/400.09 318/400.090S 318/400.23 318/400.25 318/439 318/701 318/705 318/713 318/715 318/727 318/727S 318/771 318/771S 318/798 318/801 318/801S 475/149 475/154 477/110 477/115 702/173 702/173P 702/175 702/60 702/60S

Family:

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AU2003231744 AA	20031110	AU20030231744	20030422
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EP1550203 A1	20050706	EP20030747298	20030422
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US2005242758 AA	20051103	US20030511935	20030422
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US2007013238 AA	20070118	US20060525639	20060921
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US8299673 BB	20121030	US20080008227	20080109
US8532957 BB	20130910	US20080069614	20080211
WO03092150 A1	20031106	WO2003US12445	20030422
WO05107036 A2	20051110	WO2005US13748	20050422
WO05107036 A3	20070419	WO2005US13748	20050422
WO06002207 A2	20060105	WO2005US22011	20050621
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WO06113121 A1	20061026	WO2006US12483	20060405

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US19930006302 19930122
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WO2003US12445 20030422
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Probable Assignee: BOREALIS TECHNICAL LTD

Assignee(s): (std): BOREALIS TECHNICAL LTD ; CARMAN ROBERT L JR ; COX ISAIAH W ; EDELSON JONATHAN S ; MORRIS DONALD H ; STANGELAND MAYNARD L ; EDELSON JONATHAN SIDNEY ; GELLER ROCHEL ; COX ISAIAH WATAS ; BOREALIS TECH LTD

Assignee(s): BOREALIS TECHNICAL LIMITED

Inventor(s): (std): CARMAN ROBERT L JR ; COX ISAIAH W ; EDELSON JONATHAN S ; EDELSON JONATHAN SIDNEY ; JONATHAN S EDELSON ; EDELSON JONATHAN ; GELLER ROCHEL ; COX ISAIAH WATAS ; MORRIS

DONALD H ; STANGELAND MAYNARD L

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Agent(s): IP SOLVED ANZ PTY LTD; PEGASUS IP; BOREALIS TECHNICAL LTD; BOREALIS TECHNICAL LIMITED; BOREALIS TECHICAL LIMITED; BOREALIS TECHICAL LTD

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

15) Family number: 63313265 (US2018034280A)

Title: POWER GENERATION AND DISTRIBUTION SYSTEM FOR OFFSHORE DRILLING UNITS

Abstract: The present invention relates to power generation and distribution system suitable for use in a variety of applications such as Mobile Offshore Drilling Units and fixed offshore installations including various types of seaborne vessels, drilling rigs etc.

Classifications:
International (IPC 8-9): B63B17/00 B63H21/17 B63H23/24 B66C23/40 E21B41/00 F02D19/06 F03G3/08 H01F27/24 H01F27/28 H02H7/26 H02J H02J15/00 H02J3/02 H02J3/14 H02J3/28 H02J3/30 H02J3/32 H02J3/38 H02J3/46 H02J4/00 H02J5/00 H02M7/04 H02P27/06 H02P9/02 (Advanced/Invention);
E21B19/00 H02J3/14 H02J3/30 H02J3/32 H02P27/06 (Advanced/Non-invention)
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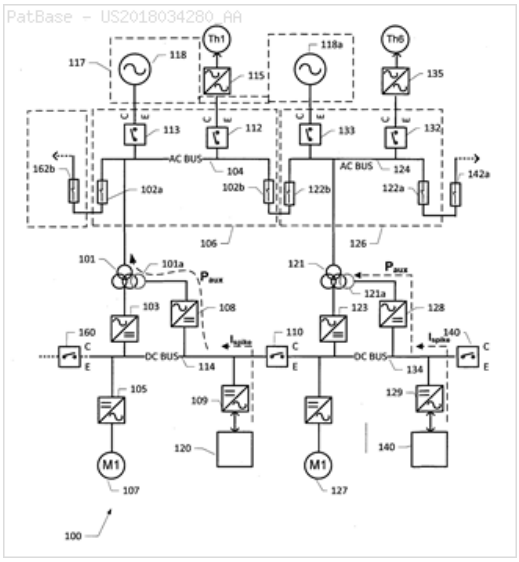

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MX2017010709 A1	20180507	MX20170010709	20160222
PL3259821 T3	20190930	PL20160711520T	20160222
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TR201905695 T4	20190521	TR20190005695T	20160222
US2018034280 AA	20180201	US20160552276	20160222
US2018366950 AA	20181220	US20160060144	20161207
US2020176987 AA	20200604	US20200782032	20200204
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US10559957 BB	20200211	US20160060144	20161207
WO16131460 A1	20160825	WO2016DK00006	20160222
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Priority:

DK20150000099 20150220 DK20150000424 20150720 DK20150000789 20151207
EP20160711520 20160222 WO2016DK00006 20160222 US20160060144 20161207
WO2016DK00047 20161207 US20180060144 20181113 US20200782032 20200204

Probable Assignee: MAERSK DRILLING A S

Assignee(s): (std)**:** MAERSK DRILLING AS

Assignee(s): WATTSUP POWER A S ; PEDERSEN JOHN RON ; MAERSK DRILLING A S

Inventor(s): (std)**:** JOHN RON PEDERSEN ; PEDERSEN JOHN ; PEDERSEN JOHN RON ; SPEIERMANN MARTIN

Inventor(s): PEDERSEN JOHN ROEN ; JOHN ROEN PEDERSEN

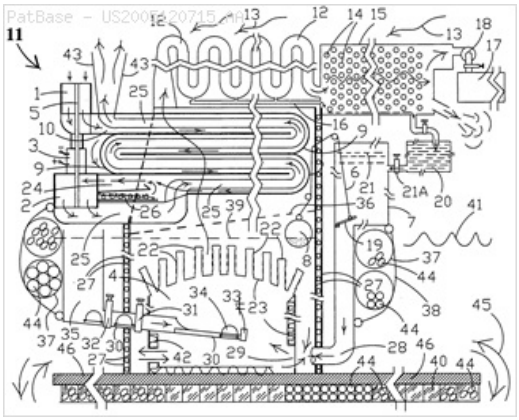
Agent(s): WRAYS PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; TYCHO ANDREAS FAERGEMANN; PONS ANGEL; FULYA SUEMERALP; LATHROP GAGE LLP

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 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

16) Family number: 30545299 (US2005120715A)

Title: HEAT ENERGY RECAPTURE AND RECYCLE AND ITS NEW APPLICATIONS

Abstract: What has been created is a plurality and a variety of processes and a variety of devices correspondingly supportive to each process, wherein, a new partnership between; (1) a heat absorbing radiator compressed air pipes/tubes and (2) a gas turbine engine or a reciprocating piston engine,-is used to recapture and reconvert the, otherwise wasted, heat energies expelled by engines, by factories, by smelting plants, by distillation plants, by chillers/coolers/freezers, by cooking ovens, by lamps/stoves, by trash burners, and the heat energies created by the solar heat on the desert/ocean water,-into electric power and finally into hydrogen-deuterium fuel,-by having the engine's tailpipes submerged in cold compressed air inside the heat absorbing radiator pipes in reverse air flow, to further drive and re-drive the same engine; wherein, in order to capture fusion heat energy the hydrogen bomb is detonated in the deep ocean to catch the flames by the water and the hot water is used to energize the compressed air inside the heat absorbing radiator pipes; wherein, in order to produce fusion energy, an abundant electric arc is passed across liquid deuterium or across gaseous deuterium by the electro-plasma torch and sparkplug in the internal combustion engine, and by detonating a dynamite inside a liquid deuterium; wherein diamond is produced by placing carbon inside the hydrogen bomb; and wherein, deuterium fusion flame is used first in smelting glass to large sizes before running an engine.



Classifications:
International (IPC 8-9): B01D61/10 B63B1/10 B63B1/12 B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H8/00 B63H9/06 B63H9/10 B63J3/00 B64C31/04 B64C31/06 E02B3/06 F01K13/00 F01K23/10 F01K27/00 F02C1/00 F02C1/05 F02G5/00 F03B13/18 F03D11/04 F03D5/00 F03D5/04 F03D9/30 F03G7/00 F24F1/037 F24F1/039 F24F5/00 F24F6/14 F28C3/06 F28D5/00 (Advanced/Invention);
B63B1/24 B63J1/00 F24F1/00 (Advanced/Non-invention);
B01D61/02 B63B1/00 B63B35/00 B63B35/44 B63B43/00 B63H9/00 B63J3/00 E02B3/06 F01K23/10 F01K27/00 F02C1/00 F02G5/00 F03B13/00 F03D5/00 F03G7/00 (Core/Invention)
International (IPC 1-7): B01D61/10 B63B1/700 B63B17/00 B63B35/00 B63B35/44 B63B43/06 B63B7/00 B63H9/10 B63J3/00 B64C31/04 F01K23/10 F03B13/18 F03D5/00 F03D5/02 F03D5/04 F03G7/00 F04B35/00 F24F6/14 F28D5/00
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US: 114/102 114/267 114/382 114/39.1 114/39.2 114/39.26 114/39.29 114/39.31 210/136 210/170 210/259 210/321.87 244/153.00R 244/153R 244/24 405/76 415/5 416/8 417/330 417/332 60/39.01 60/506 60/618 60/618P 60/676 60/698 60/698P 60/772 62/304 62/310 62/314 623/40

Family:

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US4859146 A	19890822	US19880177599	19880405
US5027735 A	19910702	US19900472753	19900131
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Probable Assignee: CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Assignee(s): (std): LABRADOR GAUDENCIO ; LABRADOR GAUDENCIO A ; LABRADOR GAUDENCIO AQUINO ; GAUDENCIO LABRADOR ; CHRISTIAN SCHOOL OF TECHNOLOGY ; CHRISTIAN SCHOOL OF TECH CHARITABLE FOUNDATION TRUST ; CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST ; CHRISTION SCHOOL OF TECHNOLOGY

Assignee(s): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI

Inventor(s): (std): LABRADOR GAUDENCIO A ; LABRADOR GAUDENCIO AQUINO ; CHRISTIAN SCHOOL OF TECHNOLOGY

Inventor(s): GAUDENCIO A LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE ; GAUDENCIO AQUINO LABRADOR

Agent(s): ROGER SYN AND CO PATENT AND TRADE MARK ATTORNEYS; MLT AIKINS LLP; FURMAN AND KALLIO; OYEN WIGGS GREEN AND MUTALA LLP; GAUDENCIO AQUINO LABRADOR

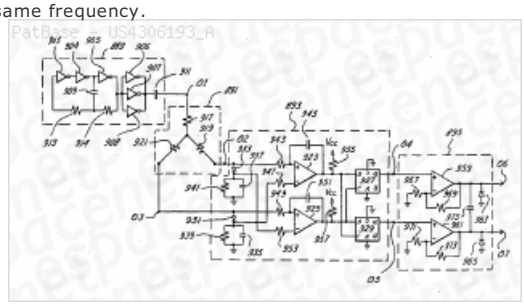
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT 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

17) Family number: 8446303 (US4306193A)

Title: Comparison circuit for alignment apparatus

Abstract: A comparison circuit for use in an apparatus including a source of a coherent light beam of low divergence for quickly and simultaneously establishing a plurality of reference lines or planes for use in leveling, squaring, plumbing, and other alignment functions and for controlling the operation of construction equipment is disclosed. The present invention is a circuit that finds particular utility in automatically adjusting the orientation of the tool. More particularly the present invention is a circuit for comparing the amplitude of a first alternating current signal to the amplitude of a second alternating current signal, such signals being in phase with one another and having the same frequency.

Classifications:
International (IPC 8-9): G01C15/00 G01R19/00 (Advanced/Invention); G01C15/00 G01R19/00 (Core/Invention)
International (IPC 1-7): H03K5/24
CPC: G01C15/004 G01R19/0038
European: G01C15/00A1 G01R19/00D
US: 327/50 327/588 328/146



Family:

Publication number	Publication date	Application number	Application date
US4306193 A	19811215	US19790037129	19790508

Priority:

US19790037129 19790508

Probable Assignee: LASERTRON COMPANY

Assignee(s): (std): LASERTRON COMPANY

Assignee(s): GENHO ROBERT K ; LASERTRON CO ; LASERTRON CO INC

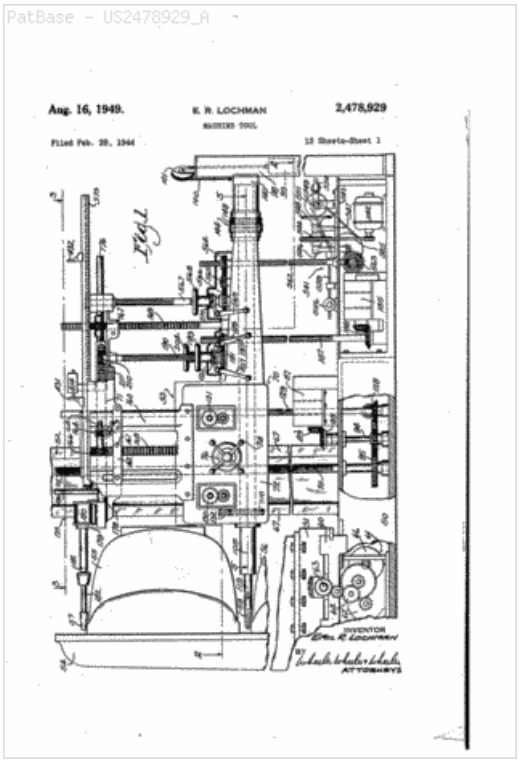
Inventor(s): (std): POTTER CHARLES W

18) Family number: 22329303 (US2478929A)

Title: MACHINE TOOL

Abstract: 1. In a machine tool, the combination With a tool carrier and a Work support, of transmission mechanism controllable for producing a plurality of transverse paths of relative movement between sald carrier and support, means including a tracer for pattern controlled operation of said mechanism in at least two paths and normally engageable with a pattern, and other control means including a stop with which the pattern 9,478,999 ' _ 49 n engasing portion of sold tracer is alternatively engageable for controlling said mechanism independently ol the pattern.

Classifications:
International (IPC 8-9): B23Q35/12 B23Q35/122 (Advanced/Invention); B23Q35/00 (Core/Invention)
International (IPC 1-7): B23Q35/121
CPC: B23Q35/122 B23Q35/12 B23Q2735/065 Y10T409/30196
European: B23Q35/12 B23Q35/122 L23Q735/06B
US: 200/19.05 200/7 409/99 470/96



Family:

Publication number	Publication date	Application number	Application date
US2478929 A	19490816	US19440524167	19440228

Priority:

US19440524167 19440228

Probable Assignee: LOCHMAN EMIL R

Assignee(s): (std)**:** LOCHMAN EMIL R

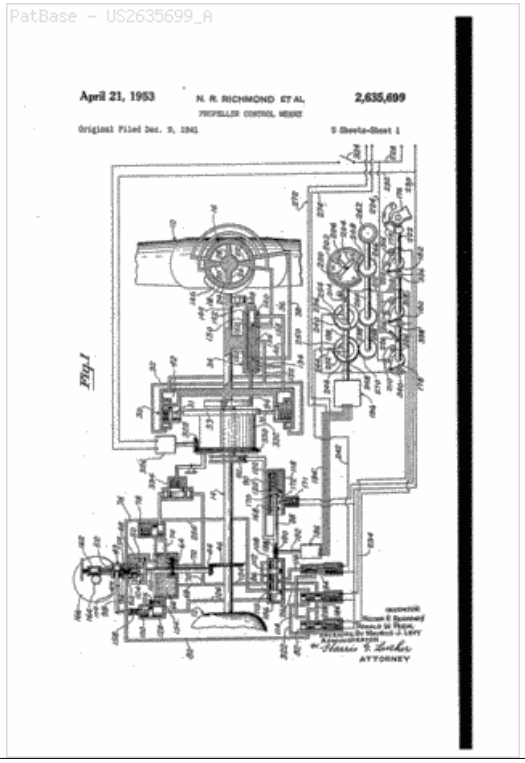
Inventor(s): (std)**:** LOCHMAN EMIL R

19) Family number: 21886324 (US2635699A)

Title: PROPELLER CONTROL MEANS

Abstract: (Claim 1) 1. In a prop6ller control -providing various modes of operation for a hydro_contrdllable propeller, in combination, a prop6ller, a single vallve in said propeller for controlling the application of hydraulic fluid to said,propeller in all of said various operative modes, a servo-motor -operatively connected with said valve, hydrauli6 speed responsive means operatively connected with and coritrolli_ng the operati-on 6f seiid servo-motor, -and manually controlled electrical means, -including a pluro_lity of electrically actuatable iluid cohtrol.ling valves, also operativ_ly connected wiluh said servo-motor for controlling the operation thereof.

Classifications:
International (IPC 8-9): B64C11/30 (Advanced/Invention); B64C11/00 (Core/Invention)
International (IPC 1-7): B64C11/38
CPC: B64C11/303
European: B64C11/30C
US: 416/46 416/61 91/435



Family:

Publication number	Publication date	Application number	Application date
US2635699 A	19530421	US19490077644	19490221

Priority:

US19490077644 19490221

Probable Assignee: UNITED AIRCRAFT CORP

Assignee(s): (std): UNITED AIRCRAFT CORP

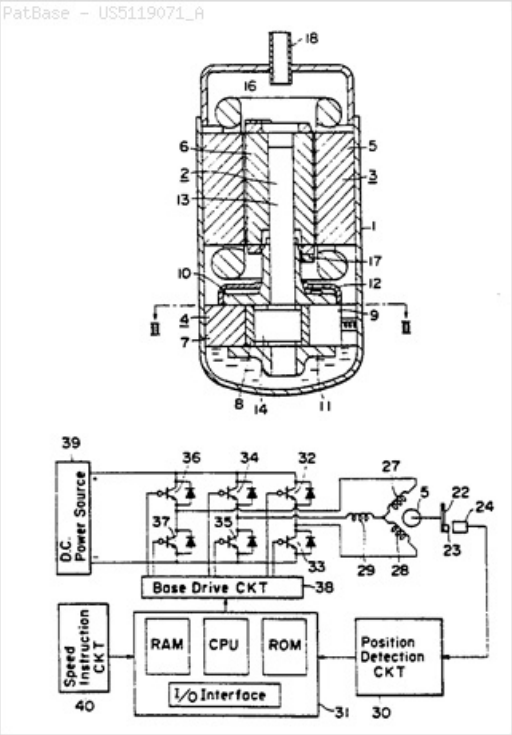
Inventor(s): (std): LEVY MAURICE J ; RICHMOND NELSON R

20) Family number: 20708327 (US5119071A)

Title: METHOD AND APPARATUS FOR CONTROLLING INDUCTION MOTOR FOR COMPRESSOR

Abstract: PCT No. PCT/JP90/00858 Sec. 371 Date Mar. 5, 1991 Sec. 102(e) Date Mar. 5, 1991 PCT Filed Jul. 3, 1990 PCT Pub. No. WO91/01062 PCT Pub. Date Jan. 24, 1991.DC power is supplied to an induction motor for a compressor by switching ON/OFF in response to a modulated voltage waveform obtained from modulating waves which are used for generating AC power for energizing an induction motor and a carrier wave according to PWM theory. The compressor has a compressing element rotated by the induction motor, and the modulating wave is corrected according to a rotational angle of the compressing element. A sine wave having the same frequency as the modulating wave is added to the modulating wave, and a phase of the sine wave is controlled so that a maximum value of the sine wave corresponds to the compression stage of the compressing element. Thus, a rotation speed of the compressing element is constant in a suction stage and a compression stage.

Classifications:
International (IPC 8-9): F04B49/06 F04B49/10 G01B7/00 G01B7/30 H02K11/00 H02K17/30 H02K29/08 H02P27/04 H02P27/06 H02P27/08 (Advanced/Invention);
F04B49/06 F04B49/10 G01B7/00 G01B7/30 H02K11/00 H02K17/02 H02K29/06 H02P27/04 (Core/Invention)
International (IPC 1-7): F04B49/06 F04B49/10 F04C29/10 G01B7/30 H02K11/00 H02K17/30 H02K33/14 H02P5/00 H02P5/41 H02P7/628 H02P7/63
CPC: F04B49/06 F04B2203/0207 H02K17/30 H02K29/08 H02P27/047 H02P27/08
European: F04B49/06 H02K17/30 H02K29/08 H02P27/04V H02P27/08 H02P7/628B R04B203/0207
US: 318/130 318/400.2 318/686 318/721 318/811 62/228.4 62/6



Family:

Publication number	Publication date	Application number	Application date
DE69025898 D1	19960418	DE19906025898T	19900703
DE69025898 D1	19960418	DE19906025898	19900703
DE69025898 T2	19961114	DE19906025898T	19900703
EP0437617 A1	19910724	EP19900909840	19900703
EP0437617 A4	19920527	EP19900909840	19900703
EP0437617 B1	19960313	EP19900909840	19900703
JP2021324 C3	19960219	JP19890177455	19890710
JP3045144 A2	19910226	JP19890177455	19890710
JP3203592 A2	19910905	JP19890341228	19891227
JP7046893 B4	19950517	JP19890177455	19890710
KR19910012549 A	19910808	KR19900022553	19901227
US5119071 A	19920602	US19910651382	19910305
WO9101062 A1	19910124	WO1990JP00858	19900703

Priority:

JP19890177455 19890710 JP19890341228 19891227 WO1990JP00858 19900703

Probable Assignee: SANYO ELECTRIC CO

Assignee(s): (std): SANYO ELECTRIC CO

Assignee(s): SANYO ELECTRIC CO LTD ; SANYO ELECTRIC CO LTD MORIGUCHI OSAKA JP

Inventor(s): (std): HAYASHI NORIO ; OGAWA TAKASHI ; TAKEZAWA MASAAKI ; HAYASHI YOSHIO

Inventor(s): TAKEZAWA MASAAKI GUNMA 370 04 JP ; OGAWA TAKASHI GUNMA 373 JP ; HAYASHI NORIO GUNMA 373 JP

Designated states: AT BE CH DE DK ES FR GB IT LU NL SE US