

Nicolas Vargas

Search history

Search FT=(hybrid and solar panel and water turbine and wind turbine) (Results 19)

1:

Search 1 and pd<20170922 (Results 16)

2:

Search [SP]: 1. a hybrid energy system, comprising: a first dynamo array which includes more than one wind blade specially designed fixed onto an axis rod which operatively cranks a wind dynamo generator configured to provide a power output at least one solar panel combined with wind dynamo configured to generate another power output a second dynamo array which includes more than one rotary blade specially designed fixed onto an axis rod which operatively cranks a generator configured to provide a power output a system of rectifier to convert electrical ac output into a rectified dc a system of controller to control the angle of rotor blades which thereafter controls the speed of the rotor blades at least one monitoring system for measuring the speed of the rotor blades a system of commutator connected to convert dc voltage from solar panel into ac power a buoy which is connecting wind, solar and hydro dynamo together and is used as a housing for generators, rectifiers and electronic equipment and a storage system connected to store dc voltage from the rectifier as a power source 2. the system as in claim 1, wherein the hybrid energy system is one of a buoy, multi rotor systems: one of a wind dynamo coupled with solar panel, another of a hydro dynamo 3. the hybrid energy system as in claim 1, includes a first dynamo system which includes one or more wind propelled blades, a linear actuator mechanism which is used move the wind pan to control the speed of the wind dynamo, a braking system to stop the rotation of the wind dynamo, the wind propelled blades are fixed with the axis coupled with the generator 4. the hybrid energy system as in claim 1, includes a solar panel curved in shape fixed with wind blade, solar panel generating dc fluctuating output is fed to the commutator using brushes 5. the hybrid energy system as in claim 1, includes a second dynamo system which includes one or more hydro propelled blades, flaps are connected which rotates to control the speed of the hydro dynamo, a braking system to stop the rotation of the hydro dynamo, the hydro propelled blades are fixed with the axis coupled with the generator 6. the hybrid energy system as in claim 1, includes a rectifier circuit which is used convert ac output from wind dynamo generator, solar energy system and hydro dynamo generator into dc power 7. the hybrid energy system as in claim 1, includes one or more controller which individually provides the signal to the actuators in wind blades and signal to the flaps in hydro dynamo therefore controlling the speed of the rotor 8. the hybrid energy system as in claim 1, includes at least one or more speed monitoring devices which monitors the speed of dynamo and accordingly sends the signal to the controller which thereafter performs as in claim 79. the hybrid energy system as in claim 1, includes a commutator connected with brushes with certain number of poles which converts fluctuating dc from solar panels into an ac power system as in claim 410. the hybrid energy system as in claim 1, includes a storage system which contains one or more battery to store dc power converted after. rectification as in claim 6. (Results 1)

Search [SP]: hybrid power plant comprising solar, wind and hydro system hybrid electrical energy generation system is achieved by a system of vertical axis wind turbine, vertical axis hydro turbine and a solar panel system mounted on the buoy. vertical axis wind turbine and vertical axis hydro turbine generates ac power by using generator or dynamo system and solar panel system generates dc power which gets converted to ac by the commutator circuit. all the ac supplies get converted again into dc power by the rectifier circuit which is further stored in the battery. this complete system along with controlling and monitoring system generates electrical energy with efficiency. (Results 0)

Search FT=(buoy and solar panel and water turbine and wind turbine) (Results 7)

5:

Search FT=(buoy and (solar panel or photovoltaic*) and water turbine and wind turbine) and PD<20170922 (Results 19)

6:

Search FT=((solar panel or photovoltaic*) and water turbine and wind turbine) and PD<20170922 (Results 188)

7:

Search 7 and generator and rectifier (Results 39)

8:

Search 8 and batter* (Results 36)

9:

Search 9 and inverter (Results 25)

10:

Search [SP]: 1. a hybrid power generating system for coupling a large-scale water turbine generator with a gravity power generating unit using balances, the gravity power generating unit having pressure load equipment, the hybrid power generating system, comprising a water turbine (78a) to be subject to water pressure energy of height difference of a large-scale hydroelectric power plant, and to be rotated by a large volume of water from a water pressure pipe at high pressure, a power generator (11) integral with the water turbine (78a), a gravity power generating unit (a) having pressure load equipment, using upper-lower two step balances with a center on their fulcrum, each of the balances and having a fulcrum point at a center thereof, and a torque converter automatic transmission (86) disposed between the water turbine generator and the gravity power generating unit (a), for coupling the water turbine generator with the gravity power generating unit (a) into one power generating system wherein the larger the wind turbine is, the less frequently will the wind turbine turn. wherein double acting single rod water pressure cylinders (9a) are provided on right and left leading end portions of the lower balance, a separate pressure water pump for applying water pressure by the height difference communicates in a head chamber of each of the double acting single rod water pressure cylinder (9a), via a pressure control electric valve and a flow control electric valve, leading ends of the cylinder rods are on right and left portions of a load balance (1), and apply a pressure force constantly in proportion a pressure receiving area of a piston in the head chamber, wherein rod chambers of the right and left double acting single rod cylinders communicate with one another via a oil hydraulic tube (23), load is applied alternately to the right and left rod chambers by pressurizing the hydraulic oil by an variable displacement oil hydraulic piston pump (27) for a closed circuit in a multiplex oil hydraulic pump (14), wherein the pressure load equipment has control device, the control device comprises a quick acting solenoid on-off shut-off valve (67) and a solenoid discharge valve between the pressure water pipe (4) and the head chamber, permanent magnet (7) and an electromagnet (6) on the leading end portion of the rod wherein a reciprocating oil pressure transfer unit is provided on a center portion between right and left ends of the balance, the reciprocating oil pressure transfer unit has a plurality of, right and left a double rod oil hydraulic cylinder (3a) at positions each of which set by a short distance according to a ratio of balances, a power increased by the pressure load equipment is transferred alternately to the double rod oil hydraulic cylinders to pressurize a piston, wherein upper and lower chambers of the double rod oil hydraulic cylinders are continued via two closed circuit variable displacement oil hydraulic piston pump (25) of the same model which are activated by an external motor, the right and left double rod oil hydraulic cylinders is switched by the closed circuit variable displacement oil hydraulic piston pump (25), using a limit switch (34) at upper and lower dead center positions and a timer (38), at the same time as activation of the pressure load equipment, wherein the multiplex oil hydraulic pump (14) is a multiplex quintuplex oil hydraulic pump (14) activated by an external motor, in the multiplex quintuplex oil hydraulic pump (14), two auxiliary pumps (26, 28) for replacing hydraulic oil are incorporated at a vertically and laterally symmetrical position, a fulcrum, wherein a forward reverse tilt plate is angled by sensing a load of an increased power, the forward reverse tilt plate is switched by an automatic cam (46) under power transmission of an intermediate shaft, to define a variable displacement tilt plate angle for increasing quantity of the hydraulic oil, wherein the external motor (12) activates the auxiliary pump so as to serve a function of supplying the hydraulic oil, wherein the vertical axis water turbine generator (11) has a flywheel (8) for adjusting volume of water, an rotation axis of the vertical axis water turbine generator rotates a horizontal axis with a spiral bevel gear, the horizontal axis rotating is coupled with a shaft of right and left crank gears (17) of the gravity power generating unit, and coupled with right and left double rod cylinders (3a) and a crank rod (15), a water turbine rotates with up and down movement of the double rod cylinder, the cylinder functions as a pump, the oil hydraulic pump of the closed circuit functions as an oil hydraulic motor, the pump motor functions as a power generator, wherein the water turbine transmits a commercial electricity as a load, wherein a device is provided for gradually inputting an increased power to the double rod cylinders moving up and down, wherein in the generator, an output configuration is arranged in such that a power increased according to a ratio of balances is input from the torque converter automatic transmission, balancing with the flywheel, a water turbine (78a) gradually increases an output by increased volume of water, balancing with an

output of the water turbine power generator, accordingly the power which is increased with pressurizing the variable displacement oil hydraulic piston pump is converted to rotation output, the water turbine generator is capable of generating and combining power, wherein a synchronous or an induction generator of a vector control inverter is used, wherein the upper and lower closed circuit oil hydraulic pump (25) of the same model, and the right and left double rod oil hydraulic cylinders serve as conveyance media for coupling both power generators by closing circuits to transfer a small quantity of hydraulic oil alternately between the right and left ones, wherein as countermeasure against sliding heat, a water-cooling radiator (89) of water jacket is applied for an inside of a pipe piston rod and a cylinder sleeve, or to the double acting single rod water pressure cylinder (3b), a double rod water pressure cylinder of arbitrary rod diameter is applied, the double rod water pressure cylinder includes head and rod chambers in which both a water pressure and an oil pressure are applied, and is incorporated in a power generation space. 2. a hybrid power generating system for coupling a small-size small-scale water turbine generator with a gravity power generating unit using balances, the gravity power generating unit having pressure load equipment, the hybrid power generating system, comprising a small-size small-scale water turbine generator having a water turbine (78a) and a power generator (11), the water turbine (78a) being selected according to water volume, water flow to use a source of water, a drainage canal or the like at a place of small height difference, a gravity power generating unit (a) including pressure load equipment and upper-lower two step balances and further including a power generating equipment coupled with the power generator (11) via a horizontal axis, the power generating equipment having a rotating intermediate axis disposed at a position of the balance, wherein double acting single rod water pressure cylinders (9a) of large diameter are provided on right and left leading end portions of the lower balance, reciprocating oil pressure transfer units are provided on a left and a right of an upper reciprocating balance with respect to a fulcrum point thereof for connecting and linking the upper and lower balances to one another, a pressure from the small volume of water and height difference is increased according to a ratio of balances into a high pressure, the high pressure is transmitted in upper and lower chambers of closed circuit double rod oil hydraulic cylinders (3a) of the reciprocating oil pressure transfer unit, wherein closed circuit variable displacement oil hydraulic piston pumps (25) of the same model are coupled with external driving means and are connected between upper chambers and between lower chambers, a load of an increased power is applied alternately pistons of the right and left closed circuit double rod oil hydraulic cylinders (3a), at upper and lower dead points, a power further increased is input in the water turbine power generator (11) from the closed circuit double rod oil hydraulic cylinders (3a) and a crank at a position thereof, wherein or, an air hydraulic cylinders (93) are used as pressure load equipment, instead of the water pressure cylinders, an air pressure is filled in head chambers of the air hydraulic cylinders (93), a load which is more lightweight than a weight placed on the ground is applied on leading ends of a load balance, when the weight contacts the ground by adjusting an oil pressure force in a rod chamber, no load is applied, a power is increased by switching the load alternately to one another, according to a ratio of balances, and inputs in the power generator from the crank mechanism of the double rod cylinders, wherein alternatively, double acting single rod pneumatic cylinders having an open circuit oil hydraulic unit (79) and a storage tank may be used as pressure load equipment, wherein a power is increased by discharge of an air pressure of a single acting air cylinder which is a device for gradually inputting a power and by increase of the air pressure by the closed circuit variable displacement (Results 50)

Search 11 and solar and wind and water (Results 5)
12:

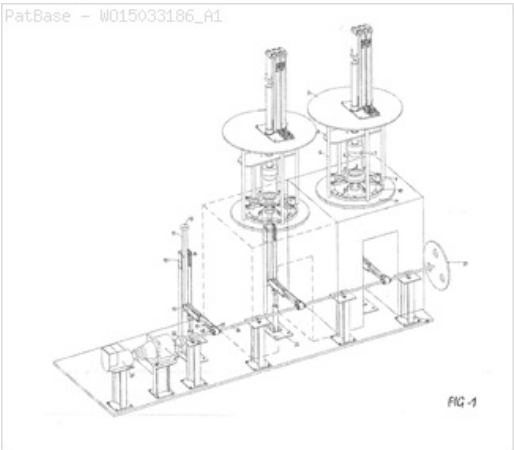
1) Family number: 58694110 (WO15033186A1) © PatBase

Title: MECHANISM FOR THE GENERATION OF ELECTRIC POWER USING A FALLING HEAVY ELEMENT

Abstract: Mechanism for the generation of electric power using a falling heavy element indicated by reference sign "M", which is characterized in that use is made of the kinetic energy of a heavy element (7) or (7A) which, in free fall, is accelerated under gravity to confer, on a striker (12), a kinetic movement that is transmitted to a transmission arm (13) connected to a clutch (16) positioned above a spring (25); the heavy element (7) or (7A) can be captured and moved vertically upwards by means of a pneumatic actuator or mechanical mechanism mounted on a fixed base (2) which, for its part, vertically connects external guide rods (5), aligned with the internal guide rods (6), which serve to assist the fall of the heavy element (7) or (7A) on the cradle (8); for the purposes of capture and raising of the heavy element, use may be made of an electromagnet (4) connected to a movable base (3) supported vertically by a fixed base (1); in instances of high mass, the heavy element is connected to the rod of the actuator or to the mechanical lifting mechanism, these latter being responsible for raising same to the height at which release thereof takes place, it being unnecessary in such cases to capture the heavy element electromagnetically; the lower portion of the mechanism "M" includes, furthermore, a striker (12) that directly receives the movement arising from impact and is driven by the vertical transmission arm (13), by means of a guide structure (16) with pins (14) allowing the movement to be transmitted to a clutch (16) composed of an arm (17), a catch (18) and a catch base (19), which elements assist in the achievement of mechanical or binary torque on the rotor shaft (24), which, for its part, couples to a mass disc (27) which assists in preserving the slowly rotating inertial movement of the rotor shaft (24), with recourse to bearings (23), positioned on supports for the generation unit (26) as a whole, this movement being transmitted to a gearbox (21), by means of an elastic coupling (22), which accelerates same to actuate the electric generator (20); in order to guarantee lifting of the heavy element, use is made of a mechanical mechanism with a support structure (I), which allows the connection of all elements that give rise to the movement of the heavy element upwards by means of a (), commencing with the use of the motor () which provides the force up to the end of each ascending cycle or, finally, is automatically disconnected; this motor is connected to the reducer (..) by means of an elastic coupling () and a clutch (...) connected to a transmission gear (), which, for its part, is connected directly to a chain () and to a cable () that runs by means of pulleys (..), that pass the cable to the heavy element (7A) by means of arm () fixed to the base (32) where a guide ring (31) is secured.

Classifications:

International (IPC 8-9): F03G3/06 F03G7/10 H02K7/02 H02K7/116
H02K7/18 (Advanced/Invention)
CPC: H02K7/1853 H02K53/00



Family:

Publication number	Publication date	Application number	Application date
WO15033186 A1	20150312	WO20131858287	20130904

Priority:

Probable Assignee: MAINSEL JO O GASPAR**Assignee(s):** (std): MAINSEL JO O GASPAR**Assignee(s):** MAINSEL JOAO GASPAR**Inventor(s):** (std): MAINSEL JO O GASPAR**Inventor(s):** MAINSEL JOAO GASPAR

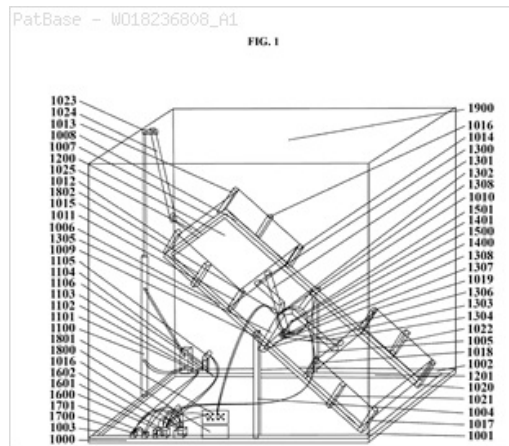
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2) Family number: 72570601 (WO18236808A1)

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Title: GRAVITY MOTOR AND GENERATOR

Abstract: Systems, methods, apparatuses, and in some embodiments computer programs encoded on a computer storage medium, provide for clean continuous portable self-contained physics powered energy generation and propulsion, by in some embodiments, including one complete embodiment, transferring force generated through hydraulics and or pneumatics and or mechanical leverage and or motorized mechanical leverage, to cause the flow of a medium, to spin a turbine, to power an electricity generator, and or rotate an axle to provide the propulsion of a traditional motor, where energy may be captured in excess of that consumed as a result of the differential between input force required and output force provided by certain force providing device configurations, as well as a result of the differential between the linear force used to elevate the medium and the compounding force provided by gravity during medium drop.

Classifications:**International (IPC 8-9):** F03G3/00 F03G3/02 (Advanced/Invention)**CPC:** F03G3/00 F03G3/02**Family:**

Publication number	Publication date	Application number	Application date
WO18236808 A1	20181227	WO2018US38191	20180619

Priority:

US20170522646P 20170620 US20170596825P 20171209 US20180645066P 20180319

Probable Assignee: JONATHAN BANNON MAHER CORP**Assignee(s):** (std): JONATHAN BANNON MAHER CORP**Inventor(s):** (std): MAHER JONATHAN**Inventor(s):** MAHER JONATHAN BANNON

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

3) Family number: 53176790 (US2013056993A)

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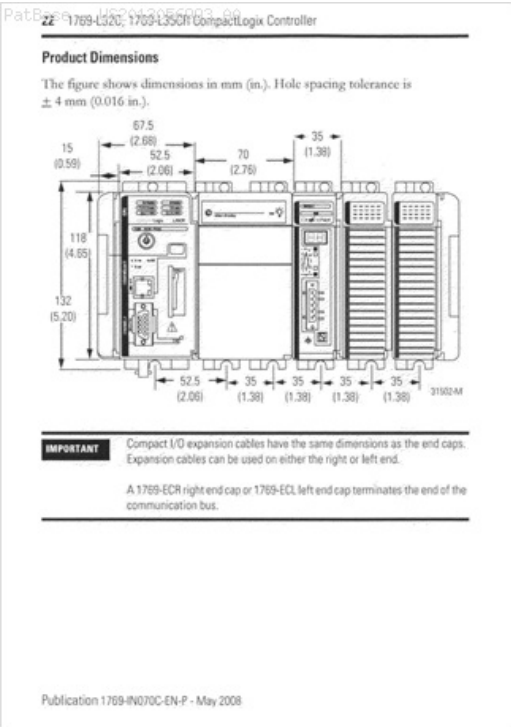
Title: USE OF THERMAL HYDRAULIC DC GENERATORS MEETS THE REQUIREMENTS TO QUALIFY AS A "GREEN ENERGY" SOURCE

Abstract: Thermal Hydraulic DC Generators capture energy from Turbine Generators, Combustion Engines, Geothermal Sources, Facility Systems, or Solar Collectors. These sources can be used to produce 180-degree Fahrenheit hot water in order to drive Thermal Hydraulic DC Generators. These Generators create a very efficient means of generating electric power. Other co-generation systems require the use of steam to drive Steam Turbines. The use of steam as opposed to hot water requires more expensive equipment and more maintenance to operate than a 180 Degree F. hot water system. These 180 Degree F. hot water systems incorporating the Thermal Hydraulic DC Generators are more efficient than the Rankine Cycle or the Carnot Cycle. Thermal Hydraulic DC Generator Engines incorporate a plc based control system that eliminates the need for governors and voltage regulators. They incorporate inverter systems to create clean power at unity power factor. This is a new system that has never been accomplished before.

Classifications:

International (IPC 8-9): F01B11/00 F01D15/00 F01D15/10 F01K7/00
F02C6/18 F02G F02G5/00 F02G5/04 F03D9/00 F03G7/06 F24F11/00
G05B19/048 G05D7/06 G06F G06F1/26 H02J3/38 H02J3/40 H02J3/46

H02K H02K7/14 H02K7/18 H02N10/00 (Advanced/Invention)
CPC: F01D15/10 F03G7/06 H02J3/14 H02P9/04 F02G5/02 H02K7/1823
H02J3/46 H02K7/1853 H02J3/40 F01K7/00 H02J3/385 H02K7/14
G05D7/0635 G05B19/048 G05B2219/2614 Y02B30/52 F01D15/00
F02C6/18 F02G5/00 F05D2220/76 F05D2250/82 H02N10/00 Y02E10/465
Y02E10/72 Y02E20/14 Y02T10/166 F24F11/30 F24F11/52 F24F11/62
F24F11/63 F24F11/83 F24F11/85 F02G5/04 F03D9/008 F03D9/25
H02S10/12 F03D9/00 F03D9/007 Y02E10/725 Y02P80/158
US: 290/1R 290/54 307/45 60/530 700/287



Family:

Publication number	Publication date	Application number	Application date
EP3027875 A1	20160608	EP20140831802	20140731
EP3027875 A4	20170510	EP20140831802	20140731
HK1225430 A1	20170908	HK20160113786	20161202
US2013056993 AA	20130307	US20110134343	20110907
US2014005844 AA	20140102	US20130956897	20130801
US2014353975 AA	20141204	US20140444636	20140728
US2016233683 AA	20160811	US20150847724	20150908
US2017205103 AA	20170720	US20170416871	20170126
US9920648 BB	20180320	US20140444636	20140728
WO15017599 A1	20150205	WO2014US49005	20140731

Priority:

US20110134343 20110907	US20120507331 20120621	US20120573882 20121012
US20130956897 20130801	US20140444636 20140728	WO2014US49005 20140731
US20150847724 20150908	US20160287239P 20160126	US20170416871 20170126

Probable Assignee: NEWCOMB ERIC WILLIAM

Assignee(s): (std): NEWCOMB ERIC WILLIAM

Inventor(s): (std): NEWCOMB ERIC WILLIAM

Agent(s): CASEY ALAN MICHAEL; INCOMPASS IP LTD; WALL EAMON J

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 NZ 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

4) Family number: 45867886 (US2013341934A)

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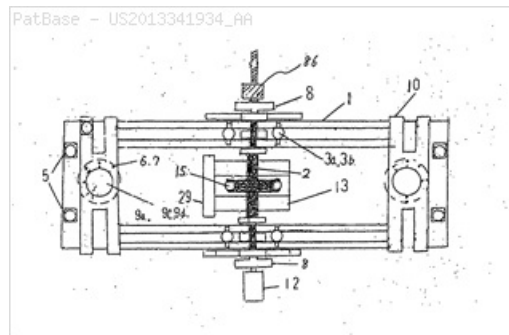
Title: HYBRID POWER GENERATOR COUPLED TO GRAVITY POWER GENERATOR USING BALANCE WHICH HAS PRESSURE LOAD DEVICE

Abstract: There is provided a hybrid power generating system for hydraulic power, thermal power (nuclear power) turbines, geothermal, an engine room of a ship, **wind** power, **solar** power, a train (high-speed underground electric railway). The system of the present invention for existing hydraulic power, thermal power (nuclear power) turbines, geothermal, an engine room of a ship, **wind** power, **solar** power, a train (high-speed underground electric railway), a factory or the like is installed in a space for a power generator in sites of primary, secondary, tertiary substations. A torque converter automatic transmission which serves as a coupling clutch is coupled with a rotating shaft of a motor of the above, a cylinder of pressure load equipment working with a weight, **water** pressure, oil pressure, air pressure or the like which is suitable for potential energy serving as output is provided on each end of a load balance, a power which is increased according to a ratio of balances is transmitted to cylinders of a reciprocating balance at a fulcrum position, the increased power is input by a crank and combined in the power generator, and thereby output is increased.

Classifications:

International (IPC 8-9): B60L13/03 B60L13/04 B60L7/12 B60L7/14 B60M7/00 B61B1/00 B61B13/08 B61B13/10 B61D23/02 B61D37/00 B61D43/00 B61L27/00 F03B13/00 F03D9/00 F03G3/00 H02K41/025 H02K7/00 H02K99/00 (Advanced/Invention); F03G3/00 H02K7/00 (Core/Invention)

CPC: Y02T10/7083 B60L8/00 H02K7/1807 B61D43/00 F03B13/00
B60M3/00 B60L2200/26 Y02T10/641 Y02P90/60 F03D9/007 F03D9/008
F03D9/12 F03D9/25 F03D15/10 F03D80/70 H02S10/12
European: B60M3/00 H02K7/18A Y02T10/64B
US: 290/1A 290/3 290/54 290/55



Family:

Publication number	Publication date	Application number	Application date
JP2011043137 A2	20110303	JP20090192940	20090824
JP2011109763 A2	20110602	JP20090260651	20091116
JP4480051 B1	20100616	JP20090192940	20090824
JP4544545 B1	20100915	JP20090260651	20091116
US2013341934 AA	20131226	US20100261179	20100820
WO11024928 A1	20110303	WO2010JP64539	20100820

Priority:

JP20090192940 20090824 JP20090260651 20091116 WO2010JP64539 20100820

Probable Assignee: KAWANISHI EIJI

Assignee(s): (std): KAWANISHI EIJI

Inventor(s): (std): KAWANISHI EIJI

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 RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

5) Family number: 44967911 (US2010156632A)

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Title: INFRASTRUCTURE MONITORING SYSTEM AND METHOD

Abstract: An infrastructure monitoring system and method that comprises multiple monitoring devices and/or multiple output devices. Each monitoring device includes at least one sensor for collecting data, a data storage device for storing the data, a processor for analyzing the data, and a communications device for transmitting and receiving data. The system may also include an operations center for controlling and receiving data from the plurality of devices.

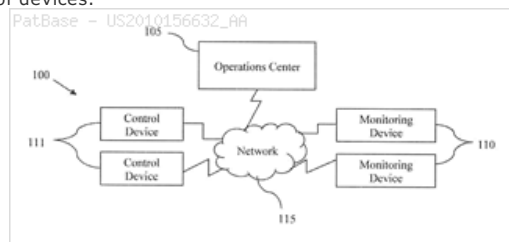
Classifications:

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G05B23/02 G06F15/00 G08B1/08 G08B19/00 G08B21/00 G08B21/18
G08B23/00 G08B25/00 G08B25/08 G08B25/10 G08B29/00 G08C17/02
G08G9/00 H02J13/00 H04M11/04 H04Q9/00
H04W24/00 (Advanced/Invention);
G06F15/00 G08C17/00 (Advanced/Non-invention);
G06F15/00 G08B21/00 (Core/Invention)

CPC: G08B25/006 G08B25/10 G08C17/02 E03B9/06 G01N33/0075
G01N21/94 G08B25/009 H04M11/04 G08B21/18 G08B25/08
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H04Q2209/823 Y10T137/5468 G05B2223/06

European: G08B25/08 H04Q9/00 S05B219/13

US: 1/1 137/296 340/517 340/539.1 340/539.100P 340/539.22 340/539.26 340/540 340/540P 340/540S 340/870.01 340/870.16
702/188 702/188S



Family:

Publication number	Publication date	Application number	Application date
AU2009308949 AA	20100506	AU20090308949	20091027
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW