

200 Documents

Publication numbers	Title	Current assignees
CN106894940 A	A power generation device at an outlet of a water supply plant	ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING
CN205315200U U	Power generation facility in water works exit	ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING
CN108661841 A	Novel hydroelectric generation device	ZHAO MIMI
CN106894936 A	A power generation device	ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING
CN101922402 A	Automatic circulating hydropower generating device	FU DELI
CN2693980U Y	Waterwheel generator	DENG CHUNCUI
CN202187856U U	New type high-efficiency water power generation device	DALIAN HAITING SHIP INDUSTRY
CN205025681U U	Improved generation water wheels power generation facility of increase high energy	LUO GUANGSHAN
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CN106762332 A	Novel washdown universal water turbine and water bucket thereof	HUNAN ZHENGKAN HYDRAULIC POWER & HYDROELECTRIC RESEARCH & DEVELOPMENT
JP6442095 B1	Linear hydraulic power generation device	GOKAN HAJIME
WO2006108901 A1	Electric power generator system using ring-shaped generators	NOVO VIDAL MARIA ELENA
CN206309522U U	General hydraulic turbine of novel direct -flushing formula and bucket thereof	HUNAN ZHENGKAN HYDRAULIC POWER & HYDROELECTRIC RESEARCH & DEVELOPMENT
CN202451355U U	Water wheel power generation device and dam power generation system	GAO HONGLIANG
CN203335319U U	Reaction type waterwheel landscape generator set	SHANG SHUIQIAO
US4180976 A	Siphon motor	BUNN CARL H
CN104791180 A	Combined water cart water power recycled water self-circulation power generating method	YANG LIN
JP2003269310 A	Water wheel power generation device and power generating method with water wheel	TOSHIBA ENGINEERING
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Publication numbers	Title	Current assignees
	Feedback type waterwheel scene electricity generating unit	SHAOXING CITY BI LAKE ENVIRONMENTAL PROTECTION TECHNOLOGY
CN102230438 A	Combined type waterwheel power generation device used in water conservancy channel or river channel	GUO ZHENJIA
CN105804916 A	Novel efficient energy-saving environment-friendly waterwheel	LIUZHOU JINGYANG ENERGY SAVING TECHNOLOGY RESEARCH & DEVELOPMENT
CN205277672U U	Power generation device	ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING
CN1858433 A	Wheel and bucket type wave force water turbine	DONG HONGQIAN
CN1948743 A	Bigear toothed water wheel	YUAN DEZE
JP2013087650 A	Bucket for water wheel, water wheel having the bucket and water wheel generator composed of the water wheel	SUZUKI TOKUO
KR20180017063 A	Environmentally-friendly power generation method to continuously produce electricity using gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency while additionally generating action of gravitational acceleration	HAN, SANG-KWAN
KR20180008362 A	Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration	HAN, SANG-KWAN
KR20180005148 A	ECONOMICALLY-FRIENDLY POWER GENERATION METHOD CONTINUOUSLY PRODUCING ELECTRICITY USING GRAVITATIONAL ACCELERATION GENERATOR coupled TO VERTICAL FALL GENERATION EQUIPMENT TO INCREASE GENERATION EFFICIENCY	HAN, SANG-KWAN
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CN102889164 A	Ultrahigh-efficiency hydraulic generating device and technology thereof	DALIAN HAITING SHIP INDUSTRY
JP2011127334 A	Hydroelectric power unit utilizing flowing water in fall, mountain stream and the like	NAGASHIO KICHINOSUKE
KR20180011038 A	Omitted economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment	HAN, SANG-KWAN
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Publication numbers	Title	Current assignees
CN108590922 A	Shaft energy recycling device and method for force transmission on basis of gear chain structure	HOHAI UNIVERSITY
WO2005106240 A1	Method for energetic, technical and biological use of underground water	BORN GUENTER HEINRICH
CN105275713 A	Hydroelectric generation device used for retaining dam	L B ENTERPRISES
CN101787949 A	Side water inlet type hydroelectric generating set	OUYANG ZHICHENG
DE102005050909 A1	Energy recovery process for recovering energy from water involves rotating water wheel eccentrically and transmitting rotation to consumer or energy converter	ROSENKRANZ
WO2014155656 A1	Sustained-flow-rate power generation control system, sustained-flow-rate power generation control method, sustained-flow-rate power generation control program, and sustained-flow-rate power generation facility	CHUGOKU ELECTRIC POWER
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US3936224 A	Power turbine	NORDQUIST OSCAR M
CN106837654 A	Horizontal shaft impulse turbine with high power generating efficiency	SHENZHEN ZHONGKEZHICHENG TECHNOLOGY
CN203856639U	River-flow floating type hydroelectric generator	LU YING
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CN101614179 A	Method for hydroelectric generation on medium and small-sized rivers	HOU WEIDONG
CA3030824 A1	Hydraulic water wheel for a directional water flow	HELIOSALTAS
JP2003021043 A	Reaction type water turbine and operating and controlling method therefor	TOSHIBA
KR20170013801 A	Water power generation system	KANG, SEOK-CHEOL
CN104265549 A	Water wheel type generator set and power station	LUO FUQIANG
GB201408407 D0	Synergic method for hydrodynamic energy generation with neutralized head pressure pump	IBRAHIM HANNAH
WO200931016 A2	An energy generating system using a plurality of waterwheels	Anne - Mary, ...
DE10324791 A1	Hydroelectric power generation involves arranging impeller at slope of barrier, with slope located between upstream side and downstream side of water stream	THALER RICHARD
CN203257594U	High-rise tap water fluid power generation system	XING GANSHEN

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KR20180003492 A	Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration	HAN, SANG-KWAN
CN105370483 A	Wide-width low-water-head water flow power generation flexible system	HOHAI UNIVERSITY
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CN205225560U U	Waterwheel formula hydraulic generator's back upper place drainage formula waterwheel	LUO FUQIANG
CN205478082U U	Multistage water under high pressure power generation facility	WEI FUFENG
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JP2011089476 A	Hydraulic pressure reducing device	CHUGOKU ELECTRIC POWER, ...
KR20180002557 A	Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate gravitational acceleration	HAN, SANG-KWAN
CN107152372 A	Water power recovery water drawing backflow type power generation method	YANG LIN
JP2003042050 A	Conduit type power generating system and its starting method	TOSHIBA ENGINEERING
KR20180025307 A	Environmentally friendly power generating method for continuously producing electricity using gravitational acceleration generator	HAN, SANG-KWAN
KR20180021020 A	Environmentally-friendly power generation method to continuously produce electricity using gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency by actions of gravitational acceleration and gravity	HAN, SANG-KWAN
CA3030757 A1	Linear pelton turbine	NATEL ENERGY
KR20190055952 A	Acceleration of gravity action configured to generate a weighted orthogonal drop power generation facility associated with the action of the gravitational acceleration device for generating electricity by using the continuous production of environmentally friendly power generation method of a natural	HAN, SANG-KWAN
JP2014118960 A	Hydraulic power generation device	Shunji Kondo
KR101907347 B1	Turbine device and the driving method thereof	KIM, JEUM SIK
CN106089543 A	Ultra-large hydroelectric station	CHEN YONGYUAN
CN105971808 A	Recycling and electricity-generating method of fluid power	YANG LIN

Publication numbers	Title	Current assignees
CN204253255U U	Electric generating set by utilizing flexible shafts to waterwheel for driving power	FENG LIANG, ...
WO200721295 A2	Waste water electrical power generating system	CRIPTONIC ENERGY SOLUTIONS
FR2641607 A1	System for remote measurement of the surface of an article, especially a Pelton turbine bucket, using an optical sensor	EDF - ELECTRICITE DE FRANCE
CN204267206U U	Power generation device	PENG WEICHENG
JP5615402 B1	Water turbine device for power generator	POWER GIKEN
CN203856638U U	River-flow Pelton type generation waterwheel structure	LU YING
CN203809194U U	Water turbine using water gravitational energy	GUO QIANG
CN103089524 A	Power generating device	CHEN LIQIN
CN202023678U U	Pipeline potential energy generating system of tap water works	LI ZHENGFU
CN204458179U U	Waterwheel	WANG KAIMING
EP1348913 A1	Energy recovery apparatus and method of operating energy recovering apparatus	HITACHI
JP2000257544 A	Air energy utilizing system utilizing dam or its circumferential facility	OKINAWA DEVELOPMENT AGENCY OKINAWA GENERAL BUREAU
JP08193567 A	Bucket hydraulic wheel	SANO SADAJIRO
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JP2013083268 A	Semipermanent water circulation power amplification power generation system loaded with high output dynamo by water power dam	TARUNO KAZUO
CN102345549 A	Floating wheel type water turbine	YANG CHUNYI
CN201679617U U	Intertidal zone wave energy electricity generating system	GUO QIANG
CN107461293 A	Water current power generation device	FOSHAN DAODAO ELECTRONIC TECHNOLOGY
JP2010116771 A	Hydroelectric power generation system and comprehensive hydroelectric power generation system	Tetsuo Shida; Saitama Prefecture Tokorozawa City Shimoyasu 1 0 1 9-2 1
CN203978695U U	Water wheel for hydroelectric generation device	L B ENTERPRISES
CN103244339 A	Power generation system using water	CHEN TUO
CN102562421 A	Hydroelectric generating set and dam power generation system	GAO HONGLIANG
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JP2005351125 A	Laterally long water turbine type water flow generator	CHOSHIOIN YASUHISA
CN204493063U U	Hydroelectric generator	SHENYANG INSTITUTE OF ENGINEERING
CN204344366U U	Hydropower station device for secondary power generation with drainage flows	GUANGDONG MEIYAN JIXIANG HYDROPOWER
CN202023681U U	Hydroelectric generator	ZHANG LIANFA
JP2003322077 A	Water supply device and method	YAMATATSUGUMI
KR20170081767 A	Torque generator using water wheel	HUH. HEON
CN106089550 A	Hydroelectric generating set with multi-shaft snap-in connection in duct type water wheels	JIE XIUZHONG
GB201610730 D0	Waterwheel	CARRUTHERS PENELOPE
CN201678466U U	Water treating and electric generating system for waterworks	HE PAIZHI
DE202006001113 U1	Device for producing a current for weirs is made from rigid steel and is mounted on a concrete base	HOFSAESS HARRY
US20030131621 A1	Energy collecting system and method of operating the same	HITACHI
DE202008013954 U1	Water wheel hydraulic power plant, floats, automatic level control, small turbines and photovoltaics	PEICKERT ULRICH JOACHIM CHRIST, ...
WO2008145018 A1	Apparatus and method for keeping water stream energy utilized	LEUNG KWONG KEUNG, ...
US7388302 B1	Hydro-electric power generating system with an adjustable water diversion system	SRBYNIK LOUIS, ...
WO200568831 A1	Power generation device utilizing falling water flow	TAKEUCHI MANUFACTURING
JP08035478 A	Power generating device using water flow	NISHI TAKASHI
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JP2001107835 A	Stopping method of water-turbine-driven compressor and water-turbine-driven compressor for executing this method	HOKUETSU KOGYO
CA2820521 A1	Power generation system	VANDERZWEEP BEREND
KR20120013812 A	Small hydropower generation for water mill	KUM SUNG & & C
DE10055548 A1	Power generation from rain water using suction method, involves collecting rainwater in drop tube to drive generator via tube and pipe arrangement and water wheel to produce energy	ROSSMANNEK WOLFGANG, ...
CN108730097 A	Water current impacting force and lever force based independent power generation device	LI HUAMING
JP2017180265 A	Hydraulic generating equipment utilizing water gravity force	YAMAZAKI HIROTO
JP2015113830 A	Vertical water channel cylindrical multiple water turbine type hydraulic power generation	SHIMONO EIICHI
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CN203515930U U	Fluid circulation generator	ZHENG YULAI
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DE202011105407 U1	Device for reducing pressure in the pipes and power generation	REUTER DANIEL
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JP2002354695 A	Conduit type power generating system	TOSHIBA ENGINEERING, ...
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WO201119302 A1	Method and device for converting hydraulic impact energy	CHERVONOV DMITRIJ NIKOLAEVICH, ...
JP10331141 A	Urban type marine structure and power generating method	MAEDA, ...
CN205315199U U	Inclined jet turbine	ZHONGXIAN SANXIA HYDROPOWER EQUIPMENT MANUFACTURING
CN104632513 A	Residual water power generation system of hydroelectric power station	WU GUOCHUN
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JP2004176705 A	Hydraulic power generating device	ASAHI TECHNO
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	pressure drop control using turbine head potential	
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CN108644090 A	Hand-operated waterwheel fun device	ZHOU MANYANG
CN206681904U U	Nucket -wheel formula rivers generator	YU CHUNHUA
CN105134461 A	Circulating power generating system	GUAN QUNXIANG
CN202628371U U	Double-linkage water turbine	CHENG XIANGQIAN
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CN207830029U U	Wave energy power supply beacon	LU LINZE
CN108301958 A	Super-high-rise building rainwater micro power generation system	NORTH CHINA UNIVERSITY OF WATER CONSERVANCY AND ELECTRIC POWER
CN206513491U U	Water wheel for hydroelectric generation device	YANG LEI
JP4817471 B1	Hydroelectric generator device	SEABELL INTERNATIONAL
GB200805233 D0	Improvements in or relating to waterwheels	BELL HUGH MALCOLM IAN
CN207568766U U	Power station is synthesized to seashore	FENG ZHANGNING
CN106988956 A	Efficient water wheel power generation device	XISHUI WENXIONG WATER CONSERVANCY POWER TECHNOLOGY
CN106050532 A	Wheel-oriented current force stretching plate water or wind wheel and power generation system	MAO YONGBO
WO201097204 A2	Water wheel	RIEGERBAUER HERMANN
CN207333083U U	Electricity generation waterwheel group	QINGYUAN YUYOU SHANGDE ENERGY
CN106014838 A	Wheel-direction flow force extension roller blind water wheel or wind wheel and power generation system	MAO YONGBO
NO20121084 A1	A bucket connection for a turbine runner	DYNAVEC
CA2836350 A1	Hydro-electric power plant comprising a grating assembly for taking water into the turbine, which is designed to discharge floating debris stopped by the grating	MJ2 TECHNOLOGIES
JP2012225212 A	Hydraulic turbine power generator	ITO TADASHI
JP3161062U U	Natural river and hydroelectric power generation apparatus	NAGAO OSAMU
KR20110038882 A	Power generation apparatus	HOGUK & N G, ...
DE102009025531 A1	Waterwheel for recovering potential energy between head	HERMESMEIER

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	water and bottom water of retaining dam, has vanes arranged on periphery of hub, where base of passage forms gap of desired breadth relative to hub for limiting free flow rate	CHRISTOPH, ...
CN201412263U Y	Device for generating power by self-pressurizing circulated water	PU SHUZHU
JP2003021041 A	Hydraulic power generating device	TOSHIBA ENGINEERING
JP07151048 A	Power generation pumping device for river	MAEDA
CN106837663 A	Low-water-level river generating set	GUO BAOTIAN
CN104819092 A	Seven-bucket type whirligig-shaped sea wave generator	HEBEI UNIVERSITY OF TECHNOLOGY
CN104329205 A	Water flow power generating device	WANG CHENGHUI
CN101975134 A	Horizontal type hydroelectric generator system	LÜ QIWEI
WO200497211 A1	Water wheel motor	BOTEK PETER
JP2004068655 A	Constant-water open type water wheel generation device	TANAKA SUIRYOKU KIKAI SEISAKUS, ...
US4345160 A	Waterwheel power generator	SMITH J T
CN207761873U U	Wave energy power supply system with buffering wave impact function	NANCHANG POWER SUPPLY BRANCH JIANGXI ELECTRIC POWER, ...
KR20180057584 A	A technique to produce electricity continuously using a water drop power plant designed to nal acceleration actions	HAN, SANG-KWAN
FI200900350U U0	Device for producing energy by hydropower	EINOLANDER JORMA, ...
CN106257047 A	Water energy cold and hot air blower set and power generation device thereof	ZHAN PINGZHI
CN105386922 A	Upper rear drainage-type waterwheel of waterwheel type hydraulic generator	LUO FUQIANG
CN204226089U U	Electricity-generating device for trolley with water wheel and water tank	DENG XIANGHUA
US20110266804 A1	Ancient hydroelectric company	DOLCIMASCOLO JOSEPH
JP2003172242 A	Hydraulic turbine	FUJISAKI MASANORI
US3984698 A	Waterwheel driven electrical generator	BREWER JACK J
CN107740745 A	Durable micro hydroelectric generation device	ZHANG GUANGSHAN
KR20180017065 A	Eco-friendly power generation method continuously generating electricity using gravity acceleration action generator combined with right angle falling power plant that increases power generation efficiency	HAN, SANG-KWAN
CN104179626 A	Multi-power hydrodynamically-driven generator set device	XIAMEN TIANSHENG ENERGY TECHNOLOGY
CN101975136 A	Automatic cycle hydroelectric power generating device	FU DELI

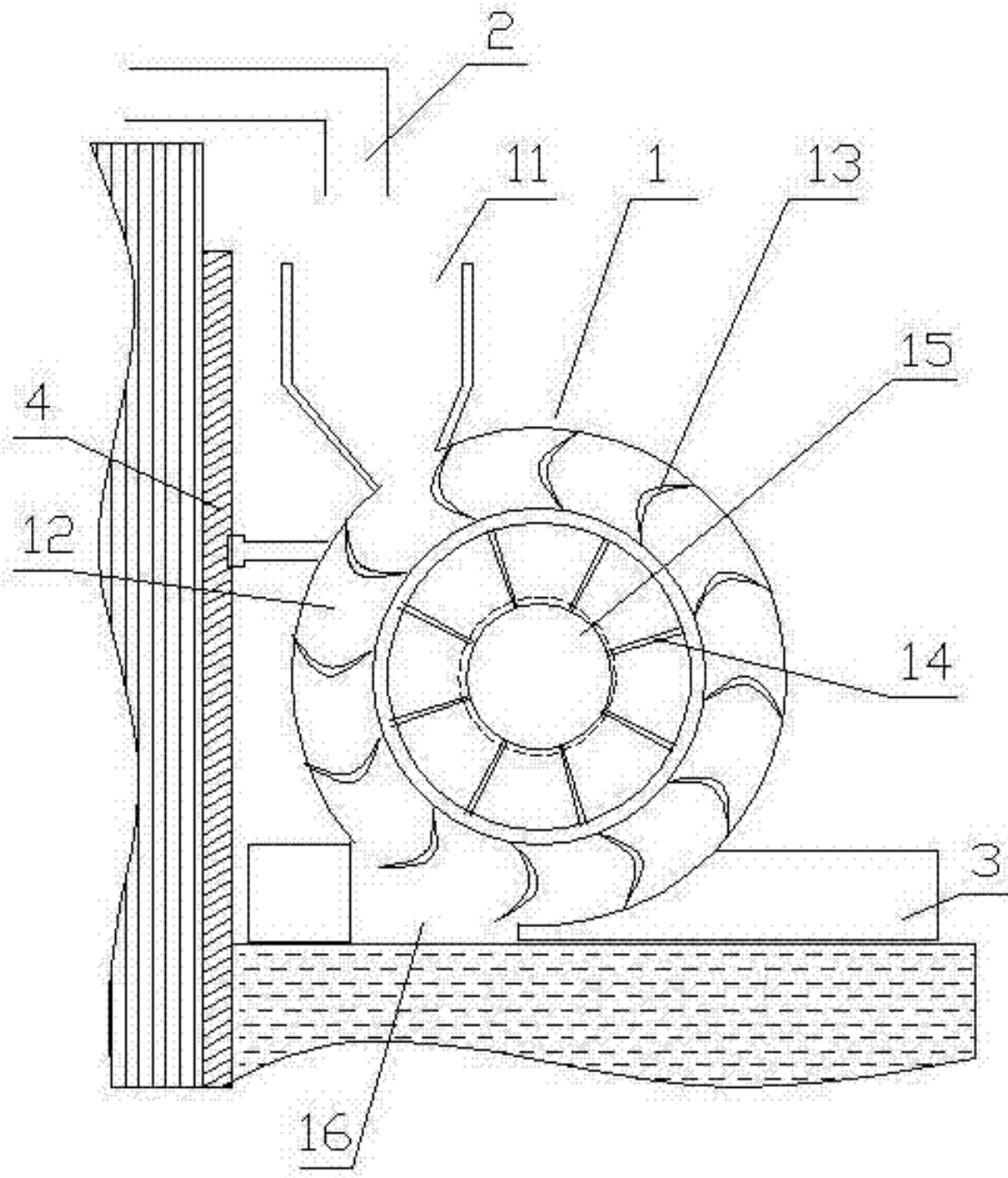
Publication numbers	Title	Current assignees
JP2011122577 A	Natural river power generation system	NAGAO OSAMU
US20110080002 A1	Controlled momentum hydro-electric system	SANTANA JOSE RAMON
KR20090103469 A	Underground storage for small hydropower generation controlling a water level and a flood	LEE, SEUNG-YOUNG
GB200401500 D0	Application of zippers to a moving film material	ITW - ILLINOIS TOOL WORKS
CN106026573 A	Efficiently inverted pelton-type hydrogenerator with double rotors	GUO YUANJUN
CN201778944U U	Graded cascading hydro-power generating unit	HU LIANGXUAN
JP2001153021 A	Hydraulic power generating equipment for low head	TONE
CN109185019 A	Hydroelectric generator	SHAOGUAN GUANGQIAN HYDROPOWER EQUIPMENT
CN106762416 A	Novel energy power generation device	GUAN WEI

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Title

(CN106894940)

A power generation device at an outlet of a water supply plant

Images**Publication data including kind & date**[CN106894940](#)

A 2017-06-27 CN106894940

**Abstract**

(CN106894940)

The invention provides a power generation device at an outlet of a water supply plant. The power generation device comprises a power generation mechanism, a tap water outlet pipe and a floating pad. The power generation mechanism is installed on the floating pad; the side of the power generation mechanism is provided with a sliding device allowing the power generation mechanism to slide up and down; the sliding device is installed on a surrounding wall under the tap water outlet pipe; the power generation mechanism comprises a water collection hopper, a water wheel chamber, water wheel, a rotating bearing disc and a generator, wherein the water collection hopper is located right under the tap water

outlet pipe, the lower portion of the water collection hopper communicates with an opening in the upper portion of the water wheel chamber, the water wheel chamber is annular in shape, the water wheel hoppers are uniformly and annularly distributed in the water wheel chamber and are fixedly installed on the outer side edge of the rotating bearing disc, and the rotating bearing disc is in transmission connection with a rotating shaft of the generator. The power generation device at an outlet of a water supply plant better solves the problem that potential energy cannot be fully utilized because of changes of fall and can fully absorb the kinetic energy and potential energy of tap water.

Inventors

LI TIEJUN

Latest standardized assignees - inventors removed

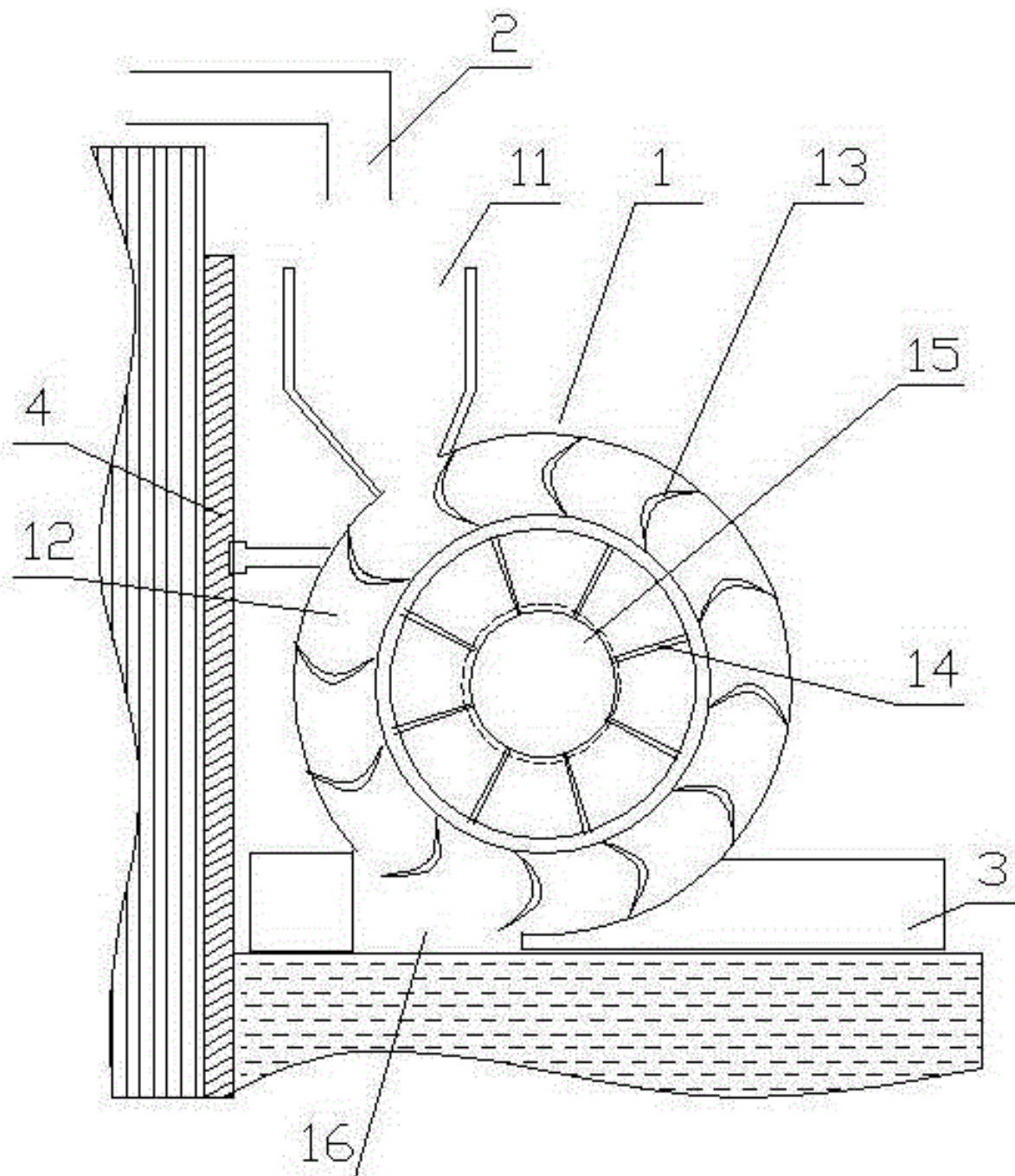
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Title

(CN205315200U)

Power generation facility in water works exit

Images

Publication data including kind & date

CN205315200

U 2016-06-15 CN205315200U

**Abstract**

(CN205315200U)

The utility model discloses a power generation facility in water works exit, include electricity generation mechanism, running water outlet pipe and float and fill up that electricity generation mechanism installs and stacks up unsteady, electricity generation mechanism side is provided with gliding slider about the mechanism that is used for generating electricity, and slider installs on the leg of running water outlet pipe below, electricity generation mechanism includes water collecting bucket, water wheels room, water wheels fill, rotates holds dish and generator, and water collecting bucket lies in the running water outlet pipe under, and the water collecting bucket lower part communicates with each other with water wheels room upper portion opening, and the water wheels room circularizes, and the indoor even annular of water wheels distributes and has the water wheels fill, and water wheels fill fixed mounting holds a set outside side in the rotation, rotates to hold set transmission and connect a power generator shaft, the utility model discloses relative prior art can solve the problem because of the unable make full use of potential energy of change of drop betterly, can absorb water kinetic energy and potential energy from the beginning fully.

Inventors

LI TIEJUN

Latest standardized assignees - inventors removed

ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING

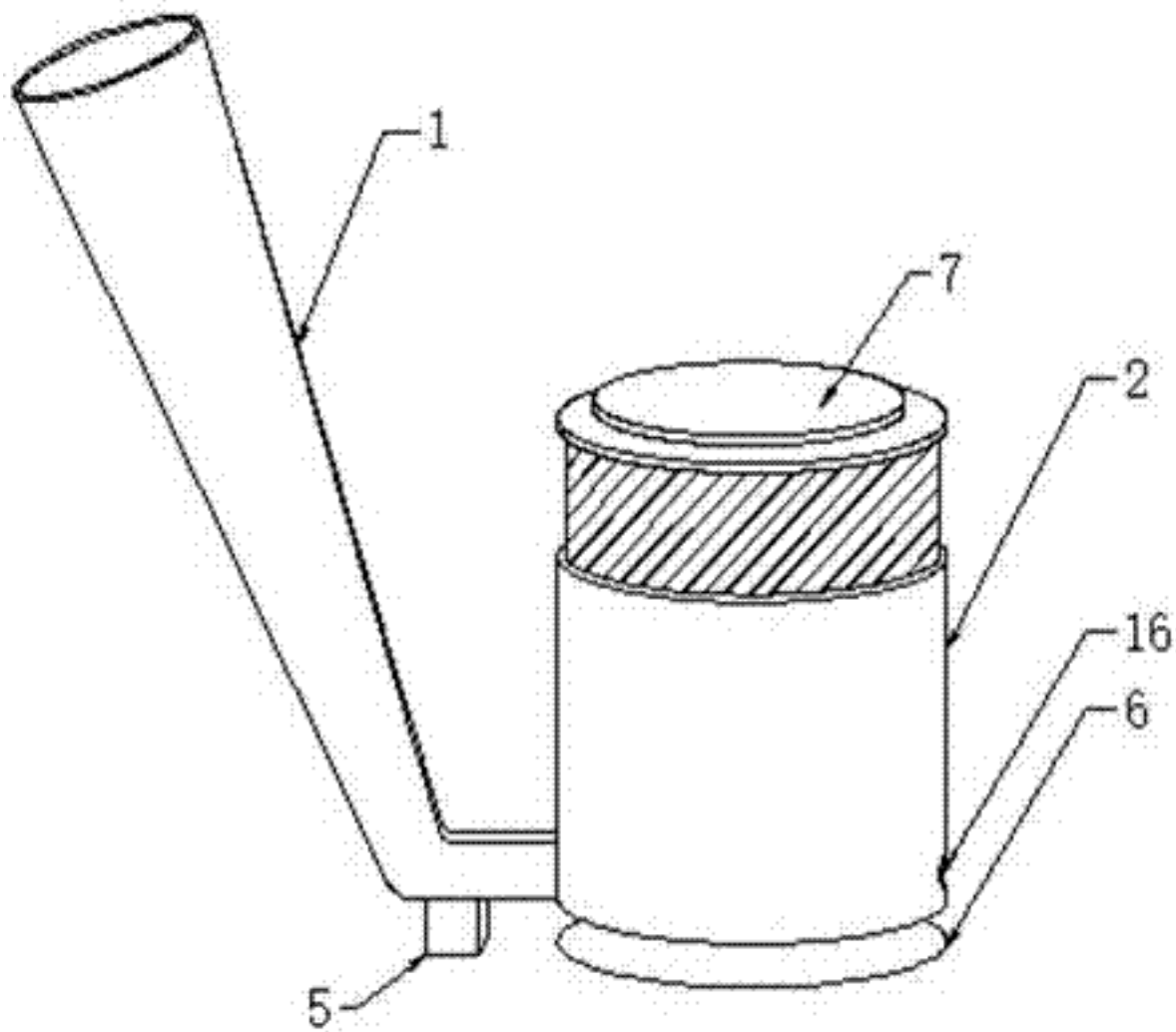
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Title

(CN108661841)

Novel hydroelectric generation device

Images

**Publication data including kind & date**[CN108661841](#)

A

2018-10-16

CN108661841

**Abstract**

(CN108661841)

The invention discloses a novel hydroelectric generation device. The novel hydroelectric generation device comprises a water collecting hopper and a device body. A filter screen is arranged in the water collecting hopper. A first safety protective valve is arranged in the water collecting hopper. A support is arranged at the bottom of the water collecting hopper. The device body is arranged on oneside of the water collecting hopper. The water collecting hopper is arranged in the device body in a penetrating mode. A top cover is arranged at the top of the device body. A partition plate is arranged in the device body. A water outlet is formed in the bottom of the device body. According to the novel hydroelectric generation device, lots of through holes are formed in the bottom of a base, the device body communicates with the outside through the through holes, after the device is used for a long time, lots of sediment may settle in the device body, by arranging the through holes, sediment settlement is not liable to occur, thus, the electric generation efficiency of the device can still be ensured after long-time application, and the device has a good market at present through the unique designs.

Inventors

ZHAO MIMI

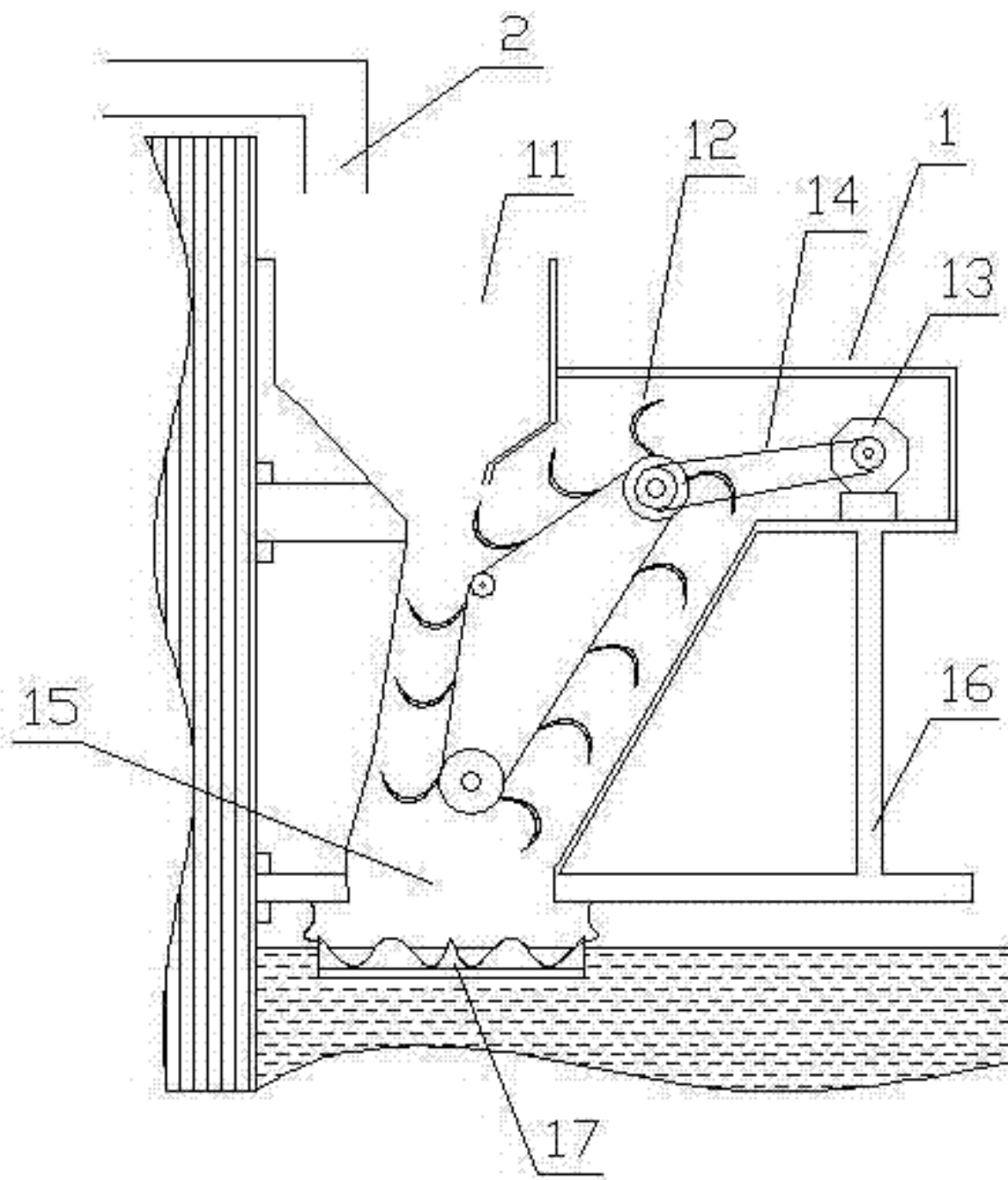
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Title

(CN106894936)

A power generation device

Images



Publication data including kind & date

CN106894936

A 2017-06-27

CN106894936



Abstract

(CN106894936)

The invention provides a power generation device comprising a power generation mechanism and a water outlet pipe, wherein the power generation mechanism is arranged under the water outlet pipe. The power generation mechanism comprises a water collection hopper, a water wheel device, a generator and transmission devices, wherein the water collection hopper is located right under the water outlet pipe, and the water wheel device is installed under the water collection hopper; the water wheel device comprises a sliding belt, water wheel hoppers and rolling wheels, wherein the water wheel hoppers are arranged on the outer side of the sliding belt uniformly, and the two ends on the inner side of the sliding belt are in transmission connection with the rolling wheels, and the rolling wheels are in transmission connection with a rotating shaft of the generator via the transmission devices. The power generation device can absorb the kinetic energy and potential energy of tap water effectively and prevent an adverse influence on downstream processing pools; the power generation device can comprehensively utilize the kinetic energy and potential energy of tap water at a water outlet and convert the energy into electric energy that can be utilized.

Inventors

GUO ZIGUI

Latest standardized assignees - inventors removed

ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING

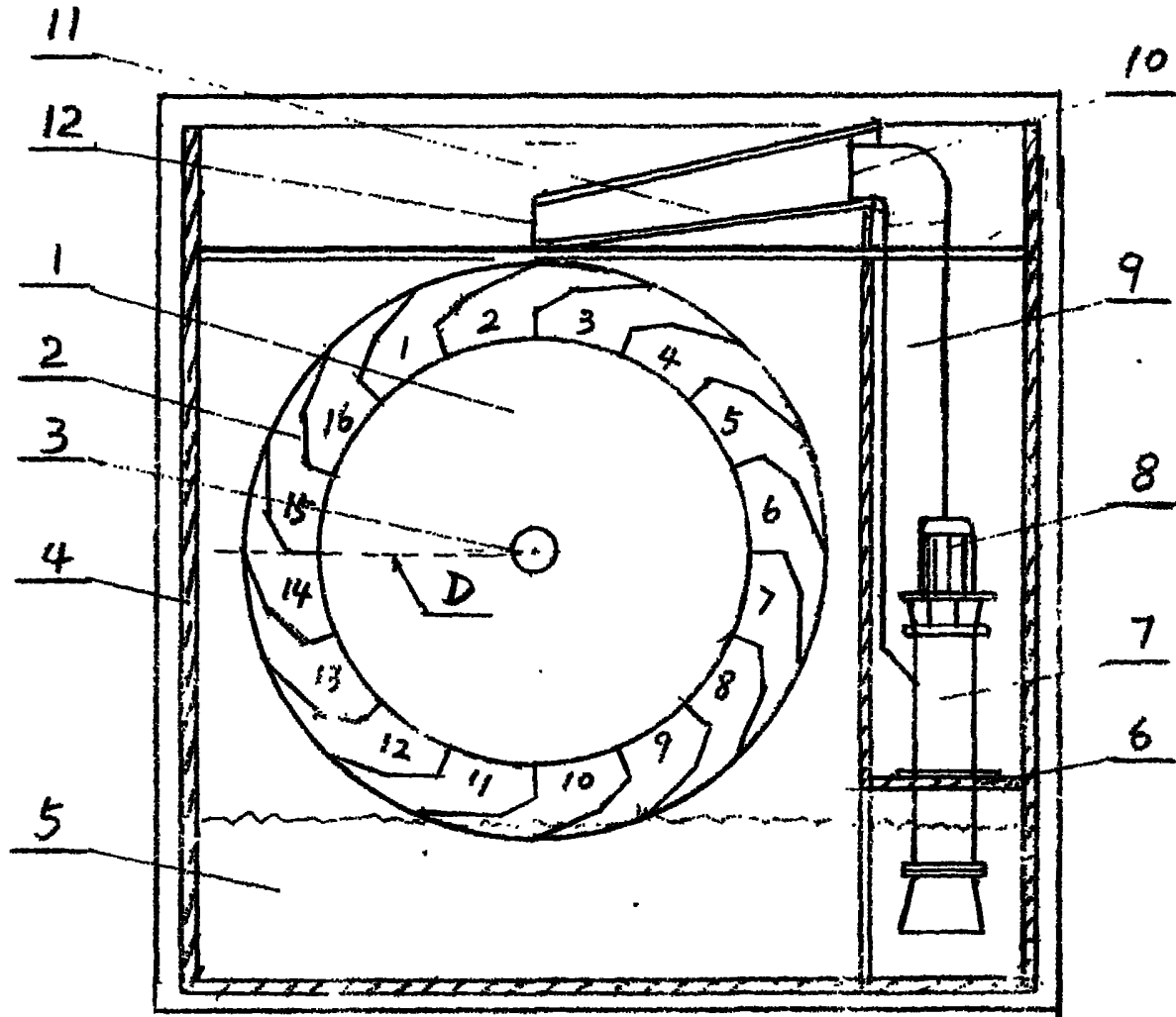
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Title

(CN101922402)

Automatic circulating hydropower generating device

Images



Publication data including kind & date

[CN101922402](#)

A

2010-12-22

CN101922402



Abstract

(CN101922402)

The invention relates to an automatic circulating hydropower generating device. Water is pumped to the top of a special bucket box waterwheel by utilizing little electric energy from a tank with over 0.6m water at the bottom and poured into in the waterwheel downwards so that the water generates the gravity superposed on the weight of the water in the tank and falls down to drive the bucket box waterwheel to rotate and drive a generator to generate electric energy; meanwhile, the pumped water falls back to the water tank and then can be automatically recycled.

Inventors

FU DELI

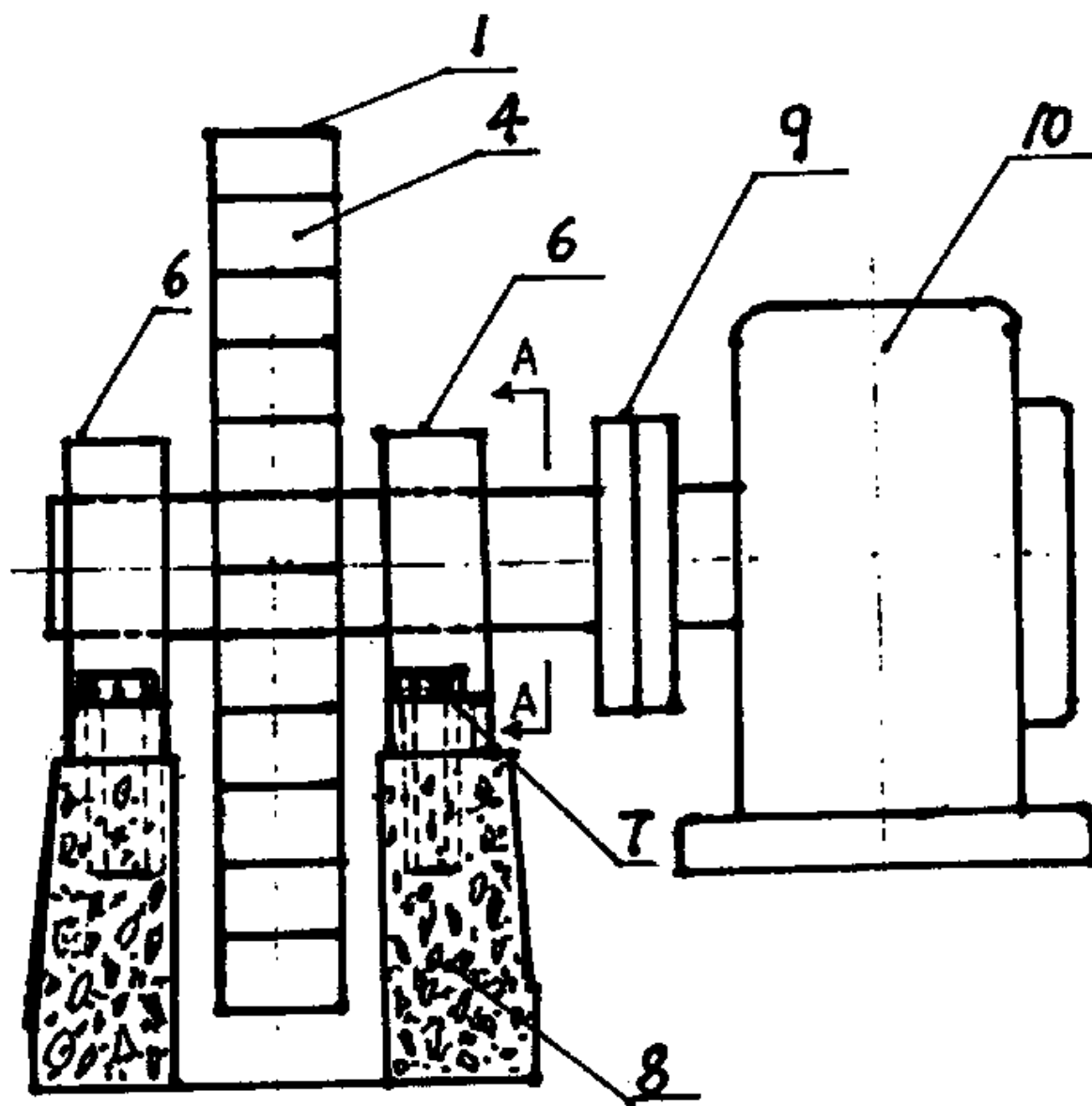
Family 6/200 - FAMPAT - ©Questel

Title

(CN2693980U)

Waterwheel generator

Images



Publication data including kind & date

CN2693980

Y

2005-04-20

CN2693980U

**Abstract**

(CN2693980U)

The utility model relates to a waterwheel generator, which is suitable to generate electricity by making use of waterpower. The utility model is composed of a water wheel (1), a main shaft (2), a wheel drum (3), a main bearing (6), a bolt (7), a bearing block (8), a clutch (9), and a generator (10). The waterwheel generator is also composed of a bucket (4) and a nozzle (5). The center of the water wheel is provided with the main shaft; the wheel drum (3) is arranged between the circumference and the center of the water wheel; a plurality of buckets (4) are arranged on the circumference of the water wheel (1); the nozzle (5) is arranged above the bucket (4); the main shaft is supported by the main bearing; the main bearing (6) is fixedly connected with the bearing block (8) through the bolt (7); the main shaft (2) is connected with the generator (10) through the clutch (9), and the utility model is suitable to be operated on the current with poor rill, small flow and low speed.

Inventors

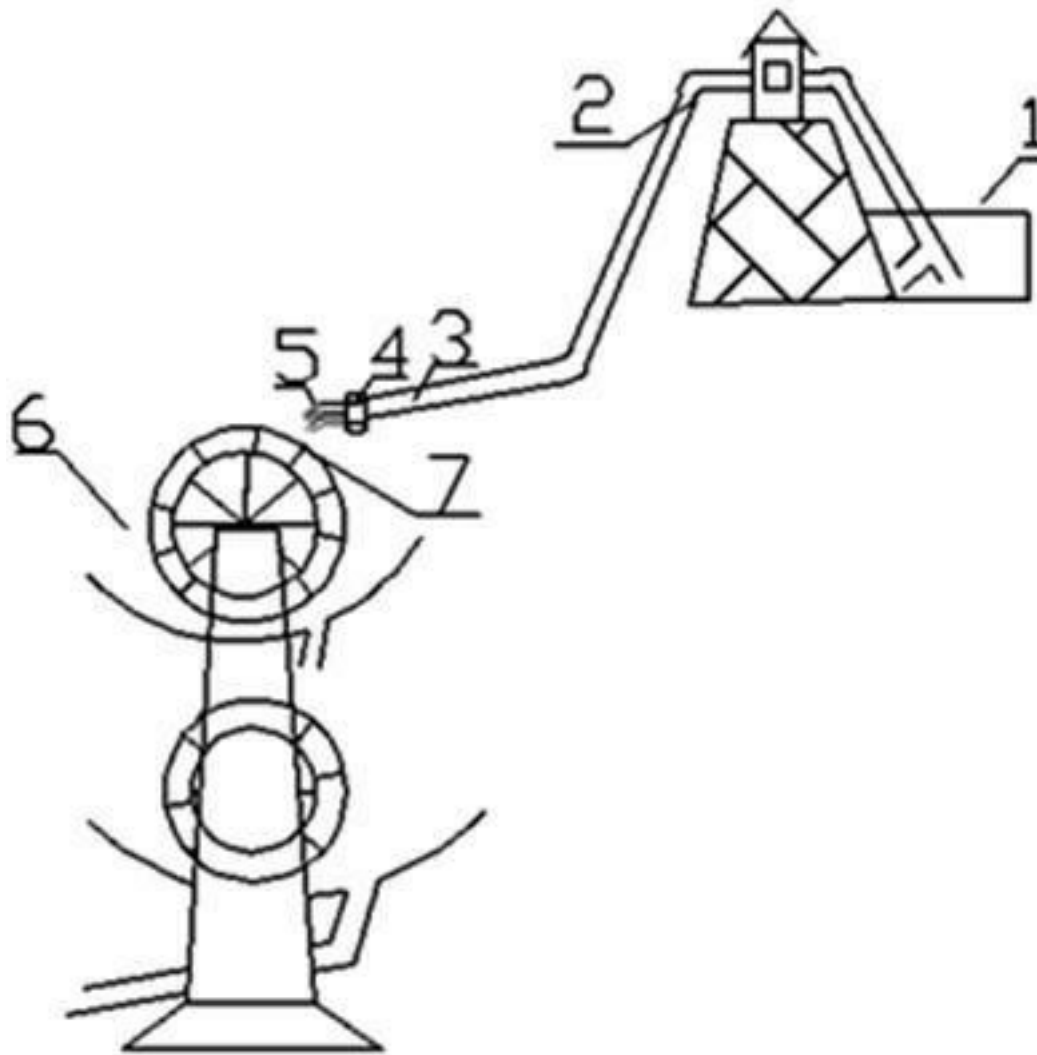
DENG CHUNCUI

Family 7/200 - FAMPAT - ©Questel

Title

(CN202187856U)

New type high-efficiency water power generation device

Images**Publication data including kind & date**[CN202187856](#)

U 2012-04-11 CN202187856U

**Abstract**

(CN202187856U)

The utility model relates to a new type high-efficiency water power generation device. The water is fed by a pressure pipeline type or hydrocone type ways to prevent water and soil from losing and prevent silt from blocking the pipeline. A pressure water pipe or a siphon pipe is subject to diameter changing for many times, thus a water outlet is gradually changed into a flat port shape, the water pressure on the water outlet is increased and the water from multiple pipes impacts on multiple points; a water wheel uses a multi-level multi-line combination, the potential energy of the water is used to the maximum limit, a bucket is mounted on the water wheel, a plurality of pressure water guns are diverted from the pressure water pipe or the siphon pipe to directly impact the bucket along the tangent direction of the water wheel and then the water wheel is made to quickly rotate under the double application forces including the impact force and the gravity of the bucket. By using the above technological innovation, the optimum technology devices are combined, compared with the conventional water energy utilization rate, the utilization rate of the water energy is increased by more 20 times.

Inventors

WANG JIANPING

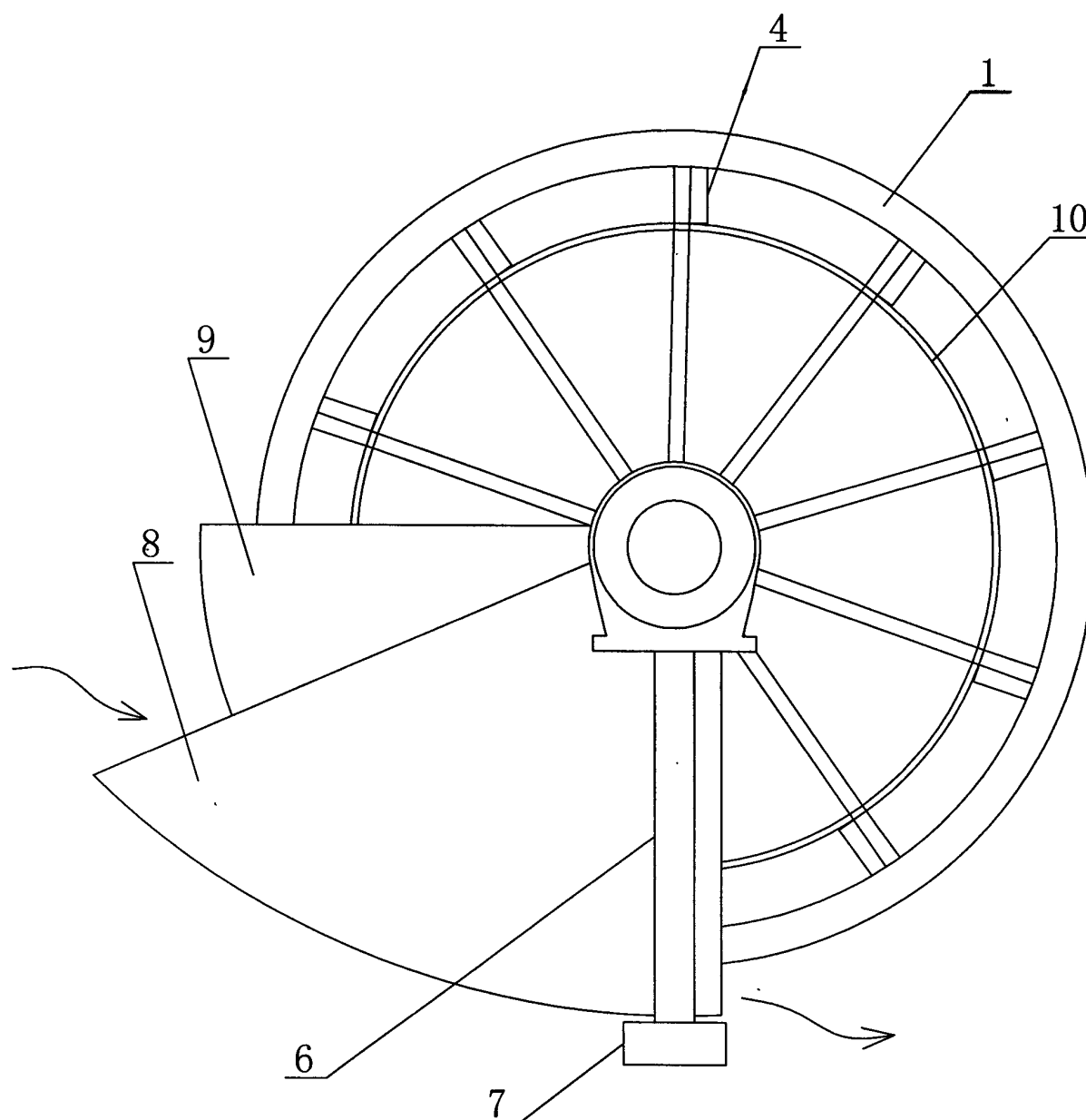
Latest standardized assignees - inventors removed

DALIAN HAITING SHIP INDUSTRY

Title

(CN205025681U)

Improved generation water wheels power generation facility of increase high energy

Images**Publication data including kind & date**[CN205025681](#)

U

2016-02-10

CN205025681U

**Abstract**

(CN205025681U)

The utility model discloses an improved generation water wheels power generation facility of increase high energy mainly relates to the power generating equipment field. Including water wheels, a bearing, the bearing frame, derailleur and generator, the week side of water wheels is equipped with the bucket, all sides of water wheels are along the outside edge that covered the bucket, still be equipped with annular interior baffle on the water wheels, the axle center department of water wheels is equipped with the water wheels axle, the water wheels axle is connected with derailleur and generator in proper order, setting in the axial lead department of water wheels both sides of bearing symmetry, its inner circle and water wheels hub connection, and install in the bearing frame its outer lane, the spud pile is installed to the bottom of bearing frame, the bottom of spud pile is equipped with the stake seat, the outside of water wheels is equipped with the semi -scroll shell, the fan -shaped casing of class that the semi -scroll shell suited for inner chamber and water wheels, the arc side of semi -scroll shell is the crescent arc curved surface of curvature radius, the apex angle department of semi -scroll shell installs on the bearing frame. The utility model has the advantages of it can utilize hydroenergy electricity generation, and

the structure is succinct, and installation convenient to use, waterpower utilization are rateed showing and is improved.

Inventors

LUO GUANGSHAN

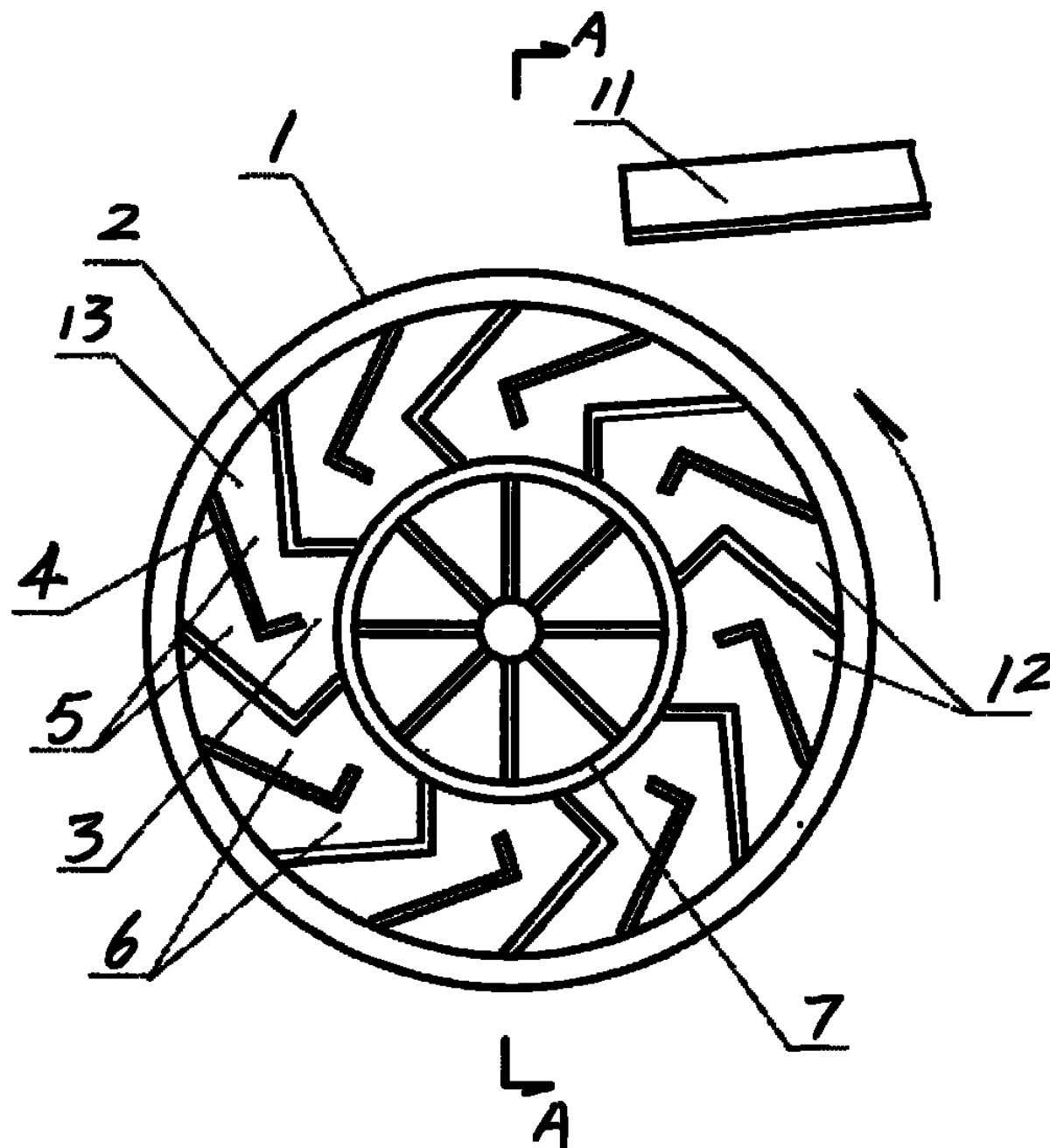
Family 9/200 - FAMPAT - ©Questel

Title

(CN101979865B)

Lever-type water turbine

Images



Publication data including kind & date

CN101979865	A	2011-02-23	CN101979865
CN101979865	B	2015-04-08	CN101979865B



Abstract

(CN101979865B)

The patent refers to the field of 'machines or engines for liquids'. This invention has disclosed the lever-type hydraulic turbine, it includes the spindle (9), equips the water wheels and driving wheel (10) on the spindle, stated water wheels are formed from two discoidal edgewise water board (1) and cylindrical water board (7) lying between edgewise water board, stated water wheels have round grooves, arrange the horizontal water board (2) alternatively in the round groove, the

stated horizontal water board is taken the form of and dismantled bend shapely, the short edge of the stated horizontal water board links with cylindrical water board, both sides of long edge of the horizontal water board link with edgewise water board, form the water skip (13) between the stated horizontal water boards, take the form of and dismantle the bend shape inner water board (4) in the water skip, it has a water inlet (12) that the stated inner water board divides water skip into two pieces of outside, constriction (6), internal pot with looks through-flow road junction (3) are put and struggled against the (5) inside in the middle. This invention can improve the water skip and store water amount, the shock wave of bleed air, increase activity space in the water skip of water in time, having lengthened dwell time in the water skip of water, realize the lever function, it can accelerate preserving the water speed with water skip, raise the utilization coefficient of water source, raise the hydraulic turbine generating efficiency.

Inventors

ZHOU HUIYUN

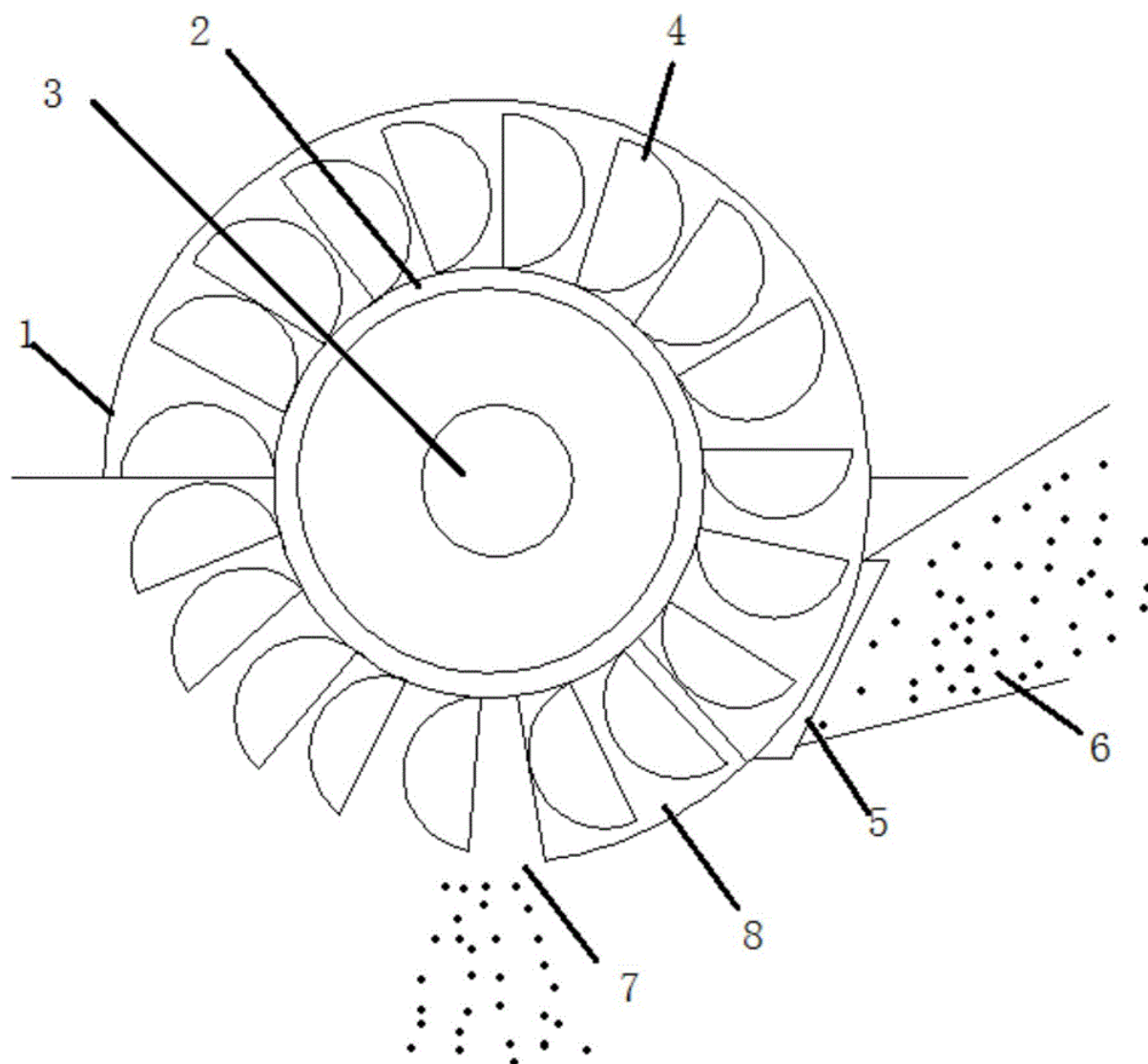
ZHOU RISHENG

Family 10/200 - FAMPAT - ©Questel

Title

(CN106762332)

Novel washdown universal water turbine and water bucket thereof

Images**Publication data including kind & date**[CN106762332](#)

A

2017-05-31

CN106762332

**Abstract**

(CN106762332)

The invention provides a novel washdown universal water turbine and a water bucket thereof. The water turbine comprises a machine shell, a rotating disk, a water turbine center shaft and the water bucket; the rotating disk is arranged in the machine shell; the water turbine center shaft is installed on the middle portion of the rotating disk; the water bucket is arranged on the outer side of the rotating disk and is welded to the rotating disk; the water bucket is divided into two cavities through a straight rod in the middle portion of an inner cavity, and is provided with a plurality of convex lattices along the inner walls of the cavities; the straight rod and a water bucket shell opening are equal in height; the circumferential cross section formed by the straight rod and the water bucket is in the shape of W; a water inlet is formed in one side of the machine shell; a water draining port is formed in the bottom of the machine shell; and a water throat is arranged between the water draining port and the water inlet and is arranged on the inner wall of a shell body of the machine shell. The water turbine can effectively utilize the potential energy of water, the water potential height and the water flow size are not limited, in the actual power generating process, investment is small, the water amount and the water pressure can be effectively controlled, the water potential energy utilizing rate is high, and large and small flow hydroelectric generation is facilitated.

Inventors

WU ZHENG

Latest standardized assignees - inventors removed

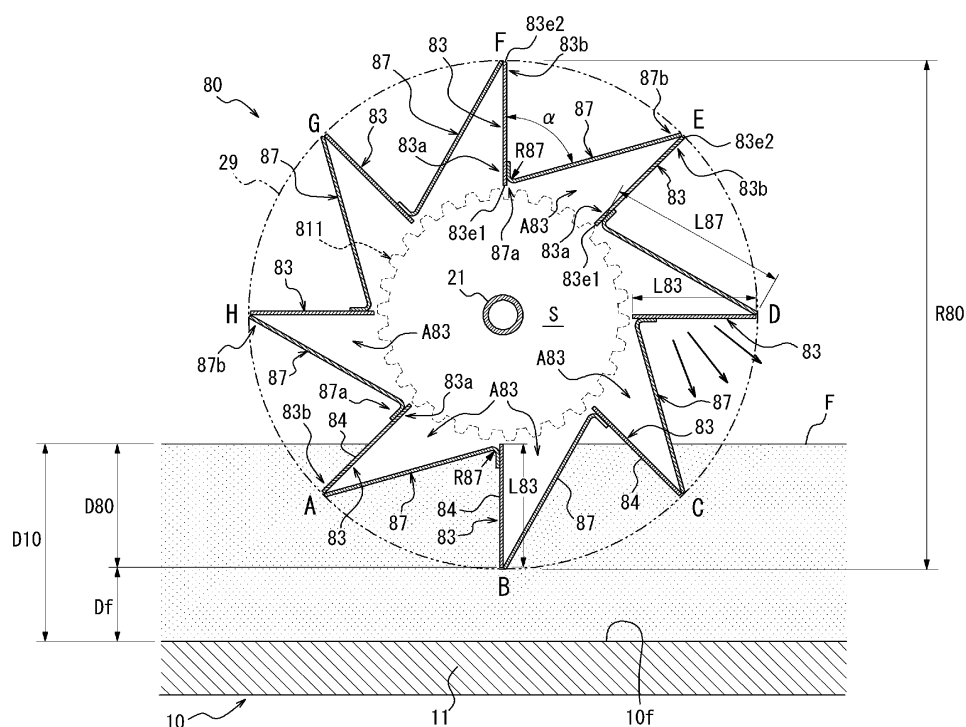
HUNAN ZHENGKAN HYDRAULIC POWER & HYDROELECTRIC RESEARCH & DEVELOPMENT

Family 11/200 - FAMPAT - ©Questel

Title

(WO201959177)

Linear hydraulic power generation device

Images**Publication data including kind & date**

JP6442095	B1	2018-12-19	JP6442095
WO2019/059177	A1	2019-03-28	WO201959177
JP2019056363	A	2019-04-11	JP2019056363

**Abstract**

(WO201959177)

Provided is a hydraulic power generation device with which, using the cross-flow water power of a river with a small fall, makes it possible to provide a facility having a desired size with respect to an arbitrary space. The linear hydraulic power generation device 100 comprises: a flow pathway 10 having a slope; a plurality of water wheels 80 arranged in the flow pathway 10; and a generator driven by means of the water wheels 80. The water wheels 80 include a rotating shaft 21, and a plurality of buckets 83 arranged in the circumferential direction of the rotating shaft 21. The flow pathway 10 has a water depth D10 which is more than or equal to twice a depth D80 at which the buckets 83 are immersed in running water. The water wheels 80 further include support plates on both sides in the width direction of the buckets 83. The support plates are respectively fixed to both sides in the width direction of the buckets 83. The water wheels 80 include running water rejection units 87 each disposed between two buckets 83 arranged adjacent to each other in the circumferential direction of the rotating shaft 21, the running water rejection units 87 extending between a radially inner end portion 83a of one bucket 83 and a radially outer end portion 83b of another bucket 83.

Inventors

Beginning of the sequel

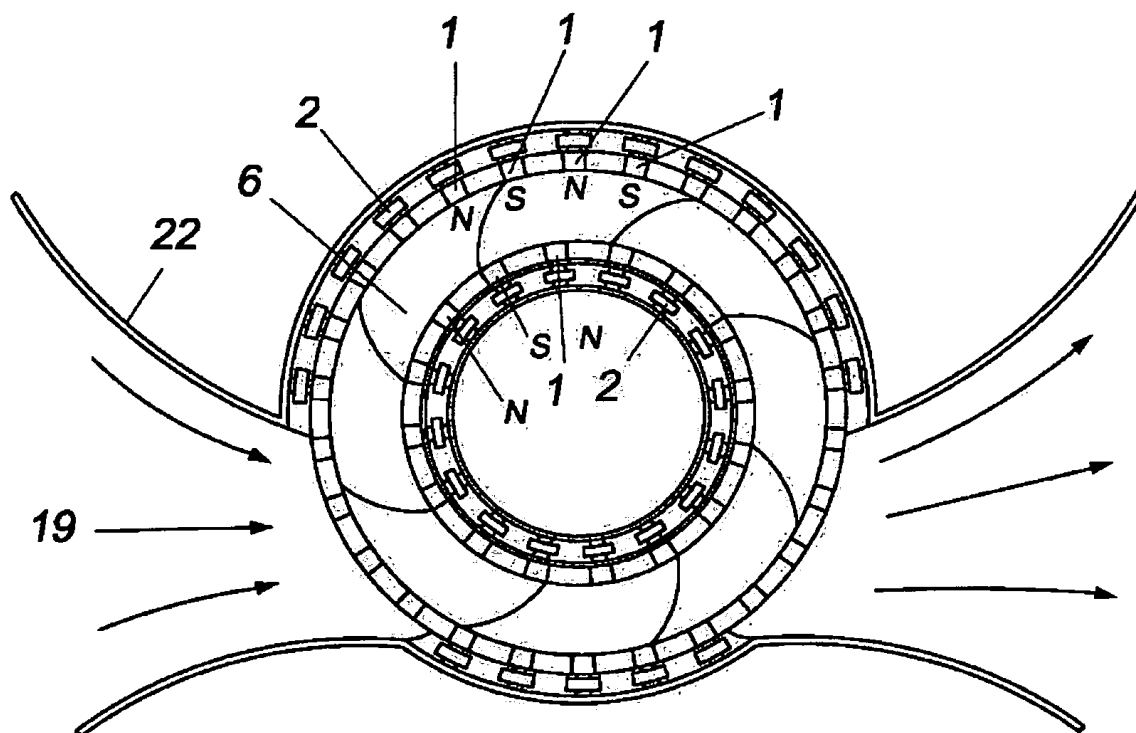
Family 12/200 - FAMPAT - ©Questel

Title

(EP1876350)

Electric power generator system using ring-shaped generators

Images



Publication data including kind & date

WO2006/108901	A1	2006-10-19	WO2006108901
EP1876350	A1	2008-01-09	EP1876350
US20080088135	A1	2008-04-17	US20080088135
US7425772	B2	2008-09-16	US7425772
EP1876350	A4	2014-01-01	EP1876350



Abstract

(EP1876350)

Electric power generator system using ring-shaped generators and essentially being formed by turbines and generators and optionally converging-diverging nozzles. The turbines optionally have an open centre and curved and/or hinged vanes,

and are optionally axial turbines or open-centred reel-shaped turbines, cycloidal turbines optionally with a circular cog wheel, or impellers, or the like. The generators can have permanent magnets or variable reluctance, unsealed and optionally independent. The exciter can be made of a ring (of magnets or areas alternately having high and low magnetic permeability) around the vanes, and the armature (winding magnets or magnets having a high-permeability core) forms an arc or ring fitted in the housing or the nozzle and/or the stationary inner cylinder or ring (or braced ring system) in the case of open-centred turbines.

Inventors

NOVO VIDAL MARIA ELENA

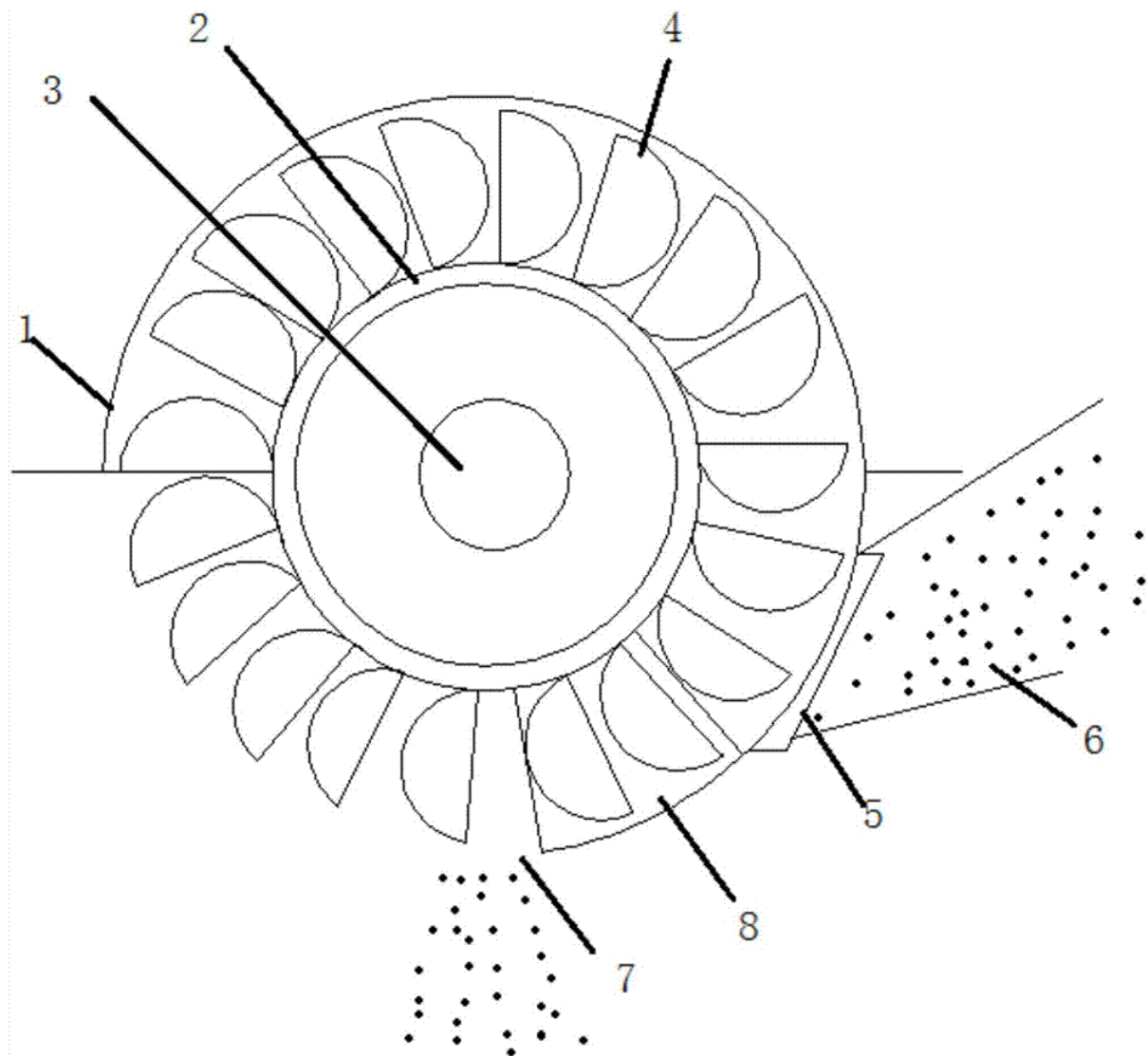
Family 13/200 - FAMPAT - ©Questel

Title

(CN206309522U)

General hydraulic turbine of novel direct -flushing formula and bucket thereof

Images



Publication data including kind & date

[CN206309522](#)

U

2017-07-07

CN206309522U



Abstract

(CN206309522U)

The utility model provides a general hydraulic turbine of novel direct -flushing formula and bucket thereof, the hydraulic turbine includes casing, carousel, hydraulic turbine center pin and bucket, the carousel is established in the casing, hydraulic turbine center pin is installed at the carousel middle part, the bucket is established in the carousel outside, bucket and carousel welding, the bucket divide into two cavities through the straight -bar at inner chamber middle part, follows the

cavity inner wall is provided with a plurality of protruding check, height such as straight -bar and bucket casing mouth, the straight -bar is described for W with the circumference cross -section that the bucket formed, casing one side is provided with the water inlet, chassis bottom is provided with the outlet, be provided with the tap between outlet and the water inlet, the tap sets up at the shell body of the machine shell inner wall. The utility model provides a hydraulic turbine can the effectual potential energy of water that utilizes, the gesture of not restricting water supply height and rivers size, in actual electric power generation process, invest in little, the water yield and water pressure ability effective control, the potential energy of water high -usage does benefit to greatly, low discharge hydroelectric power generation.

Inventors

WU ZHENG

Latest standardized assignees - inventors removed

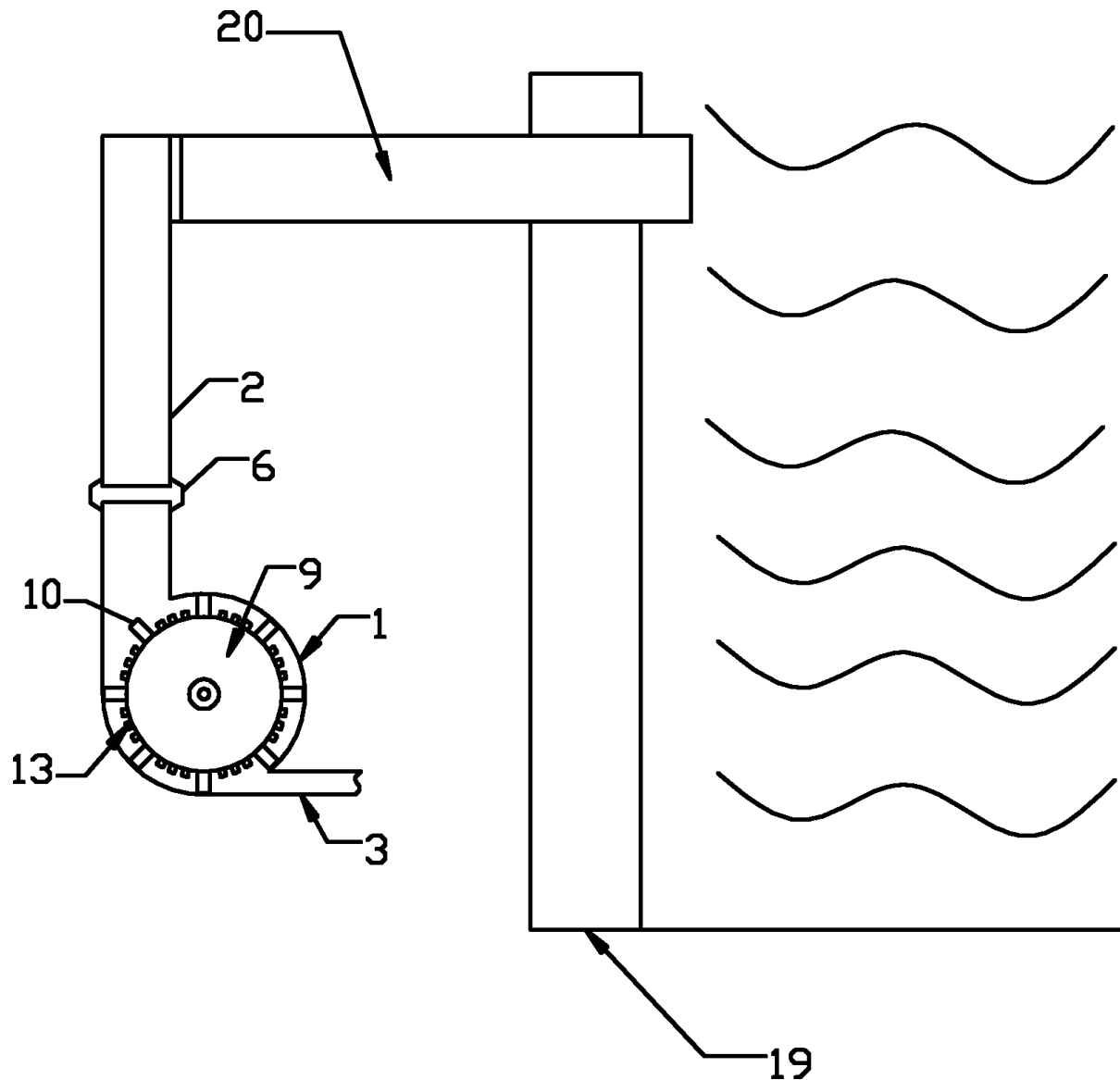
HUNAN ZHENGKAN HYDRAULIC POWER & HYDROELECTRIC RESEARCH & DEVELOPMENT

Family 14/200 - FAMPAT - ©Questel

Title

(CN202451355U)

Water wheel power generation device and dam power generation system

Images**Publication data including kind & date**[CN202451355](#)

U

2012-09-26

CN202451355U

**Abstract**

(CN202451355U)

The utility model discloses a water wheel power generation device. The water wheel power generation device comprises a cylindrical water tank provided with an water inlet and an water outlet, a water conduit, a water wheel, a water outlet pipe and a power generation device, wherein the water conduit is connected with the water inlet of the cylindrical water tank, the water outlet pipe is connected with the water outlet of the cylindrical water tank, the water conduit is vertically arranged on a tangential direction of the water inlet of the cylindrical water tank, the extending line of the water conduit is perpendicular to the extending line of the water outlet pipe, and the water wheel is disposed in the cylindrical water tank and coaxially connected with the exterior power generation device. The utility model provides the water wheel power generation device and a dam body power generation system and provides a dam body power generation building structure and an effective water injection mode, so that the potential energy of a free-fall motion of water is increased, by means of the gravitational potential energy, the water turbine motive power is high, water demand of working is small, and the mechanical efficiency is high.

Inventors

GAO HONGLIANG

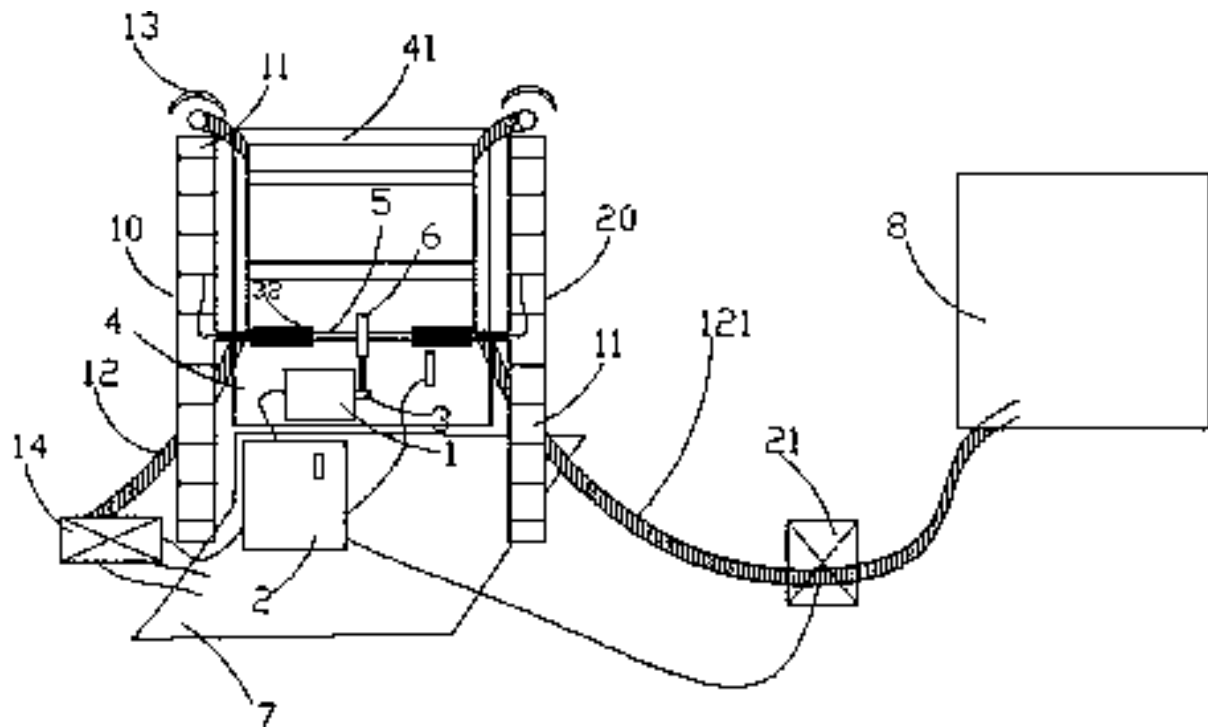
Family 15/200 - FAMPAT - ©Questel

Title

(CN203335319U)

Reaction type waterwheel landscape generator set

Images



Publication data including kind & date

[CN203335319](#)

U 2013-12-11 CN203335319U



Abstract

(CN203335319U)

The utility model discloses a reaction type waterwheel landscape generator set which comprises an electric generator; the output end of the electric generator is provided with a power distribution system, and the input end of the electric generator is provided with a spindle head gear; the spindle head gear is provided with a power input structure which is in transmission connection with the spindle head gear in a cooperated mode; the power input structure includes a frame body, the frame body is provided with a metallic hollow tube transmission shaft through bearing seats arranged at the two ends of the frame body, and the metallic hollow tube transmission shaft can rotate freely; the middle portion of the metallic hollow tube transmission shaft is provided with a master gear which is in transmission connection with the spindle head gear; the two sides of the metallic hollow tube transmission shaft are provided with a left waterwheel set and a right waterwheel set, and

the left water wheel set and the right water wheel set can achieve free rotation. The reaction type waterwheel landscape generator set is not only simple and ingenious in structure, high in generating efficiency, but also low in manufacturing cost and suitable for generating in different places; moreover, the requirement for the height of water is low, neither large-area impoundment nor reservoir construction is required, and meanwhile the reaction type waterwheel landscape generator set has a nightly landscape effect.

Inventors

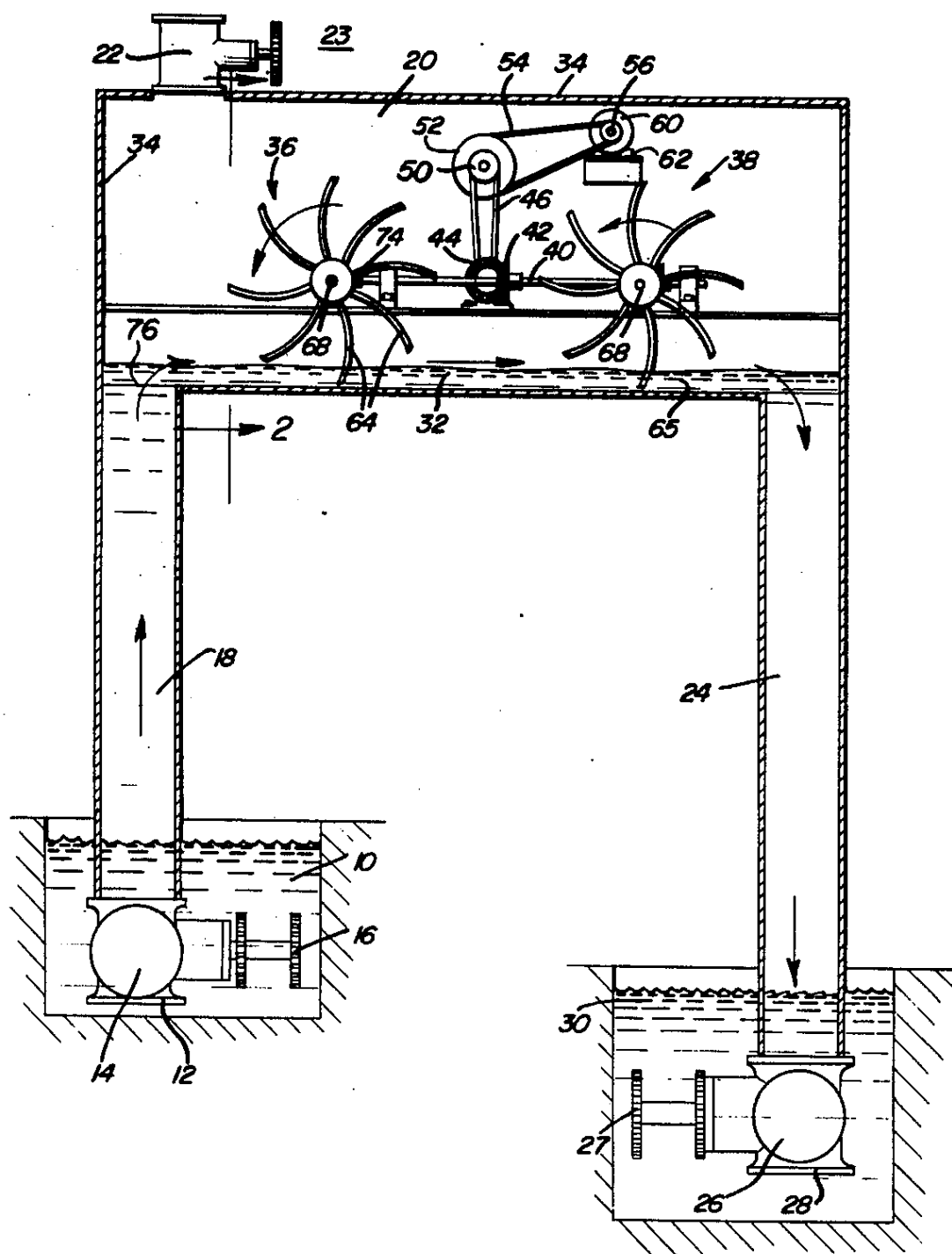
SHANG SHUIQIAO

Family 16/200 - FAMPAT - ©Questel

Title

(US4180976)

Siphon motor

Images

Publication data including kind & date

US4180976 A 1980-01-01 US4180976
 CA1137858 A 1982-12-21 CA1137858

**Abstract**

(US4180976)

A siphon motor comprising the combination of siphon means and generating means for generating electrical energy from a water source located below the generating means and a water discharge at a lower level than the water source. Water rises by siphonic action upward from the water source to a sealed working region maintained under partial vacuum, and descends to the water discharge. The working region contains the generating means. The system has particular utility as a source of power generation in remote locations having a water table within about 30 feet of the ground.

Inventors

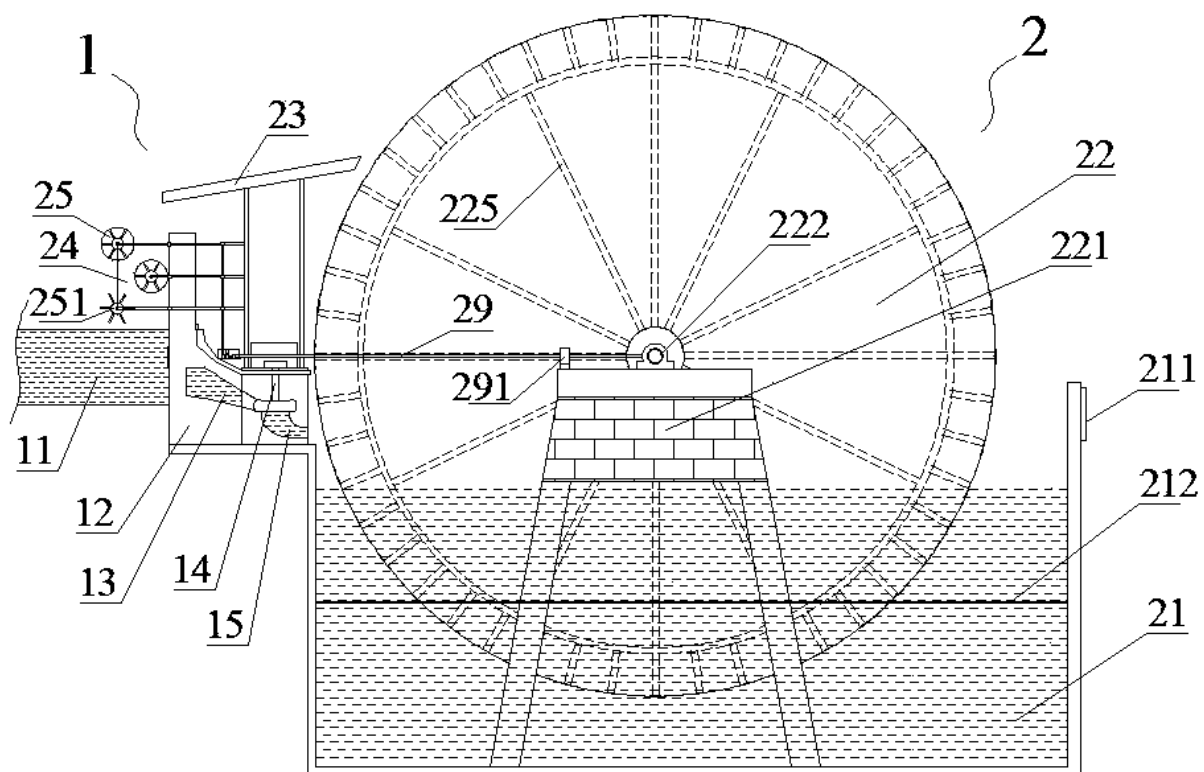
BUNN CARL H

Family 17/200 - FAMPAT - ©Questel

Title

(CN104791180)

Combined water cart water power recycled water self-circulation power generating method

Images**Publication data including kind & date**

CN104791180 A 2015-07-22 CN104791180

**Abstract**

(CN104791180)

The invention discloses a combined water cart water power recycled water self-circulation power generating method, and particularly relates to a power generating method for recycling flushing water kinetic energy acquired after acting of flushing water through various power recycling devices, and water cyclically acts. A power generating system and a power system are adopted in the method. The power generating system comprises a primary reservoir, a dam, a water diversion pipe, a power generating device and a drainage pipe. The power generating device internally comprises a water turbine and a power generator connected with the water turbine, the water diversion pipe is connected with the primary reservoir and connected to the water turbine of the power generating device, and the lower portion of the water turbine is communicated with the power system through the drainage pipe. The power system comprises a secondary reservoir, a combined water

cart, a combined water cart support, a backflow flushing water groove, a small flushing water plate fixing frame, a small clamping plate flushing water plate, a small flushing water plate, a first transmission shaft, a second transmission shaft, a power control room and a third transmission shaft. The method has the advantages that the construction mode is more flexible, construction cost is lower, and the influences of limitation of the construction environment are small.

Inventors

YANG LIN

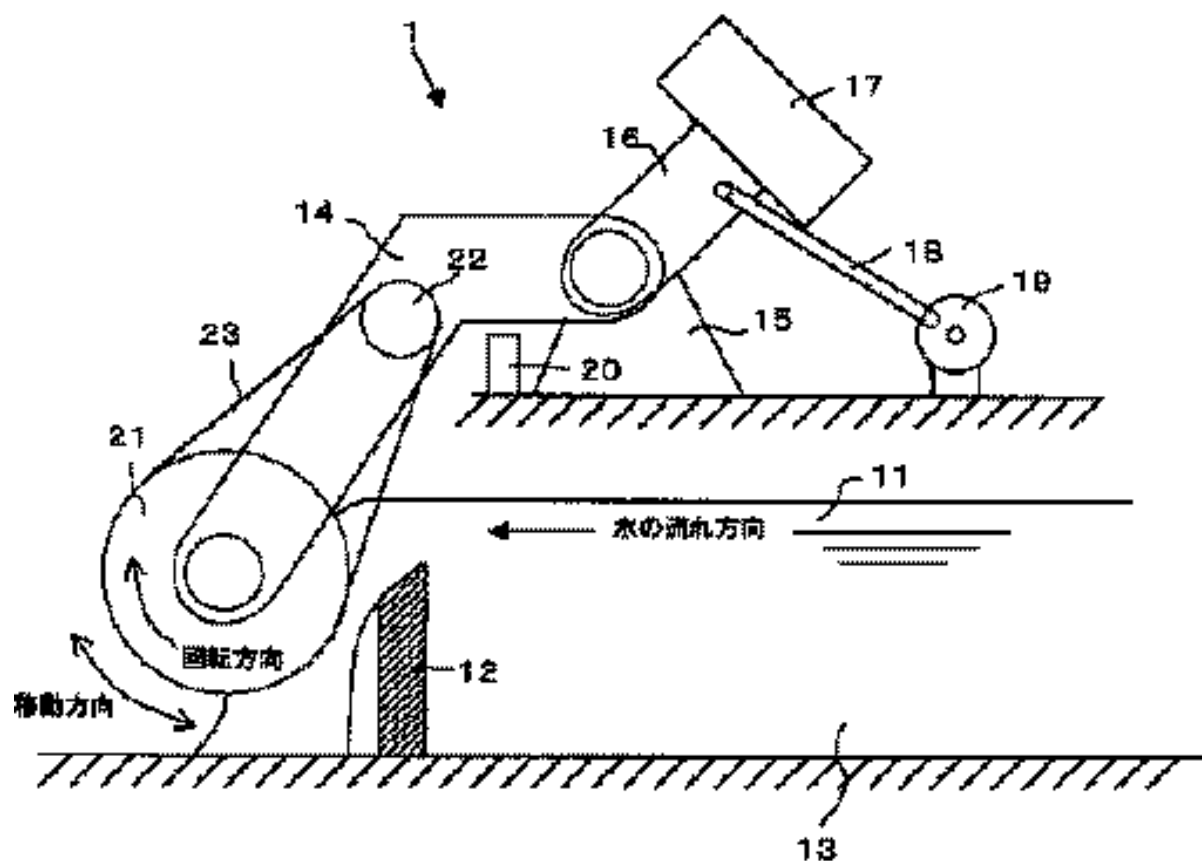
Family 18/200 - FAMPAT - ©Questel

Title

(JP2003269310)

Water wheel power generation device and power generating method with water wheel

Images



Publication data including kind & date

JP2003269310

A

2003-09-25

JP2003269310



Abstract

(JP2003269310)

PROBLEM TO BE SOLVED: To solve the problem of a water wheel power generation device which has conventionally applied to a large energy at a river, a dam, etc., but it is difficult to make power generation using the energy of the discharged water from a sewage treatment plant, etc.

SOLUTION: A water wheel is installed at the tip of a freely turnable arm and connected with a power generator attached to the arm through a chain, and thereby power generation is made with the rotation of the water wheel, wherein adjustment is made so that the arm is driven in the direction of going farther in compliance with the increase of the water flow in case the

water flow running against the water wheel is incremental and is driven in the direction that the arm approaches in compliance with the decrease of the water flow in case the water flow is decremental. Accordingly, the power generating efficiency is precluded from dropping using a simple mechanism even with an incremental or decremental discharge water overflowing at a weir of the sewage treatment plant, etc.

COPYRIGHT: (C)2003,JPO

Inventors

ENDO MASATSUGU

Latest standardized assignees - inventors removed

TOSHIBA ENGINEERING

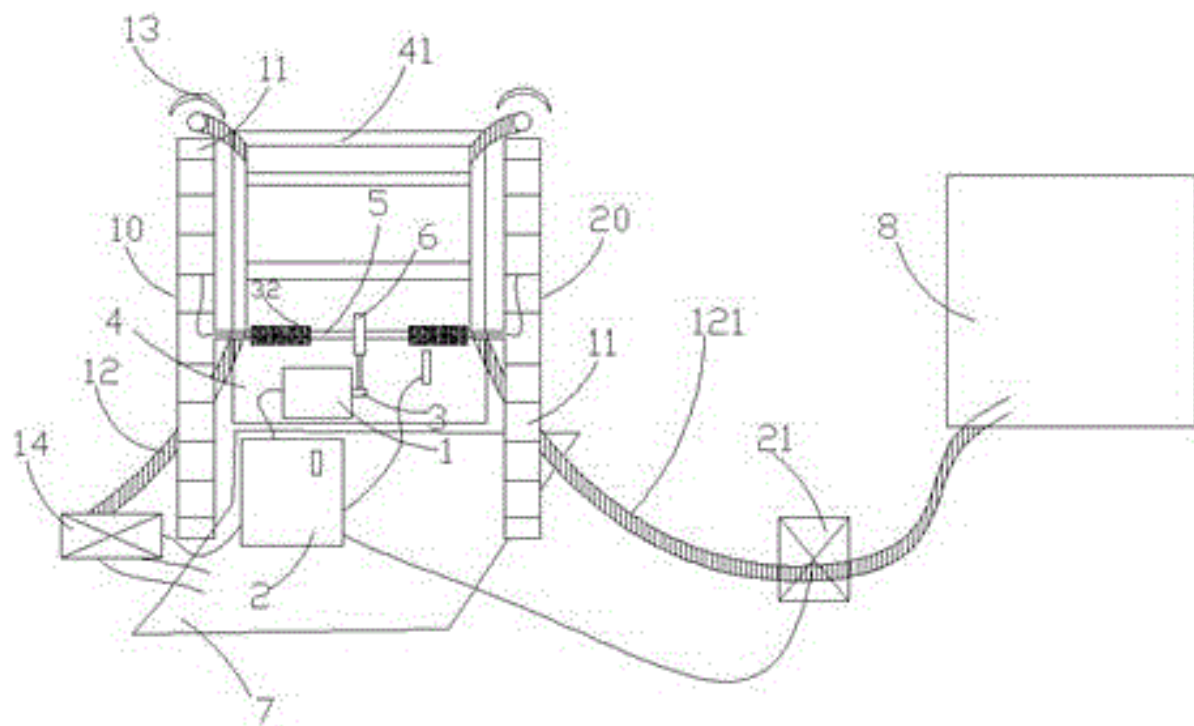
Family 19/200 - FAMPAT - ©Questel

Title

(CN103352790)

Feedback type waterwheel scene electricity generating unit

Images



Publication data including kind & date

CN103352790	A	2013-10-16	CN103352790
CN103352790	B	2016-12-07	CN103352790B



Abstract

(CN103352790B)

The invention discloses a feedback type waterwheel scene electricity generating unit which comprises an electricity generator. An electricity distribution system is arranged at the output end of the electricity generator. A spindle head gear is arranged at the input end of the electricity generator. A power input structure which is in transmission connection with the spindle head gear in a matched mode is arranged on the spindle head gear. The power input structure comprises a frame body. A metal hollow core pipe transmission shaft which can freely rotate is arranged on the frame body through bearing pedestals arranged at the two ends of the frame body. A main gear which is in transmission connection with the spindle head gear is arranged in the middle of the metal hollow core pipe transmission shaft. A left water wheel set and a right water wheel set are arranged on the two sides of the metal hollow core pipe transmission shaft respectively, and can achieve free rotation. The feedback type waterwheel scene electricity generating unit is simple and ingenious in structure, high in electricity generating efficiency, low in manufacturing cost, capable of being suitable for electricity generating in different places, low in water level fall requirement and free of needing a large-area water storage reservoir or a large-area

built reservoir, and meanwhile has the night scene effect.

Inventors

SHANG SHUIQIAO

Latest standardized assignees - inventors removed

SHAOXING CITY BI LAKE ENVIRONMENTAL PROTECTION TECHNOLOGY

Family 20/200 - FAMPAT - ©Questel

Title

(WO2012167414)

Combined type waterwheel power generation device used in water conservancy channel or river channel

Images

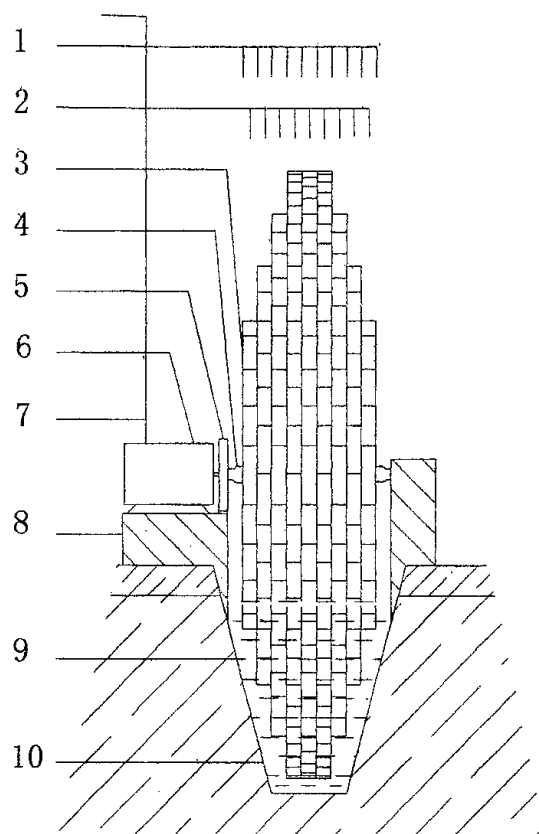


图 2 / FIG. 2

Publication data including kind & date

CN102230438	A	2011-11-02	CN102230438
WO2012/167414	A1	2012-12-13	WO2012167414
CN102230438	B	2014-07-16	CN102230438B



Abstract

(WO2012167414)

Disclosed in the present invention is a combined type waterwheel power generation device used in a water conservancy channel or a river channel, which is composed of multiple wheels (1), multiple layers of multi-vanes (2) and a shaft (3). The vanes (2) are composed of main vanes (21) and auxiliary vanes (22). A space formed by the wheel (1) and the vanes (2) is a water bucket (4) which is bottomless. A big opening portion of the water bucket (4) next to the edge of the wheel (1) is a water inlet and outlet (41), and a small opening portion of the water bucket (4) is a gas inlet and outlet (42) whose horizontal position is higher than that of the water inlet and outlet (41). The horizontal positions of layers of vanes among

individual wheels (1) are mutually staggered. The waterwheel power generation device can effectively reuse natural waterflow energy of the water conservancy channel or the river channel and efficiently drive a power generator to generate power.

Inventors

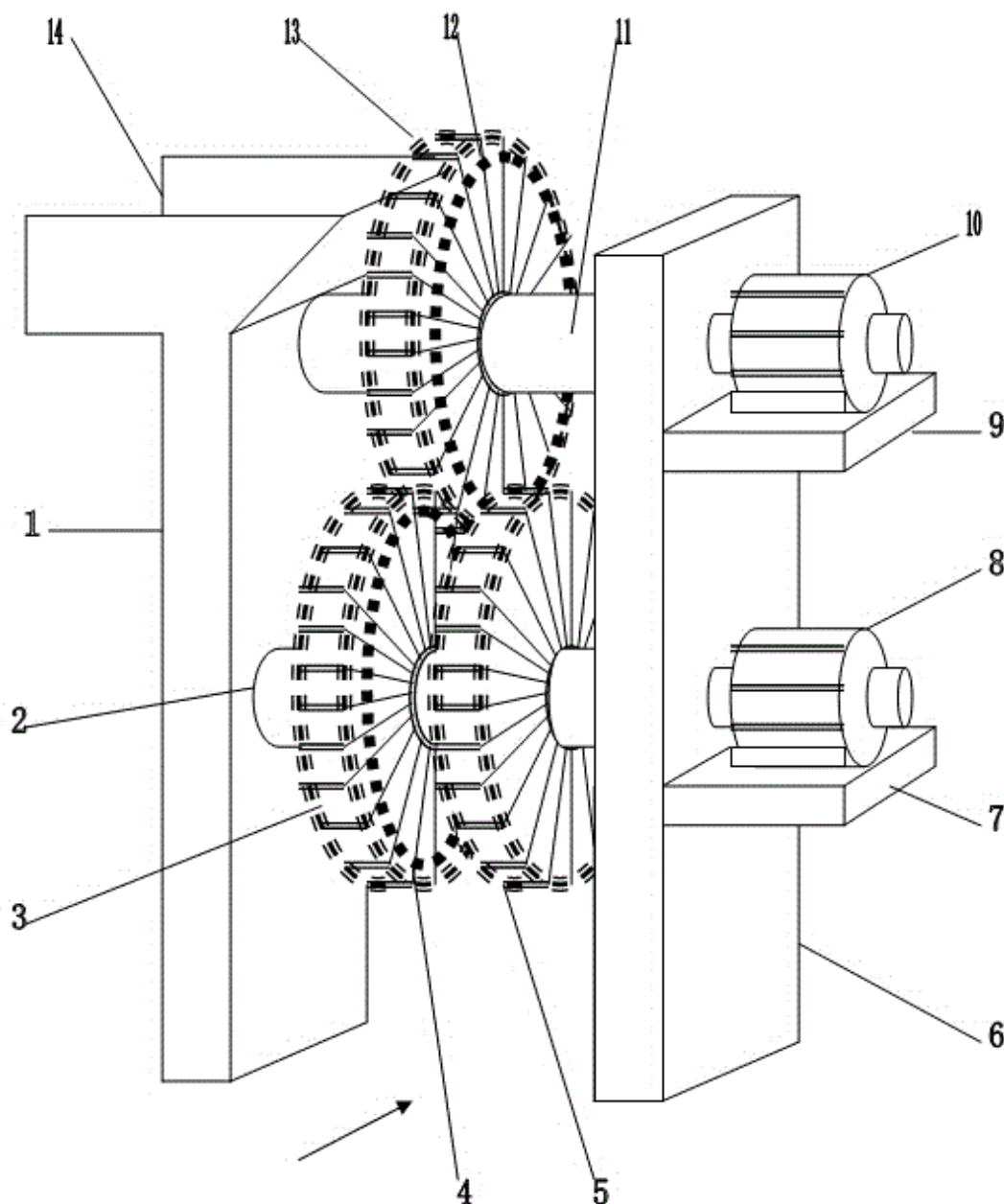
GUO ZHENJIA

Family 21/200 - FAMPAT - ©Questel

Title

(CN105804916)

Novel efficient energy-saving environment-friendly waterwheel

Images**Publication data including kind & date**

[CN105804916](#)

A

2016-07-27

CN105804916

**Abstract**

(CN105804916)

The invention discloses a novel efficient energy-saving environment-friendly waterwheel and relates to a net valve. A left waterwheel body and a right waterwheel body are arranged on the outer sides of the two ends of a lower rotary shaft correspondingly. Upper driving rings are arranged on the left side and the right side of an upper waterwheel body

correspondingly. Lower driving rings are arranged on the two sides of the left waterwheel body and the right waterwheel body correspondingly. An upper electric generator and a lower electric generator are arranged on the upper side of an upper support and the upper side of a lower support correspondingly. The upper waterwheel body is arranged on the outer side of an upper rotary shaft. A left support is arranged on the left side of the waterwheel. A right support is arranged on the right side of the waterwheel. The upper rotary shaft is arranged in an upper waterwheel bearing. The lower rotary shaft is arranged in a left waterwheel bearing and a right waterwheel bearing. The upper support and the lower support are connected with the right support. A water pouring trough is formed in the upper end of the left support. The novel efficient energy-saving environment-friendly waterwheel is advanced in design performance, simple, easy to operate, widely used, capable of achieving automatic water bucketing electricity generation and saving energy, efficient, environmentally friendly, safe to use, convenient, durable, low in cost, high in return, and very high in comprehensive benefit.

Inventors

WEI ZHAN

Latest standardized assignees - inventors removed

LIUZHOU JINGYANG ENERGY SAVING TECHNOLOGY RESEARCH & DEVELOPMENT

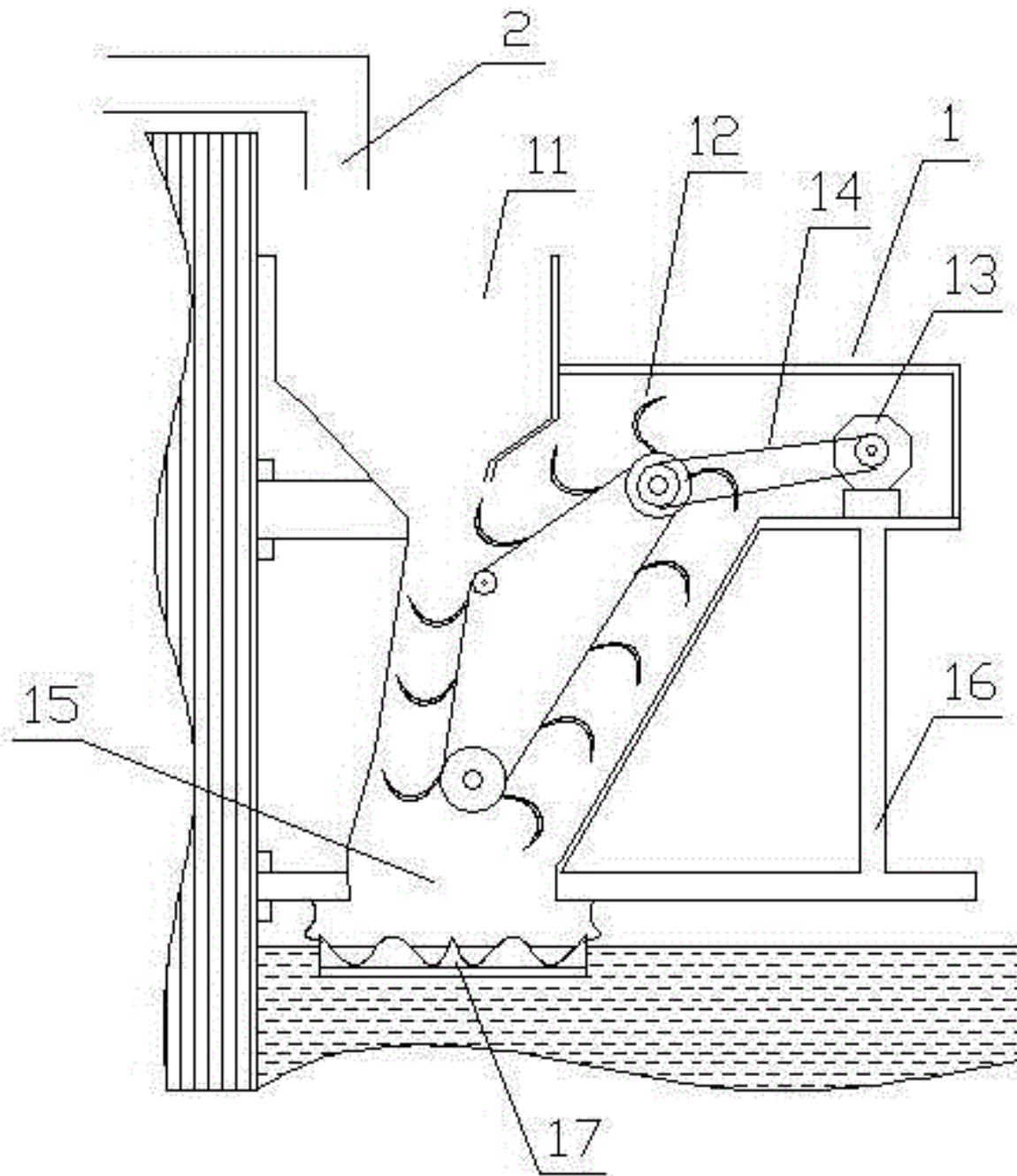
Family 22/200 - FAMPAT - ©Questel

Title

(CN205277672U)

Power generation device

Images

**Publication data including kind & date**

CN205277672

U

2016-06-01

CN205277672U

**Abstract**

(CN205277672U)

The utility model discloses a power generation device, including electricity generation mechanism and outlet pipe, electricity generation mechanism lies in the outlet pipe below, electricity generation mechanism includes water collecting bucket, water wheels device, generator and transmission, and water collecting bucket lies in the outlet pipe under, and the water wheels device is installed in the water collecting bucket below, and the water wheels device includes slip band, the water wheels wheel of fighting and roll, and slip band outside evenly distributed has the water wheels fill, and the wheel that rolls is connected in the inboard both ends transmission of slip band, and power generator shaft is connected through the transmission transmission to the wheel that rolls, the utility model discloses be on good terms and absorb running water kinetic energy and potential energy effectively, avoid producing adverse effect to low reaches processing pond, can use multipurposely the kinetic energy and the potential energy of delivery port running water simultaneously again, be usable electric energy with its energy conversion.

Inventors

GUO ZIGUI

Latest standardized assignees - inventors removed

ZHANGJIAJIE INSTITUTE OF AERONATICAL ENGINEERING

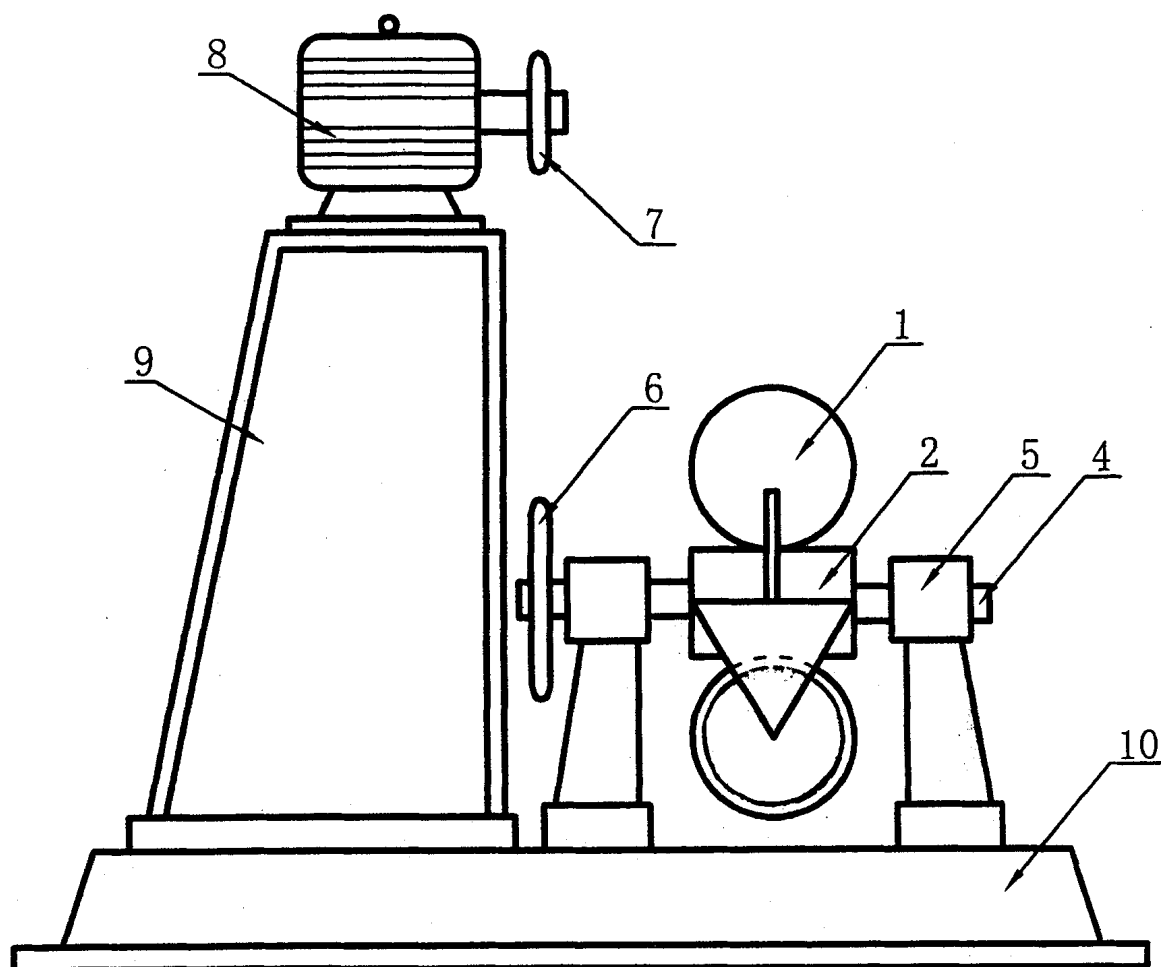
Family 23/200 - FAMPAT - ©Questel

Title

(CN1858433)

Wheel and bucket type wave force water turbine

Images



Publication data including kind & date

[CN1858433](#)

A 2006-11-08 CN1858433



Abstract

(CN1858433)

The wheel and bucket type wave force water turbine is one machine to utilize the energy of the waves in sea. It has wheel and bucket type water wheel on horizontal shaft, and bearing support for fixing the shaft onto the pedestal. When some generator is mounted, one wheel and bucket type water turbine-generator unit may be constituted. The wheel and bucket type water turbine-generator unit is set in offshore with the shaft being parallel to the sea coast and the generator and the water turbine being inside sea water. When the water turbine is stroked by waves, the wheel and bucket type water turbine-generator unit converts the wave energy into electric energy.

Inventors

LI YUWEN

Latest standardized assignees - inventors removed

DONG HONGQIAN

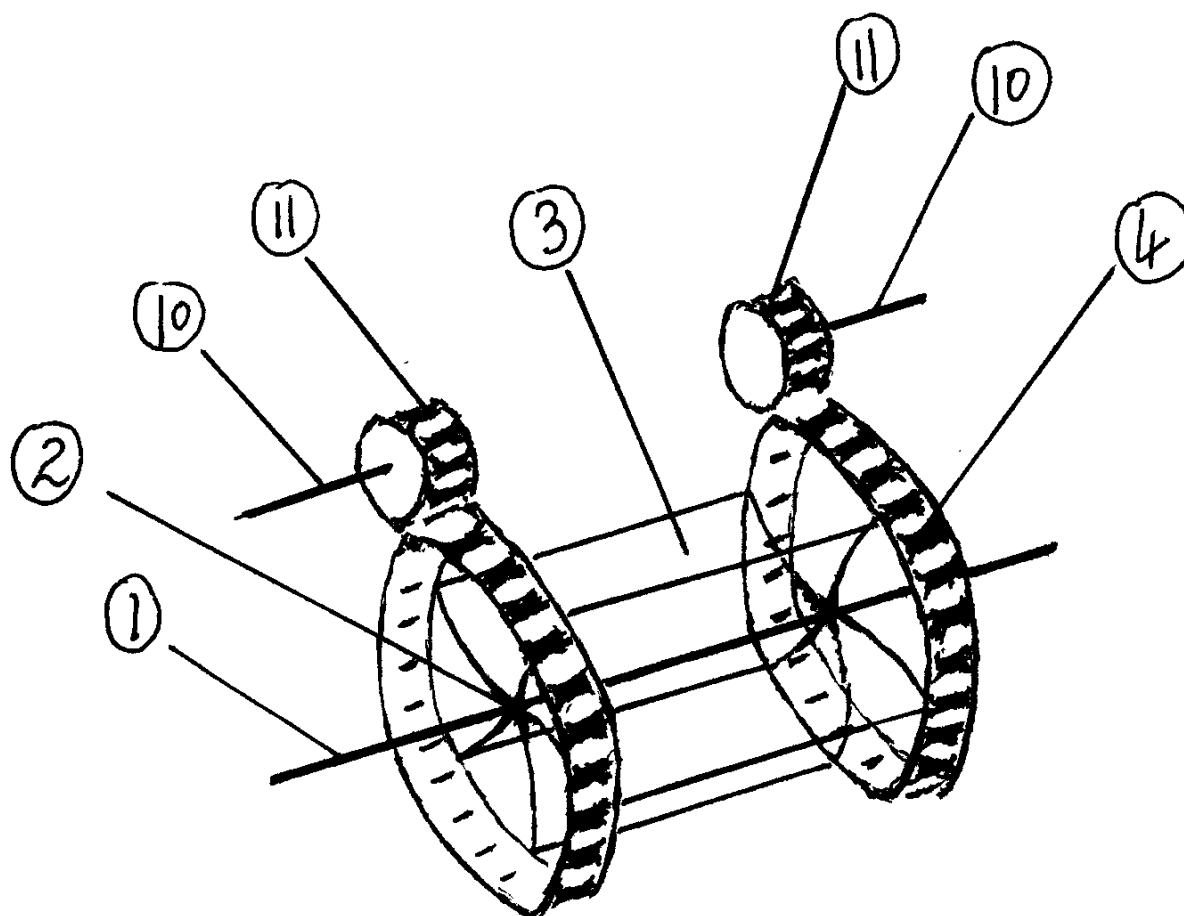
Family 24/200 - FAMPAT - ©Questel

Title

(CN1948743)

Bigear toothed water wheel

Images

**Publication data including kind & date**[CN1948743](#)

A

2007-04-18

CN1948743

**Abstract**

(CN1948743)

The invention relates to a double-gear water turbine, in which two gears are mounted on the periphery of a common wheel water turbine. The gears and the water turbine use the same rotation shaft, so when the water flow impels the water turbine, the gears and the water turbine rotate synchronously at the same time to produce power energy which is transmitted out by the two gears. By the contacting and coupling of the gears and their own power energy input rotation shaft gears, the energy is converted to realize the hydroelectric generation.

Inventors

YUAN DEZE

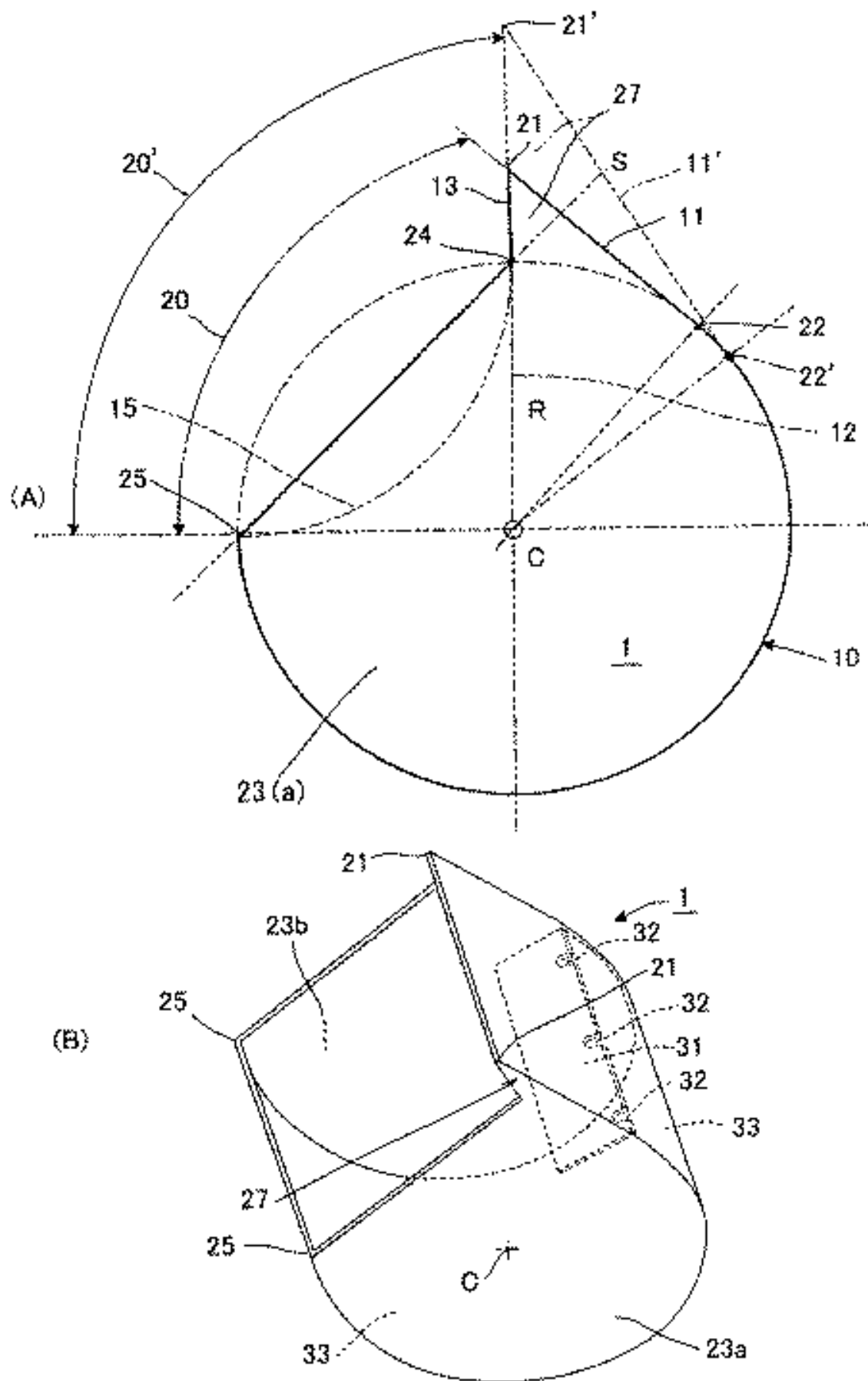
Family 25/200 - FAMPAT - ©Questel

Title

(JP2013087650)

Bucket for water wheel, water wheel having the bucket and water wheel generator composed of the water wheel

Images



Publication data including kind & date

JP2013087650

A 2013-05-13 JP2013087650



Abstract

(JP2013087650)

PROBLEM TO BE SOLVED: To provide a bucket for a water wheel, a water wheel having the bucket and a water wheel generator composed of the water wheel, that can efficiently utilize not only water level energy but also kinetic energy simultaneously.SOLUTION: In a shape formed by one arc 10 that has an opening part 20 and occupies at least 3/4 of the arc and is formed into bottomed box shape, a tangent 11 that reaches the contact 22 on the circumference of the arc 10 from the intersection 21 between the tangent 11 of the arc 10 and the center line 12, and a straight line 13 that reaches the intersection 24 on the circumference of the arc 10 toward the center C of the arc 10 from the intersection 21, the water wheel generator includes the arc and straight line 13 positioned on the center side of the arc 10 from among arcs that are symmetrical with the symmetrical line S connecting one end 24 with the other end 25 of the intersection at the same radius R as the arc 10, and is composed of the water wheel bucket formed with the opening part 20, the water wheel having the bucket and the water wheel.

Inventors

SUZUKI TOKUO

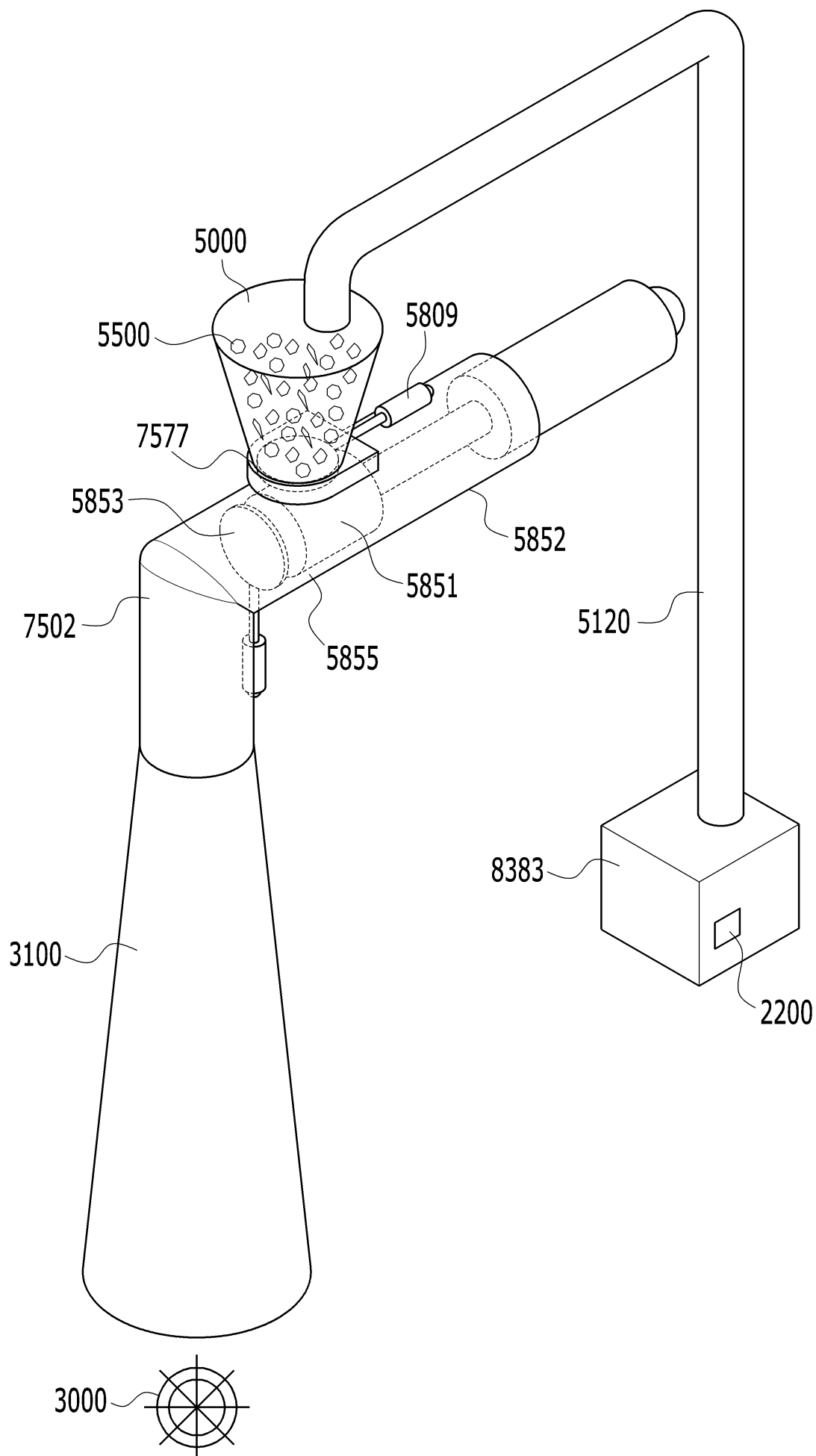
Family 26/200 - FAMPAT - ©Questel

Title

(KR20180017063)

Environmentally-friendly power generation method to continuously produce electricity using gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency while additionally generating action of gravitational acceleration

Images



[KR20180017063](#)

A 2018-02-20 KR20180017063

Abstract

(KR20180017063)

The present invention relates to an environmentally-friendly power generation method to continuously produce electricity using a gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency while additionally generating action of gravitational acceleration, capable of purifying polluted water and producing electricity with high efficiency as actions of gravity and gravitational acceleration. According to the present invention, the system uses cheap excessive electricity to operate a water intake pump (6200) to pump again secondary generation water (6100) filled in a secondary water storage device (6000) to a primary water storage device (7000), thereby rotating a secondary gravitational acceleration generation vessel (5260) and a secondary generation water wheel (5130) to produce the electricity and, at the same time, filling the primary water storage device (700) with primary generation water and discharging again the primary generation water (5100) filled in the primary water storage device (7000) to the inside of the secondary water storage device (6000) to continuously produce electricity when usage is high.

Inventors

HAN, SANG-KWAN

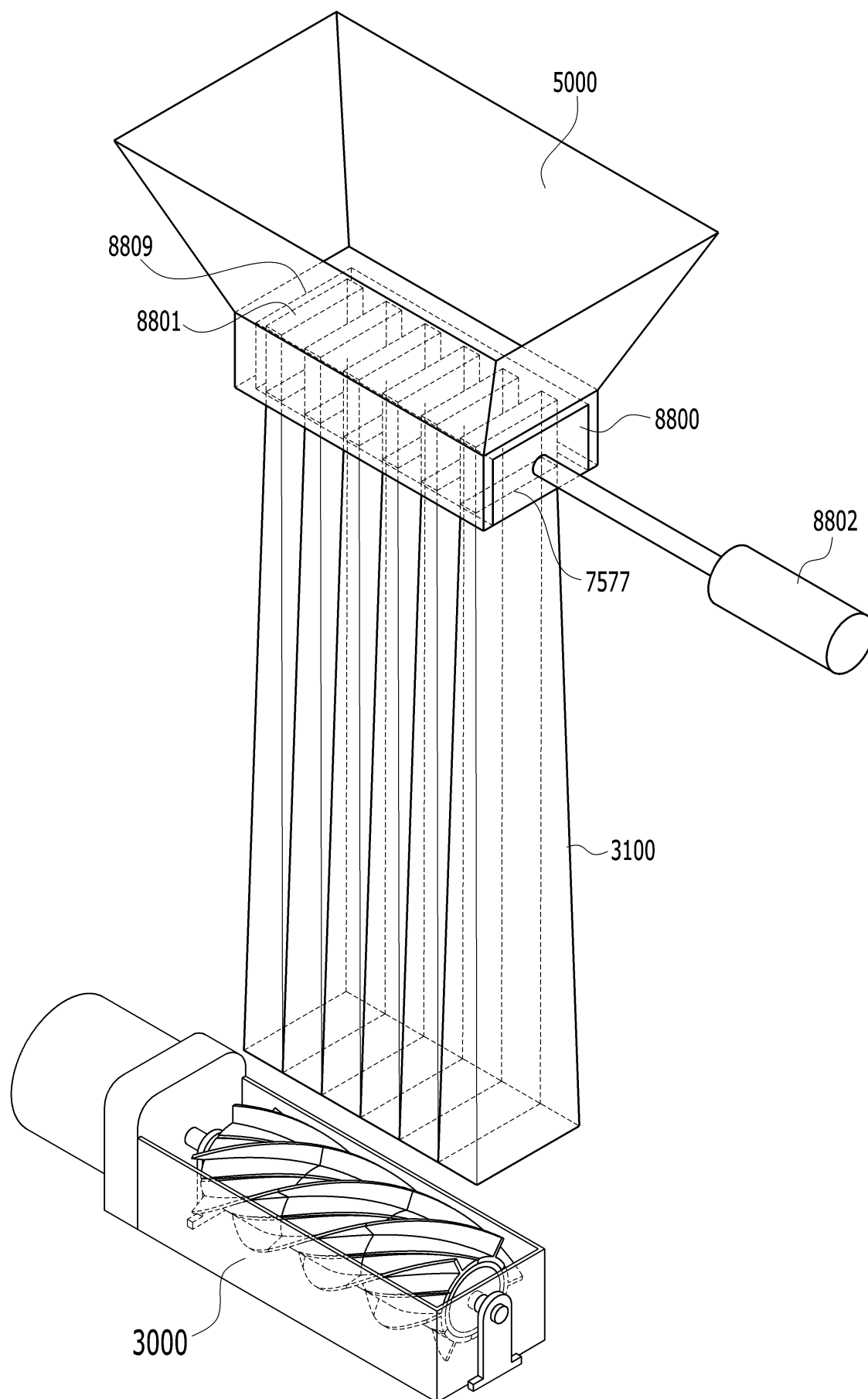
Family 27/200 - FAMPAT - ©Questel

Title

(KR20180008362)

Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration

Images



Publication data including kind & date

[KR20180008362](#)

A

2018-01-24

KR20180008362



Abstract

(KR20180008362)

The present invention relates to an economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration, capable of cleanly purifying polluted water. According to the present invention, the method comprises: a first reservoir (7000); a second reservoir (6000) formed on a top of a concrete basis (6150) formed on a bottom of a downside river with an altitude difference of about 5 to 100 m from the first reservoir (7000); a tilt drain pipe (5300) installed in a bottom of the first reservoir (7000); a drain control valve (5900) installed in a top of the tilt drain pipe (5300); a riser pipe (5320) installed in a bottom of the tilt drain pipe (5300); a water retransfer pipe (5120) installed in a top of an end of the riser pipe (5320); an air discharge control valve (1500) installed in a corner part of the water retransfer pipe (5120); a second drain pipe (5250); a second generation waterwheel (5130) installed in a bottom of the second drain pipe (5250); the gravitational acceleration generation vessel (5000) installed in a bottom of an end of the riser pipe (5320); a gravitational acceleration generation drain pipe (5200) installed in a bottom of the gravitational acceleration generation vessel (5000); a first generation waterwheel (5230) installed in a bottom of the gravitational acceleration generation drain pipe (5200); a drain control valve (5800) to control a drain amount of first generation water (6100); a water intake pump (6200) installed on one side of a bottom of the water intake pipe (6300); and an opening/closing valve (5310) to open/close the water intake pipe (6300).

Inventors

HAN, SANG-KWAN

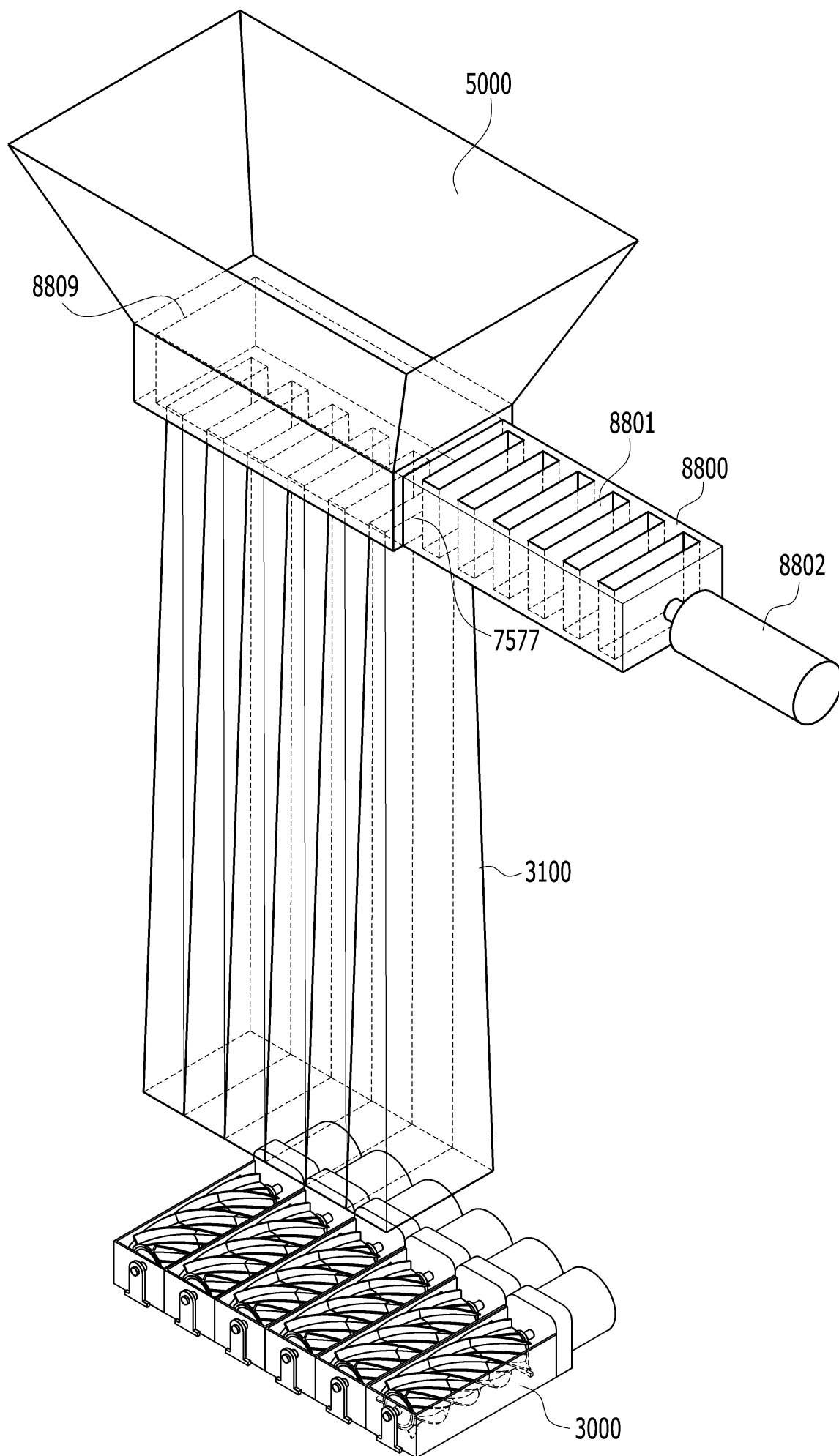
Family 28/200 - FAMPAT - ©Questel

Title

(KR20180005148)

ECONOMICALLY-FRIENDLY POWER GENERATION METHOD CONTINUOUSLY PRODUCING ELECTRICITY USING GRAVITATIONAL ACCELERATION GENERATOR coupled TO VERTICAL FALL GENERATION EQUIPMENT TO INCREASE GENERATION EFFICIENCY

Images



KR20180005148

A 2018-01-15 KR20180005148

Abstract

(KR20180005148)

The present invention relates to an economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to increase generation efficiency, capable of permanently producing electricity at high efficiency. According to the present invention, the method comprises: a first reservoir (7000); a second reservoir (6000) formed on a top of a concrete basis (6150) formed on a bottom of a downside river with an altitude difference of about 5 to 100 m from the first reservoir (7000); a tilt drain pipe (5300) installed in a bottom of the first reservoir (7000); a drain control valve (5900) installed in a top of the tilt drain pipe (5300); a riser pipe (5320) installed in a bottom of the tilt drain pipe (5300); a water retransfer pipe (5120) installed in a top of an end of the riser pipe (5320); an air discharge control valve (1500) installed in a corner part of the water retransfer pipe (5120); a second drain pipe (5250); a second generation waterwheel (5130) installed in a bottom of the second drain pipe (5250); the gravitational acceleration generation vessel (5000) installed in a bottom of an end of the riser pipe (5320); a gravitational acceleration generation drain pipe (5200) installed in a bottom of the gravitational acceleration generation vessel (5000); a first generation waterwheel (5230) installed in a bottom of the gravitational acceleration generation drain pipe (5200); a drain control valve (5800) installed on one side of a bottom of a water intake pipe (6300); and an opening/closing valve (5310) to open/close the water intake pipe (6300).

Inventors

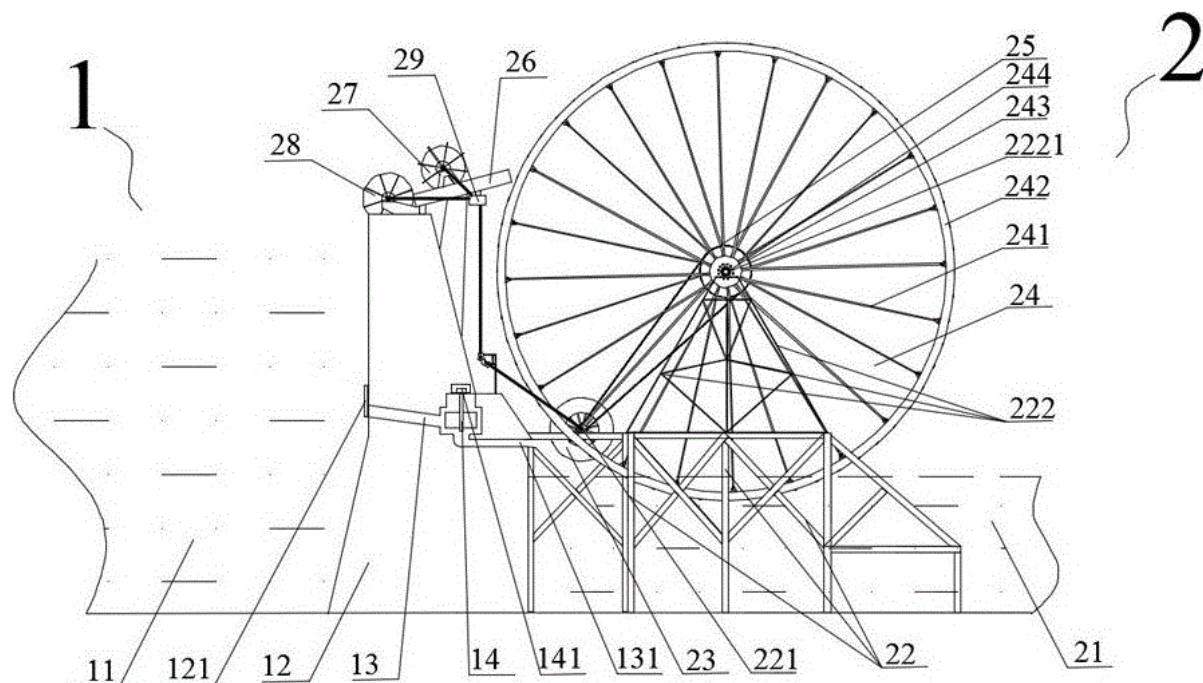
HAN, SANG-KWAN

Family 29/200 - FAMPAT - ©Questel

Title

(CN107178462)

Water returning type power generation method of hydrodynamic force recycling waterwheel

Images**Publication data including kind & date**

CN107178462

A 2017-09-19 CN107178462

**Abstract**

(CN107178462)

The invention belongs to a water returning type power generation method of a hydrodynamic force recycling waterwheel. Specifically, a water blocking plate waterwheel recycles flushing water kinetic energy of a water flushing port of a draining pipe and transmits the recycled kinetic energy to a chain through a chain wheel; then the chain transmits the kinetic energy

to a chain wheel flywheel; the chain wheel flywheel transmits the kinetic energy to the waterwheel; through operation of the waterwheel, water in a waterwheel water trough is poured into a backflow guiding trough; when flowing back in the backflow water guiding trough, the water impulses and rotates water flushing plates on the backflow water guiding trough and water blocking plate water flushing plates of a water flushing port of the backflow water guiding trough; and kinetic energy obtained by the water flushing plates and the water blocking plate water flushing plates is transmitted through bevel gears and transmission shafts and transmitted to the water blocking plate waterwheel again after decelerated by a reduction box, and the kinetic energy of operation and transmission of the water blocking plate waterwheel is increased. Through hydrodynamic force recycling of two times of flushing water kinetic energy and one time of flowing water kinetic energy, the recycled kinetic energy is used for driving the waterwheel, the flushing water kinetic energy of device system operation is completely recycled and used, and the waterwheel has the characteristics of being simple in structure, light, high in kinetic energy transmission capacity and water returning efficiency, environmentally friendly, safe and reliable in operation and the like.

Inventors

YANG LIN

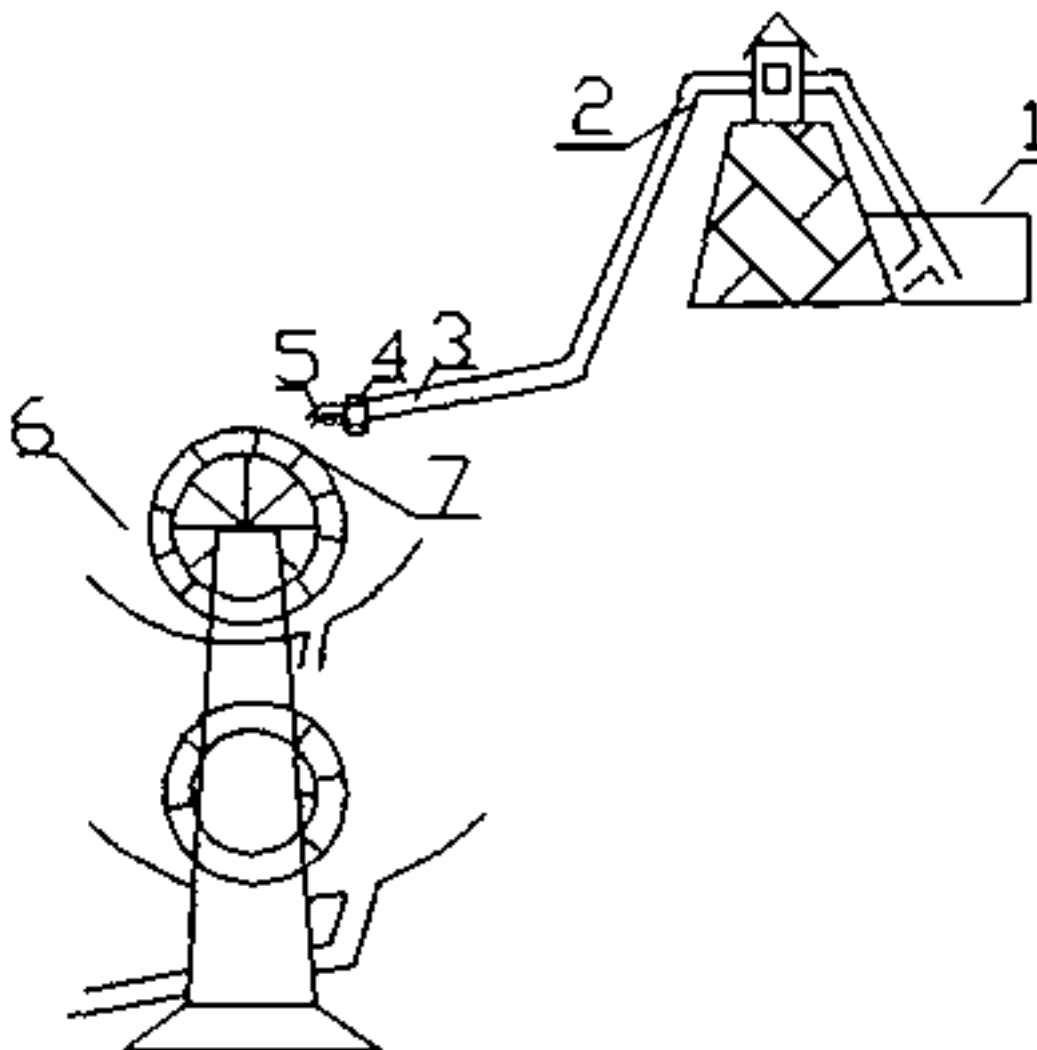
Family 30/200 - FAMPAT - ©Questel

Title

(CN102889164)

Ultrahigh-efficiency hydraulic generating device and technology thereof

Images



Publication data including kind & date

CN102889164

A 2013-01-23 CN102889164



Abstract

(CN102889164)

The invention relates to an ultrahigh-efficiency hydraulic generating device and a technology thereof. Water is fed in a pressure pipeline mode or siphon mode; the problems of water and soil loss and sediment are solved; the pressure pipeline or siphon can be repeatedly reduced, so that a water outlet is gradually changed into a flat opening, the water pressure at the water outlet is increased and the multi-pipe multi-point impacting is achieved; water wheels are combined in a multi-level multi-row form; the potential energy of water is extremely utilized; water hoppers are mounted on the water wheels; the water hoppers are directly impacted by a plurality of split pressure water guns at the water outlet of the pressure pipeline or siphon along the tangential direction of the water wheels; and the water wheels are quickly rotated under dual-force of impact force and gravity force of the water hoppers. According to the technical improvement of the invention, the use ratio of water energy is increased to above 20 times of the common use ratio of water energy, by utilizing the optimal combination of technical devices.

Inventors

WANG JIANPING

Latest standardized assignees - inventors removed

DALIAN HAITING SHIP INDUSTRY

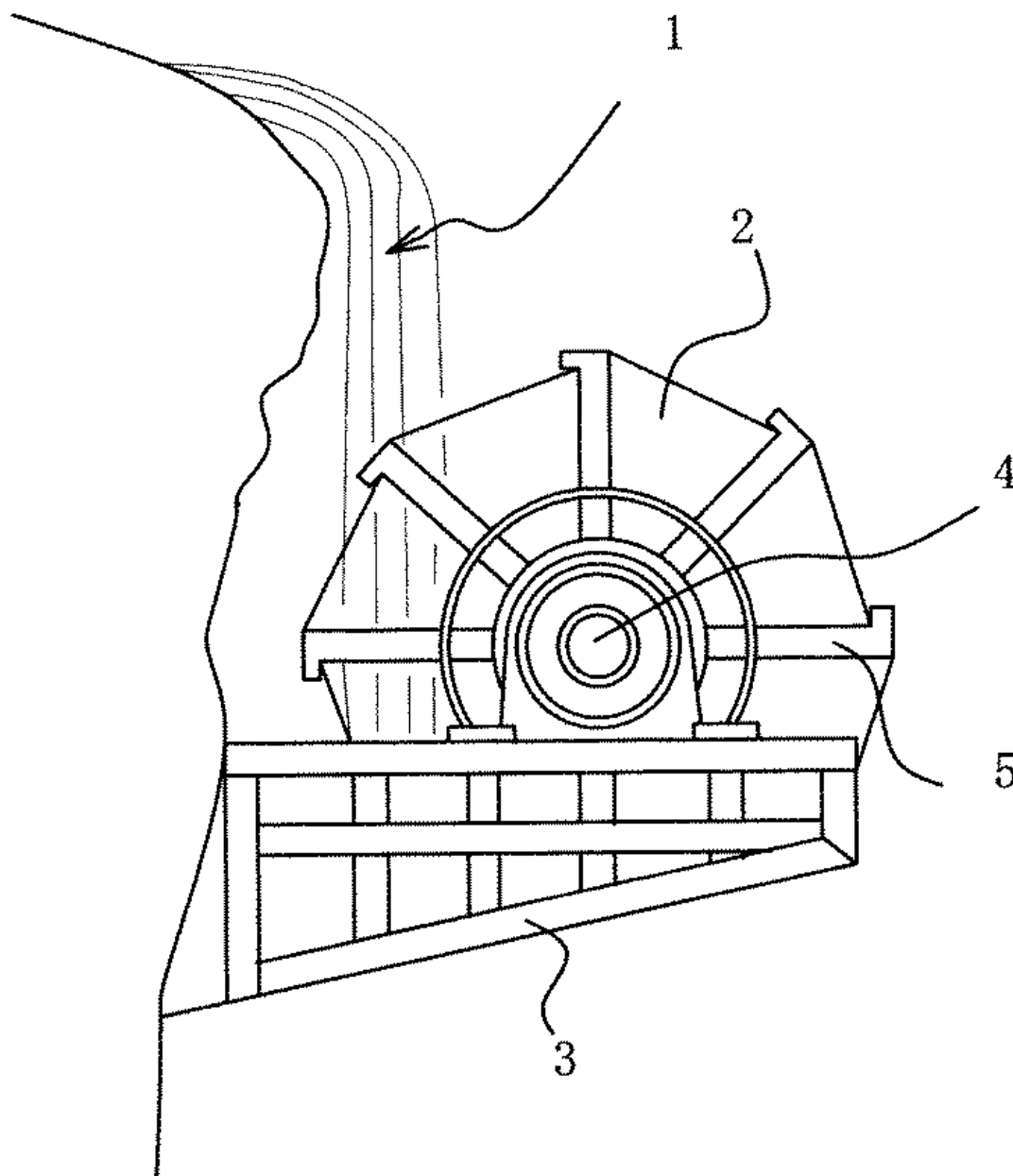
Family 31/200 - FAMPAT - ©Questel

Title

(JP2011127334)

Hydroelectric power unit utilizing flowing water in fall, mountain stream and the like

Images

**Publication data including kind & date**[JP2011127334](#)

A

2011-06-30

JP2011127334

**Abstract**

(JP2011127334)

PROBLEM TO BE SOLVED: To provide a simple hydroelectric power unit which utilizes high-speed flowing water in fields and mountains, which can be easily installed, which can obtain a desired electric-generating capacity at a low installation cost, and which enables storage of electricity according to need.

SOLUTION: This simple hydroelectric power unit utilizing the high-speed flowing water in the fields and mountains is characterized as follows: a water wheel 2 is installed in the flowing water 1 in a fall having a drop greater than the water wheel 2 installed on a fixing base 3 with a mounting portion; power-generating equipment 6 is provided via a speed-increasing gear 7 on the rotating shaft 4 of the water wheel 2; and a voltage stabilizer 13 and a capacitor 14 are connected. The power-generating equipment 6 is connected to each of the rotating shafts 4 which are provided on both the sides of the water wheel 2. A manual clutch 8 is provided between the rotating shaft 4 of the water wheel 2 and the speed-increasing gear 7.

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Inventors

NAGASHIO KICHINOSUKE

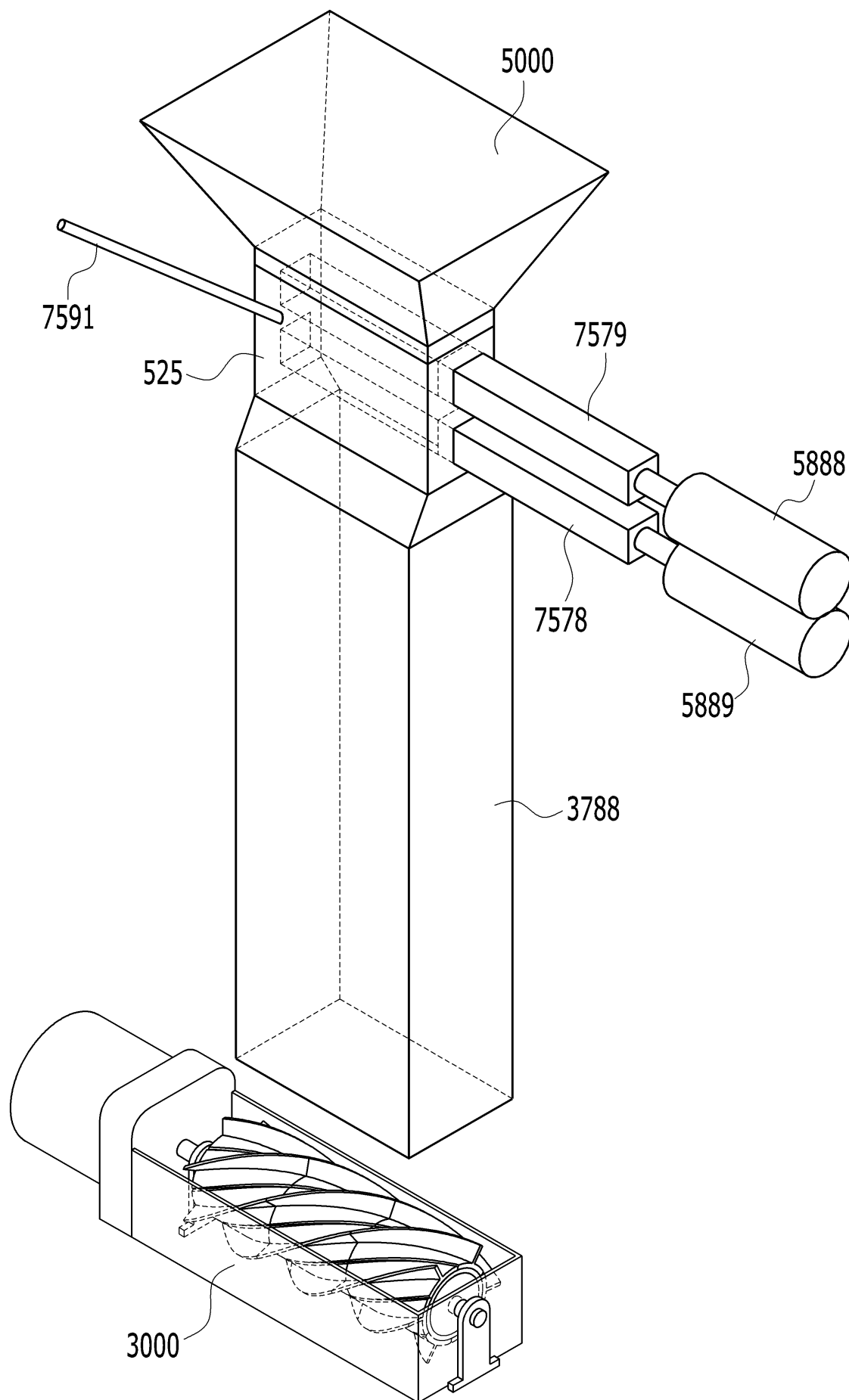
Family 32/200 - FAMPAT - ©Questel

Title

(KR20180011038)

Omitted economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment

Images



(KR20180011038)

The present invention relates to an economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment, capable of producing electricity at high efficiency. According to the present invention, the method comprises: first and second reservoirs (7000, 8000); a tilt drain pipe (5300) installed in a bottom of the first reservoir (7000); a drain control valve (5900) installed in a top of the tilt drain pipe (5300); a riser pipe (5320) installed in a bottom of the tilt drain pipe (5300); a water retransfer pipe (5120) installed in a top of an end of the riser pipe (5320); an air discharge control valve (1500) coupled to an air discharge pipe (1510) installed in a corner part of the water retransfer pipe (5120); a second drain pipe (5250) coupled to a second gravitational acceleration generation vessel (5260) installed in an end of the water retransfer pipe (5120); a second generation waterwheel (5130) installed in a bottom of the second drain pipe (5250); the gravitational acceleration generation vessel (5000) installed in a bottom of an end of the riser pipe (5320); a gravitational acceleration generation drain pipe (5200) installed in a bottom of the gravitational acceleration generation vessel (5000); a first generation waterwheel (5230) installed in a bottom of the gravitational acceleration generation drain pipe (5200); a drain control valve (5800) to control a drain amount of first generation water (6100); a water intake pump (6200); and an opening/closing valve (5310) installed in a top of a water intake pipe (6300) to open/close the water intake pipe (6300).

Inventors

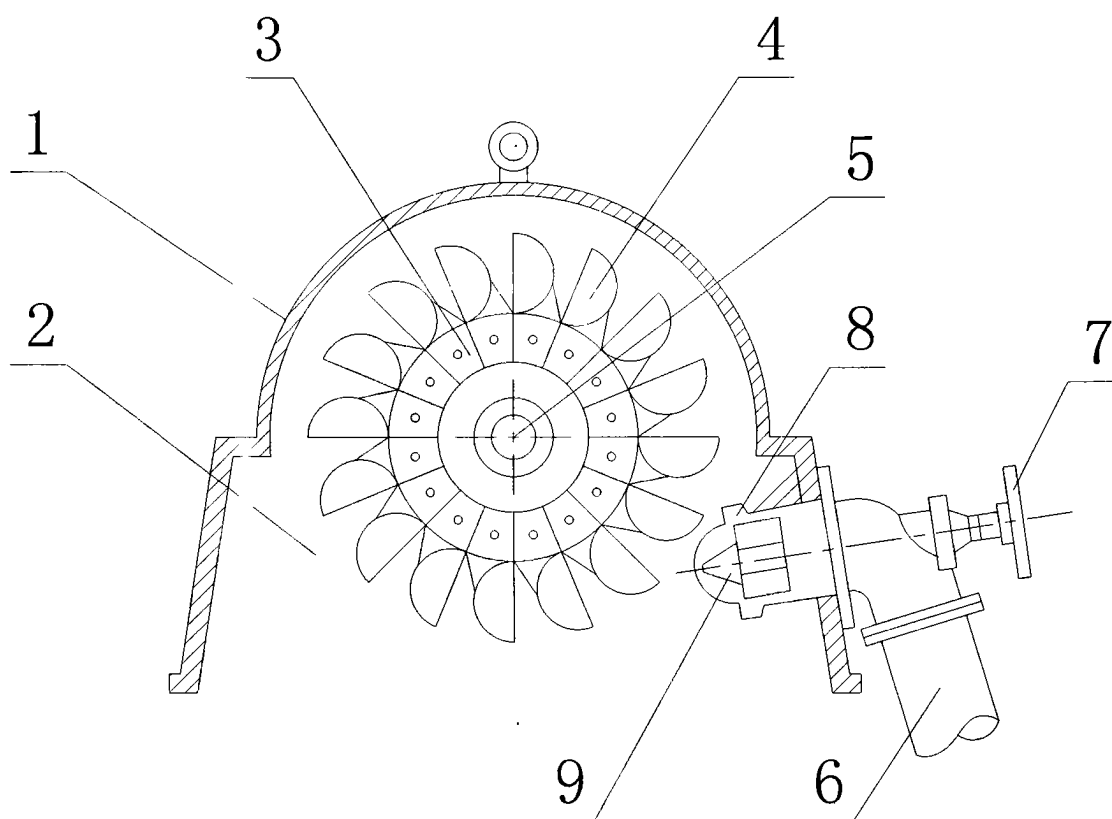
HAN, SANG-KWAN

Family 33/200 - FAMPAT - ©Questel

Title

(CN201202576U)

Bucket impulse turbine

Images**Publication data including kind & date**

CN201202576

Y

2009-03-04

CN201202576U

**Abstract**

(CN201202576U)

The utility model provides a pelton impulse turbine, which belongs to the technical field of water conservancy project machinery and comprises a housing, a runner and a water inlet pipe; the utility model is structurally characterized in that the runner is arranged in a runner chamber of the housing through a rotor; vane buckets are evenly arranged along the circumference of the runner; the water inlet pipe is arranged at one side of the housing; a spray head is arranged on the water inlet pipe and at the end which runs through the interior of the housing; a needle valve is arranged inside the spray head; and a regulating valve is arranged on the water inlet pipe outside the housing. The opening directions of the vane buckets on the runner are consistent. The spray head is arranged on the tangent direction of a circle formed by the centers of the vane buckets on the runner. The quantity of the vane buckets is 16. The pelton impulse turbine can make use of the water flow regulating valve and the needle valve inside the spray head on the water inlet pipe, as well as the high-density arrangement of the vane buckets at the same time to enable the potential energy of water to be fully converted into mechanical energy; besides, the pelton impulse turbine has simple structure, stable performance and high working efficiency, which is applied to high-water head hydropower stations.

Inventors

ZHU QIUYING

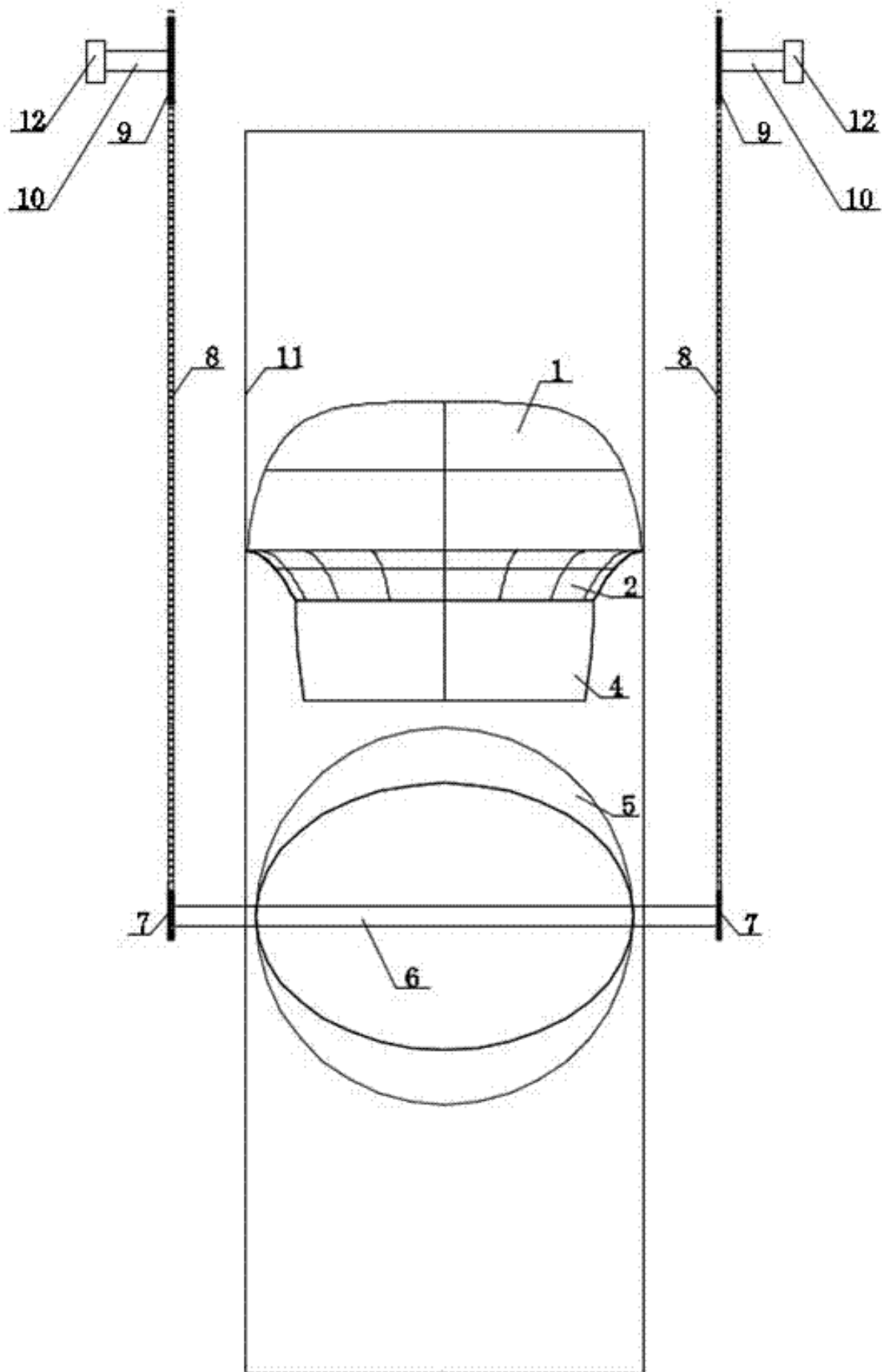
Family 34/200 - FAMPAT - ©Questel

Title

(CN108590922)

Shaft energy recycling device and method for force transmission on basis of gear chain structure

Images



Publication data including kind & date

[CN108590922](#)

A 2018-09-28 CN108590922



Abstract

(CN108590922)

The invention provides a shaft energy recycling device and method for force transmission on basis of a gear chain structure. Potential energy and kinetic energy, obtained through entering of water flow into a shaft, in a deep tunnel drain system are stored. A water collection plate and an energy conversion device for concentrating the water flow entering the shaft into one side of the shaft are arranged in the shaft; the water flow passes through the water collection plate and impacts rotating wheel blades so as to drive a rotating wheel to rotate, the gear chain structure is used, a device spindle rotates to drive a chain to move, the chain moves to drive a gear on a shaft opening to rotate, and the gear is driven a gear pump through a shaft to work. On the basis of the energy conservation work principle, the energy of the water flow passing through the shaft is stored creatively, and can conveniently provide energy for running of the whole system, and the original intention of energy dissipating is considered.

Inventors

YANG XIUWEI

YU XIAODONG

ZHANG JIAN

WANG ZIWEI

Latest standardized assignees - inventors removed

HOHAI UNIVERSITY

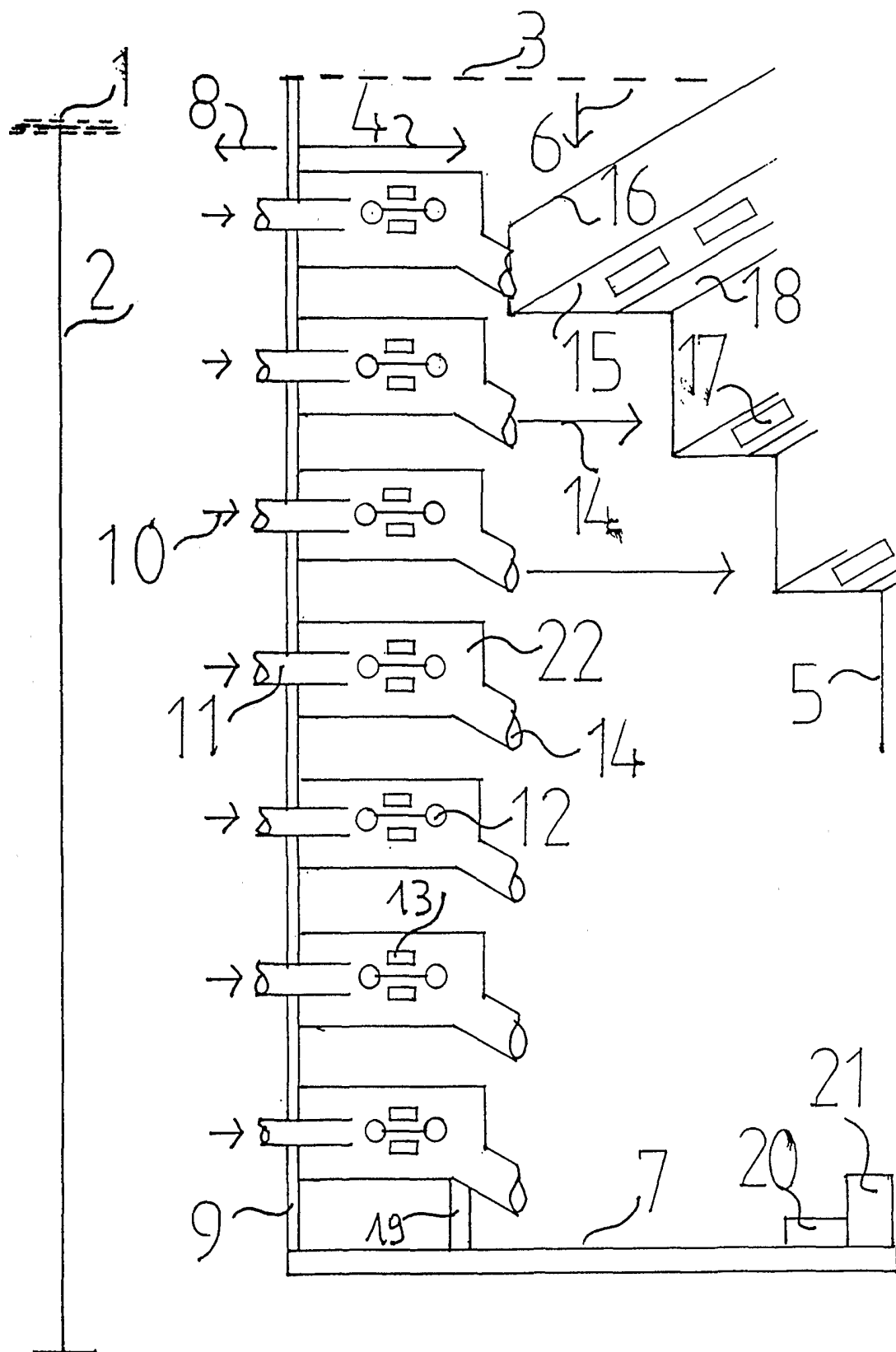
Family 35/200 - FAMPAT - ©Questel

Title

(WO2005106240)

Method for energetic, technical and biological use of underground water

Images



Publication data including kind & date

WO2005/106240	A1	2005-11-10	WO2005106240
DE102004021510	A1	2005-11-24	DE102004021510
DE102004021510	B4	2006-04-13	DE102004021510
DE102005004876	A1	2006-08-17	DE102005004876



Abstract

(WO2005106240)

Water flows from a depth of water (2) at hydrostatic pressure through pipes (11) arranged in a wall (9) built on solid ground, towards hydraulic turbines (12) driving generators (13) and/or other technical installations or devices to be driven. Water (14) from the turbines then flows towards aquaculture structures (23, 24) installed deeper where the water is used to grow aquatic plants and rear aquatic animals or is used for technical purposes. After flowing through the aquaculture structures (23, 24), the water from the turbines flows selectively via pressure pipes, towards hydraulic wheels (12, 50) located deeper to drive them, then the water flows towards evaporation surfaces (40, 53). The hydraulic wheels (12, 50) activate technical installations and devices designed to be driven. The water from the turbines may be directed towards hot cracks in the soil and in steel pipes, closed on the lower side, stored in that location. The water is geothermally heated therein to return to the surface of the ground as water vapour or sparkling water. Several ditches (15, 7) may communicate among themselves via overflows or cascade systems, such that the water from the turbines may flow from one ditch to the next successively.

Inventors

BORN GUENTER HEINRICH

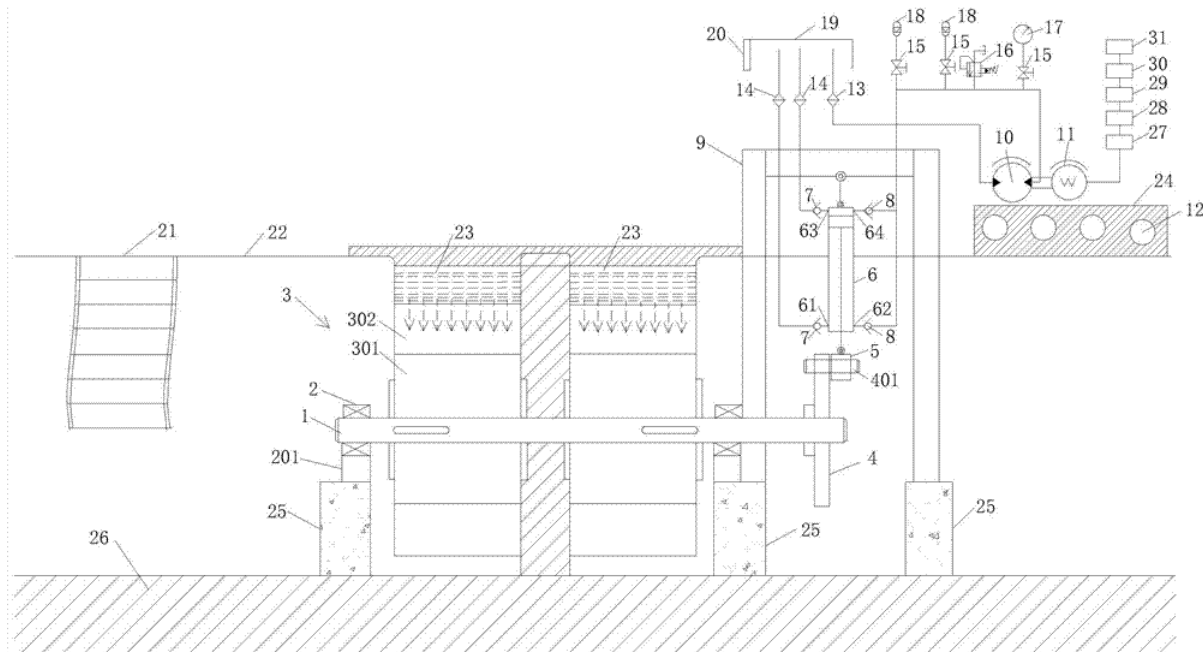
Family 36/200 - FAMPAT - ©Questel

Title

(CN105275713)

Hydroelectric generation device used for retaining dam

Images



Publication data including kind & date

CN105275713	A	2016-01-27	CN105275713
CN105275713	B	2018-11-06	CN105275713B



Abstract

(CN105275713B)

The invention provides a hydroelectric generation device used for a retaining dam. The hydroelectric generation device comprises a spindle, a water wheel, an eccentric mechanism, a hydraulic oil tank, a hydraulic cylinder, a hydraulic motor and an electric generator. The two ends of the spindle are mounted in bearing seats on supporting columns through bearings. The water wheel is provided with a rotating wheel and multiple water buckets. The eccentric mechanism comprises a disc, an eccentric shaft and a sliding sleeve. The hydraulic oil tank contains hydraulic oil. A rod cavity of the hydraulic cylinder is provided with a first oil inlet and a first oil outlet, and a rodless cavity of the hydraulic cylinder is provided with a second oil inlet and a second oil outlet. The first oil inlet and the second oil inlet are connected with the hydraulic oil tank through oil inlet pipelines, and the oil inlet pipelines are provided with oil inlet one-way valves capable of preventing oil from backwards flowing into the hydraulic oil tank. The first oil outlet and the second oil outlet are connected with an oil inlet of the hydraulic motor through oil outlet pipelines. The electric generator is driven by the hydraulic motor to

rotate. Through the hydroelectric generation device, low-water-level power generation can be conveniently achieved.

Inventors

LÜ GANBIN

LÜ YONGJIANG

Latest standardized assignees - inventors removed

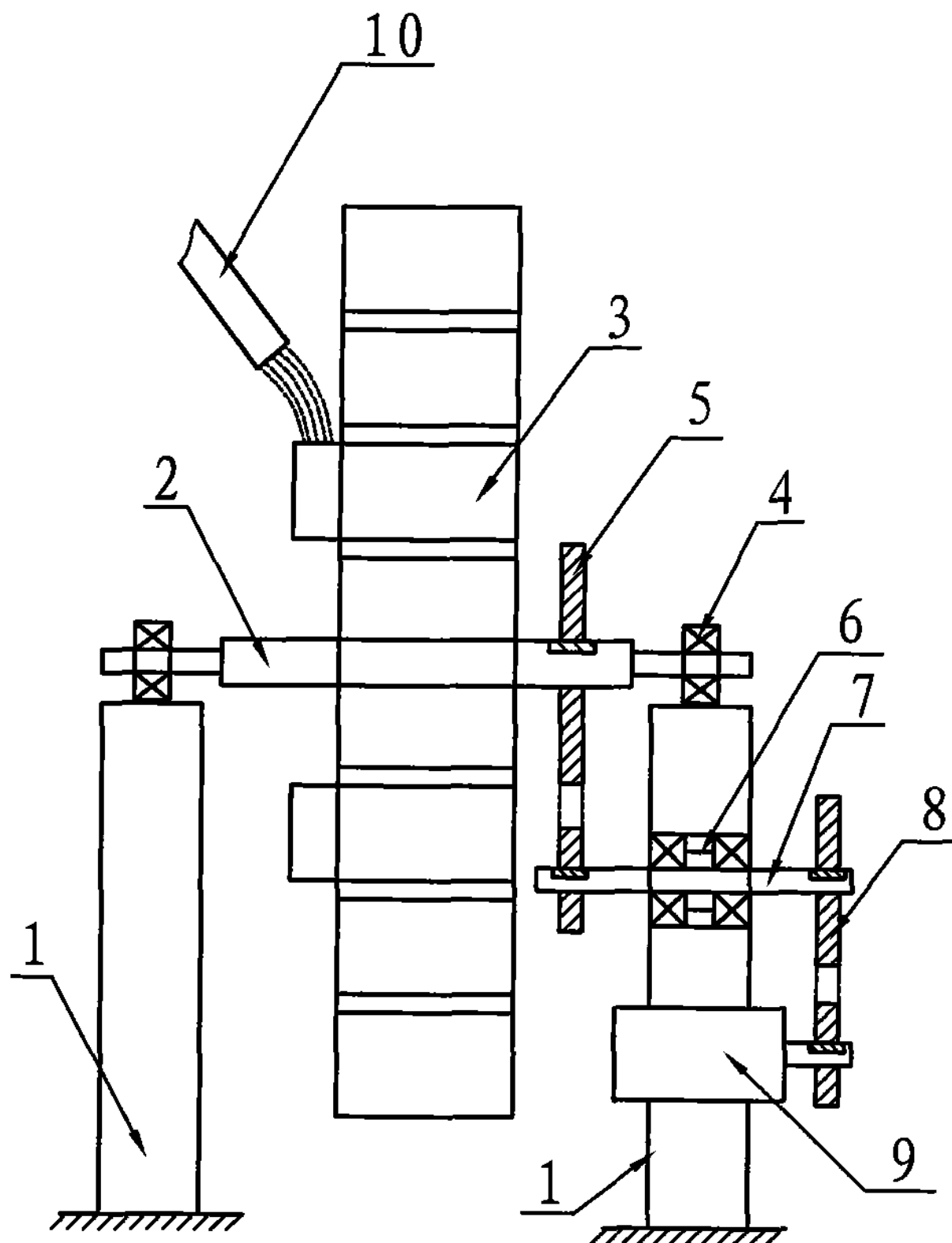
L B ENTERPRISES

Family 37/200 - FAMPAT - ©Questel

Title

(CN101787949)

Side water inlet type hydroelectric generating set

Images

Publication data including kind & date

CN101787949

A

2010-07-28

CN101787949

**Abstract**

(CN101787949)

The invention relates to a side water inlet type hydroelectric generating set which comprises a stand, a water wheel spindle, a side water inlet wheel, a spindle bearing, a first chain wheel set, a transition shaft bearing, a transition shaft, a second chain wheel set and a generator, wherein the side water inlet wheel is fixedly arranged on the water wheel spindle, and the water wheel spindle is arranged on the stand through the spindle bearing; the first chain wheel set and the second chain wheel set are arranged between the water spindle and the generator; the generator is driven by the water wheel spindle through the first chain wheel set and the second chain wheel set after speed increase; and the side water inlet wheel consists of 12-50 side water inlet tanks. So long as water flows have a drop, the water flows can be introduced into the side water inlet tanks by using pipelines, thus electricity can be continuously generated. The invention has the characteristics of less investment, wide use range, convenient mounting and use, and the like, is particularly suitable for remote mountain areas having water resources and is a high-efficiency, energy-saving and clean novel hydro electric generating set sufficiently utilizing the traditional water resources.

Inventors

OUYANG ZHICHENG

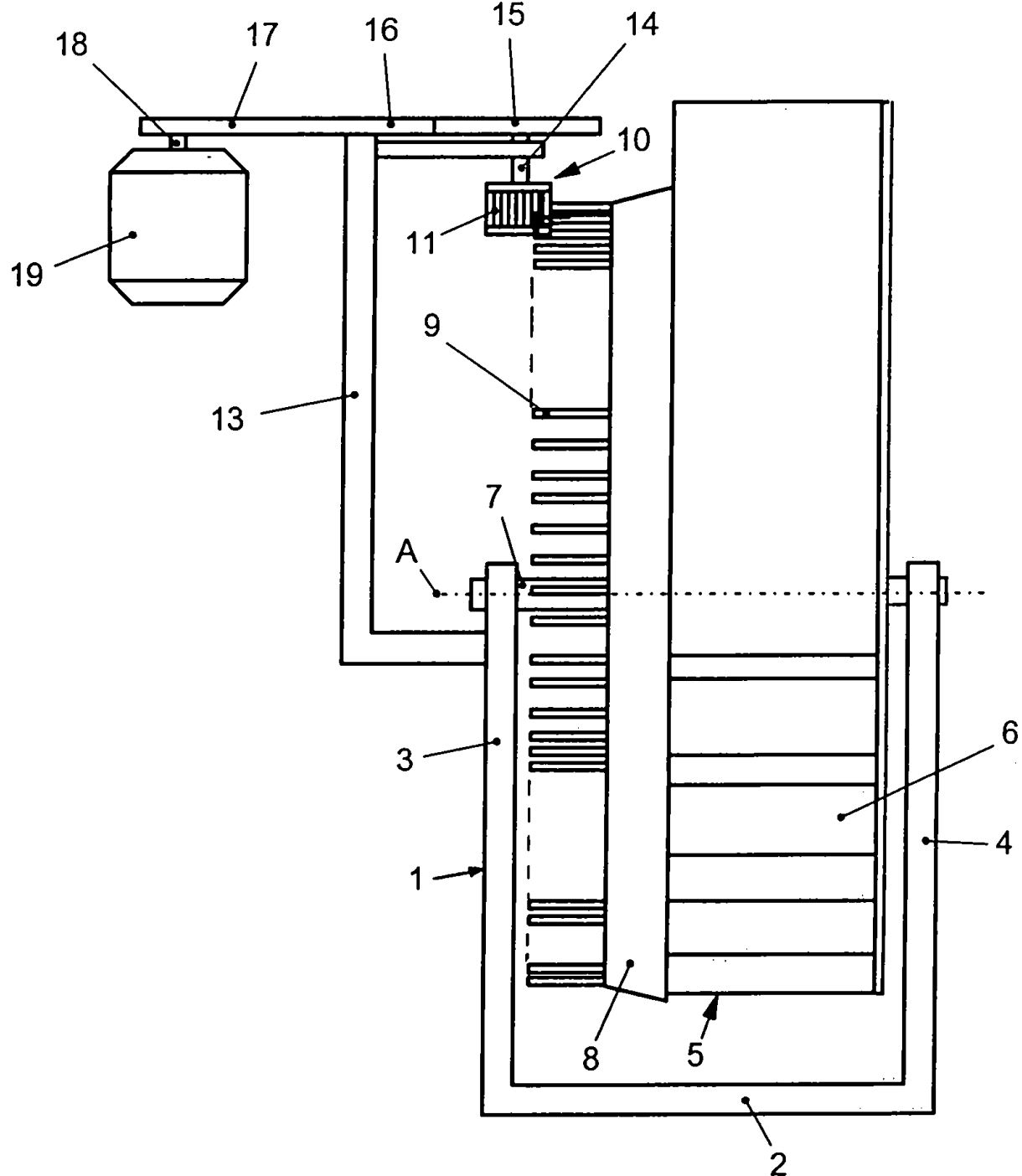
Family 38/200 - FAMPAT - ©Questel

Title

(DE102005050909)

Energy recovery process for recovering energy from water involves rotating water wheel eccentrically and transmitting rotation to consumer or energy converter

Images

**Publication data including kind & date**

DE102005050909

A1 2007-04-26

DE102005050909

**Abstract**

(DE102005050909)

The energy recovery process involves rotating a water wheel (5) eccentrically and transmitting this rotation to a consumer or to an energy converter (19). The power takeoff device (9, 10) is connected eccentrically to the water wheel. It may be in the form of a rod transmission, with the rods spaced out from a ring (8) round the water wheel.

Inventors

Erfinder wird später genannt werden

Latest standardized assignees - inventors removed

ROSENKRANZ

Family 39/200 - FAMPAT - ©Questel

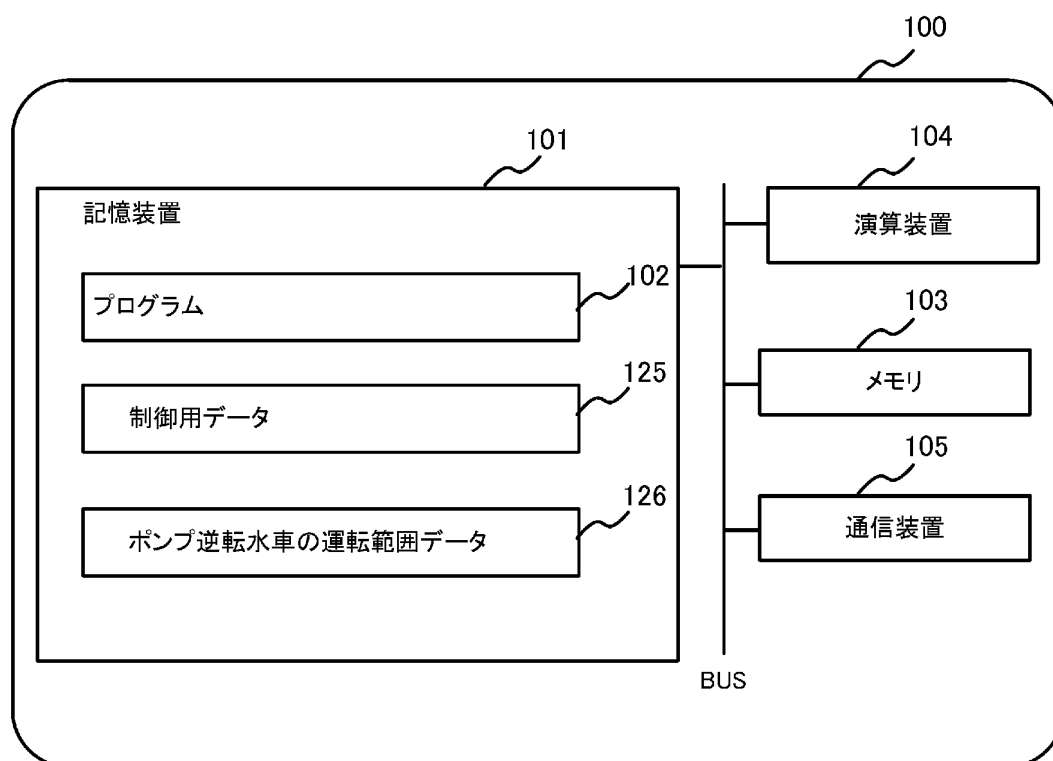
Title

(WO2014155656)

Sustained-flow-rate power generation control system, sustained-flow-rate power generation control method, sustained-flow-

rate power generation control program, and sustained-flow-rate power generation facility

Images



- 101 Storage device
- 102 Program
- 103 Memory
- 104 Calculation device
- 105 Communication device
- 125 Control data
- 126 Operational range data of reverse-running pump turbine

Publication data including kind & date

WO2014/155656	A1	2014-10-02	WO2014155656
JP5872734	B2	2016-01-22	JP5872734
JPWO2014155656	A1	2017-02-16	JP2014155656W



Abstract

(WO2014155656)

[Problem] To allow operation in sustained-flow-rate power generation to be carried out at a constant flow rate in response to water level fluctuations on a dam, and to make it possible to guarantee efficient power generation and a sustained flow rate. [Solution] This sustained-flow-rate power generation control system (100) comprises: a storage device (101) for storing control data (125) in which a relationship is established between the water level of a dam (2) where water for power generation is taken into a sustained-flow-rate power generation facility (1), and the rotating speed of a reverse-running pump turbine (3) when the discharge amount in the sustained-flow-rate power generation facility (1) during operation at the water level reaches a predetermined standard value; and a calculation device (104) for referencing the measured value at the water level gauge (5) of the dam (2) against the control data (125), specifying the rotating speed at which the discharge amount reaches the predetermined standard value at the water level, and instructing the controller (6) of the reverse-running pump turbine (3) to implement operation at the specified rotating speed.

Inventors

HIRAOKA MASANORI

NAKAMURA SATORU

Latest standardized assignees - inventors removed

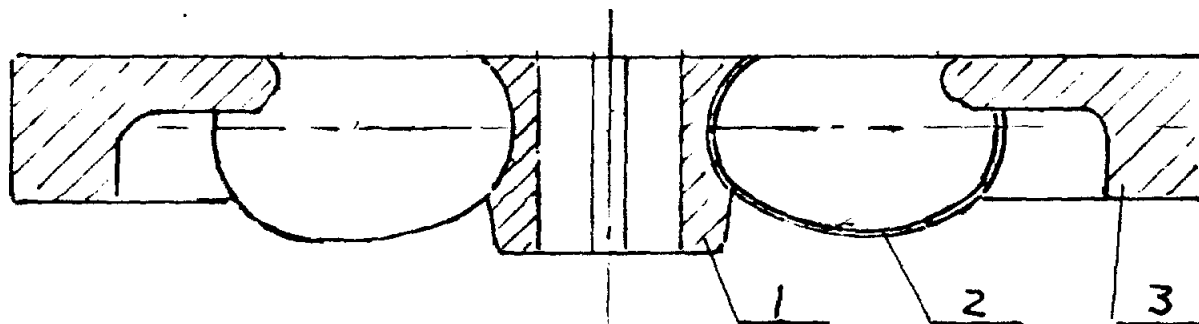
CHUGOKU ELECTRIC POWER

Family 40/200 - FAMPAT - ©Questel

Title

(CN1124820)

Rotary and fly co-wheel half-egg shaped dail tilt-impulse type water turbine

Images**Publication data including kind & date**[CN1124820](#)

A

1996-06-19

CN1124820

**Abstract**

(CN1124820)

The new structure for oblique-impact type water turbine features that hoop for strengthening the water bucket external edge of rotary wheel is extended outward to become a heavy flywheel with enlarged diameter and said bucket is reformed into a semi-egg shape one, resulting in especially simple structure, very low cost and high operation safety.

Inventors

XIAO GUANYING

XIAO JINGTANG

CHEN PINGZONG

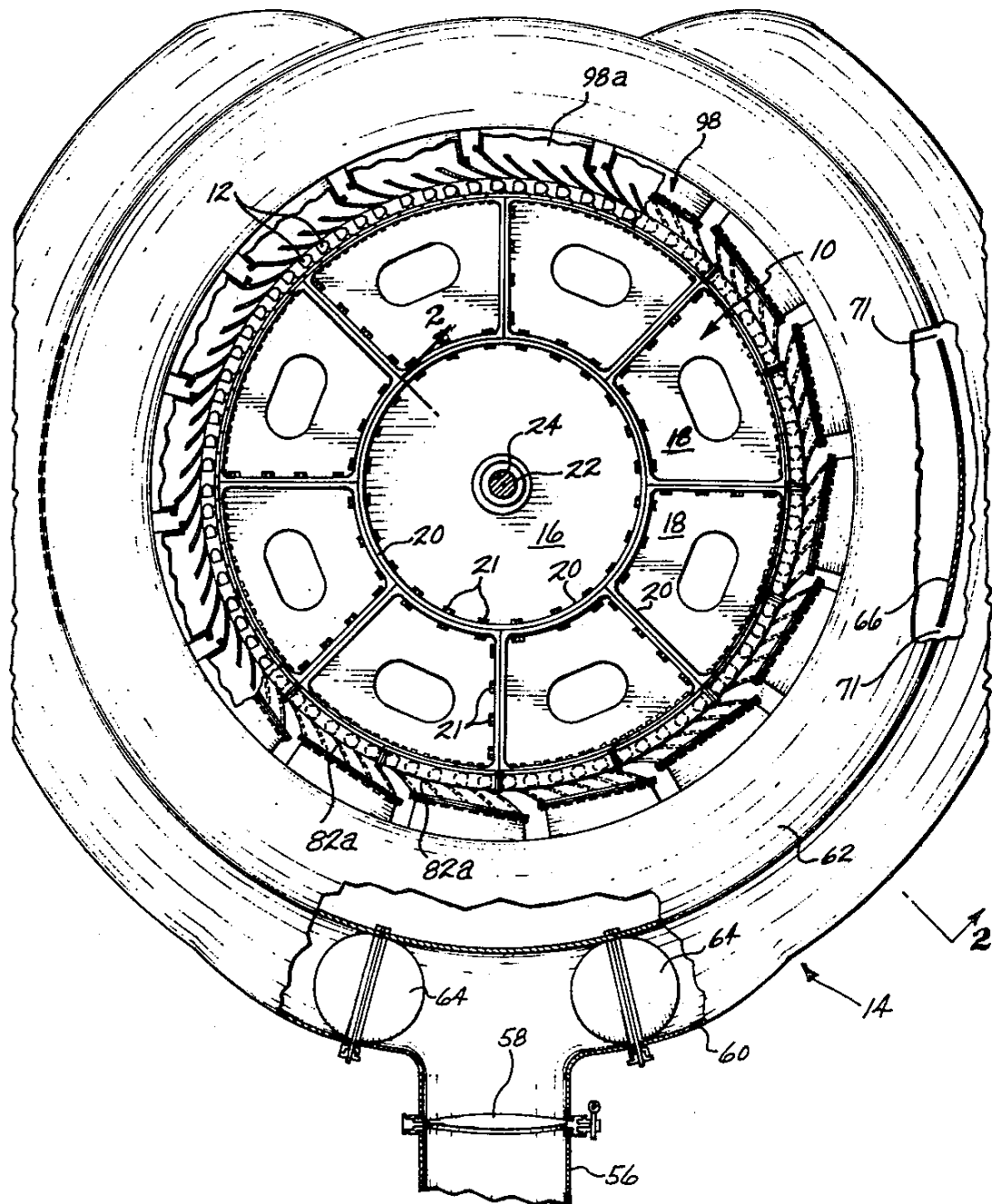
Family 41/200 - FAMPAT - ©Questel

Title

(US3936224)

Power turbine

Images



Publication data including kind & date

US3936224

A 1976-02-03 US3936224



Abstract

(US3936224)

A sectionalized turbine wheel mounted for rotation about a vertical axis and having a plurality of turbine blades mounted to its circumference. There is an outer circumferential feeder pipe surrounding a distribution pipe that defines a distribution chamber, which in turn leads through a plurality of vane assemblies to the turbine blades. The turbine blades are substantially enclosed in a housing structure which provides an annular downward opening. Water under pressure flows into the feeder pipe, thence into the distribution chamber and through the vane means to impinge on the turbine blades, from which the water is discharged in a downward direction. The turbine blades are concave and curve in both a vertical and lateral plane, with the slope of the upper portion of the impact surface having a substantial horizontal component and the slope of the curve of the impact surface at the lower end being predominantly downward, to facilitate directing the water impacting the blades in a downward direction after impact. The main drive shaft from the turbine wheel connects to a speed augmenting gear transmission to rotate an output shaft at an increased rate of speed.

Inventors

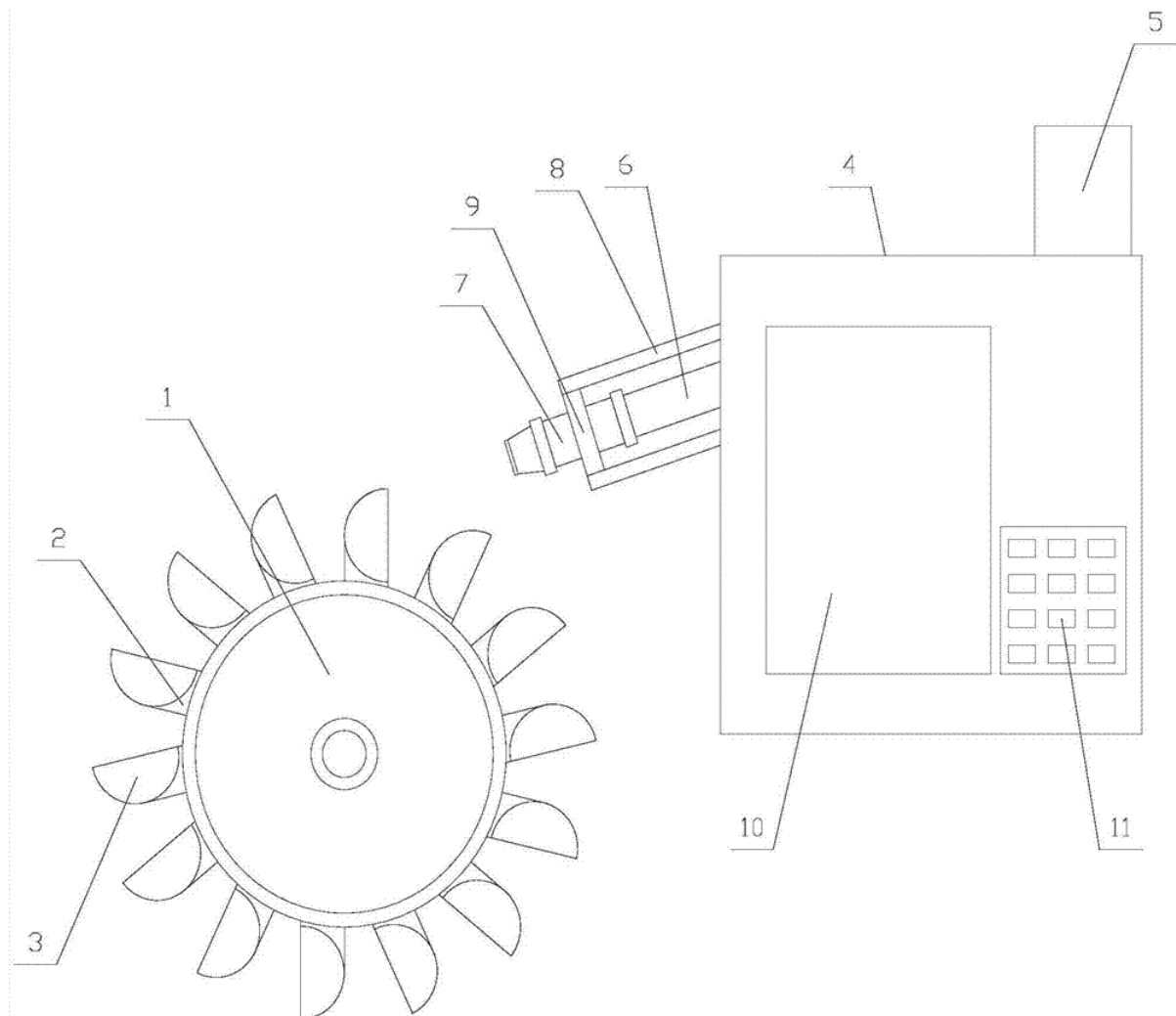
NORDQUIST OSCAR M

Family 42/200 - FAMPAT - ©Questel

Title

(CN106837654)

Horizontal shaft impulse turbine with high power generating efficiency

Images**Publication data including kind & date**

CN106837654	A	2017-06-13	CN106837654
CN109340020	A	2019-02-15	CN109340020
CN109340022	A	2019-02-15	CN109340022
CN106837654	B	2019-02-19	CN106837654B

**Abstract**

(CN106837654B)

The invention relates to a horizontal shaft impulse turbine with high power generating efficiency. The horizontal shaft impulse turbine comprises a turbine disc, a water guiding mechanism and a plurality of water buckets, wherein a first baffle and a second baffle are arranged in each water bucket; the water guiding mechanism comprises a water guiding tank; the water guiding tank comprises a casing; a plurality of water guiding units are arranged in the casing; each water guiding unit comprises a driving unit, a blocking unit, a water cylinder, a piston, a first water pipe, a second water pipe and a water outlet pipe. According to the horizontal shaft impulse turbine with the high power generating efficiency, more gravitational potential energy is converted into kinetic energy of the turbine disc when the water buckets downward rotate by the first baffles and the second baffles; meanwhile, when the water buckets upward rotate, a gravity load is reduced, further the rotating speed of the turbine disc is guaranteed, and the power generating efficiency is improved; besides, the plurality of water guiding units cooperatively import water current into a spray head, and the guiding speed of the water current is adjusted by adjusting the rotating speed of a first driving motor, therefore, the speed of the water current is changed while

vertical cross section of the jet water current is ensured, the rotating speed of the turbine disc is remarkably changed and the power generating power is adjusted.

Inventors

THE INVENTOR HAS WAIVED THE RIGHT TO BE MENTIONED

Latest standardized assignees - inventors removed

SHENZHEN ZHONGKEZHICHENG TECHNOLOGY

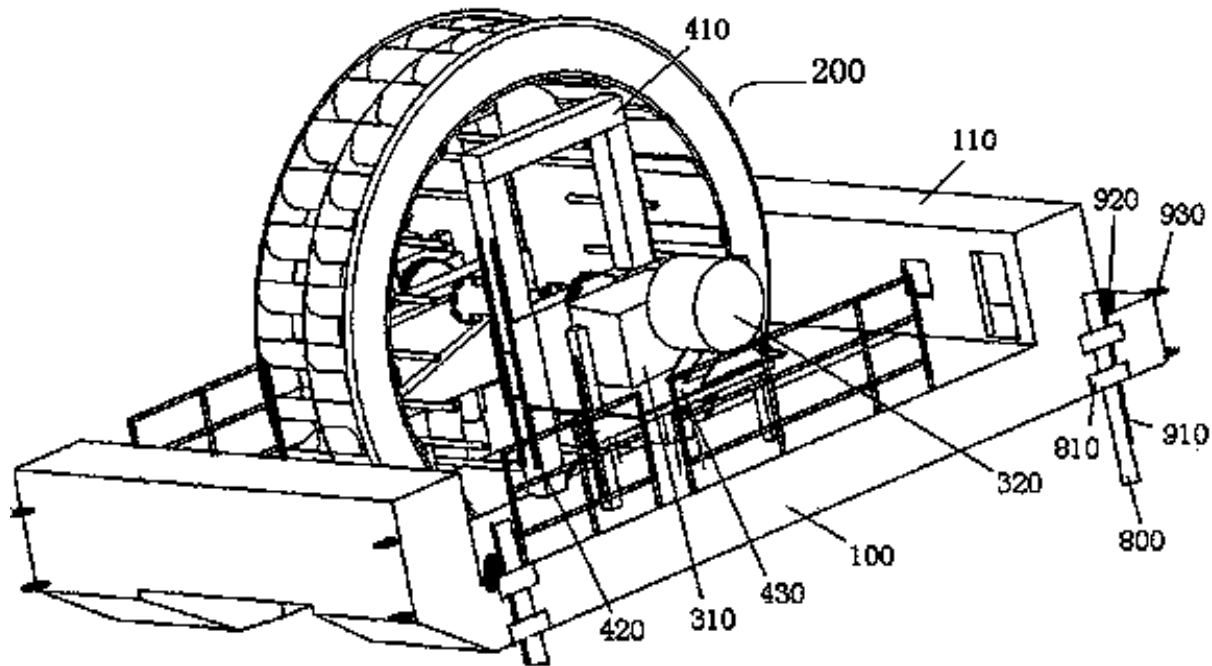
Family 43/200 - FAMPAT - ©Questel

Title

(CN203856639U)

River-flow floating type hydroelectric generator

Images



Publication data including kind & date

CN203856639

U 2014-10-01 CN203856639U



Abstract

(CN203856639U)

The utility model discloses a river-flow floating type hydroelectric generator. The river-flow floating type hydroelectric generator comprises a buoyancy tank floating on water and at least one waterwheel rotatably mounted on the buoyancy tank, wherein each waterwheel comprises a rotation shaft, a waterwheel supporting framework, a waterwheel wheel body, waterwheel fixing boards and a plurality of water buckets, and further comprises a generation system fixed on the buoyancy tank; the generation system comprises a gearbox and a generator; the rotation shaft is connected with the generator through the gearbox; the bottom of the waterwheel is soaked in the water; water streams push the waterwheel to rotate; power is transmitted by the gearbox to the generator for generation; the river-flow floating type hydroelectric generator further comprises a power distribution unit fixed on the buoyancy tank; the generator is connected with the power distribution unit through a cable. The river-flow floating type hydroelectric generator provided by the utility model has the advantages of good working stability, high generation efficiency, and flexibility and changeability in utilization; a user can select according to actual needs; the river-flow floating type hydroelectric generator is very applicable to popularization and application.

Inventors

CHEN GUOJI

Latest standardized assignees - inventors removed

LU YING

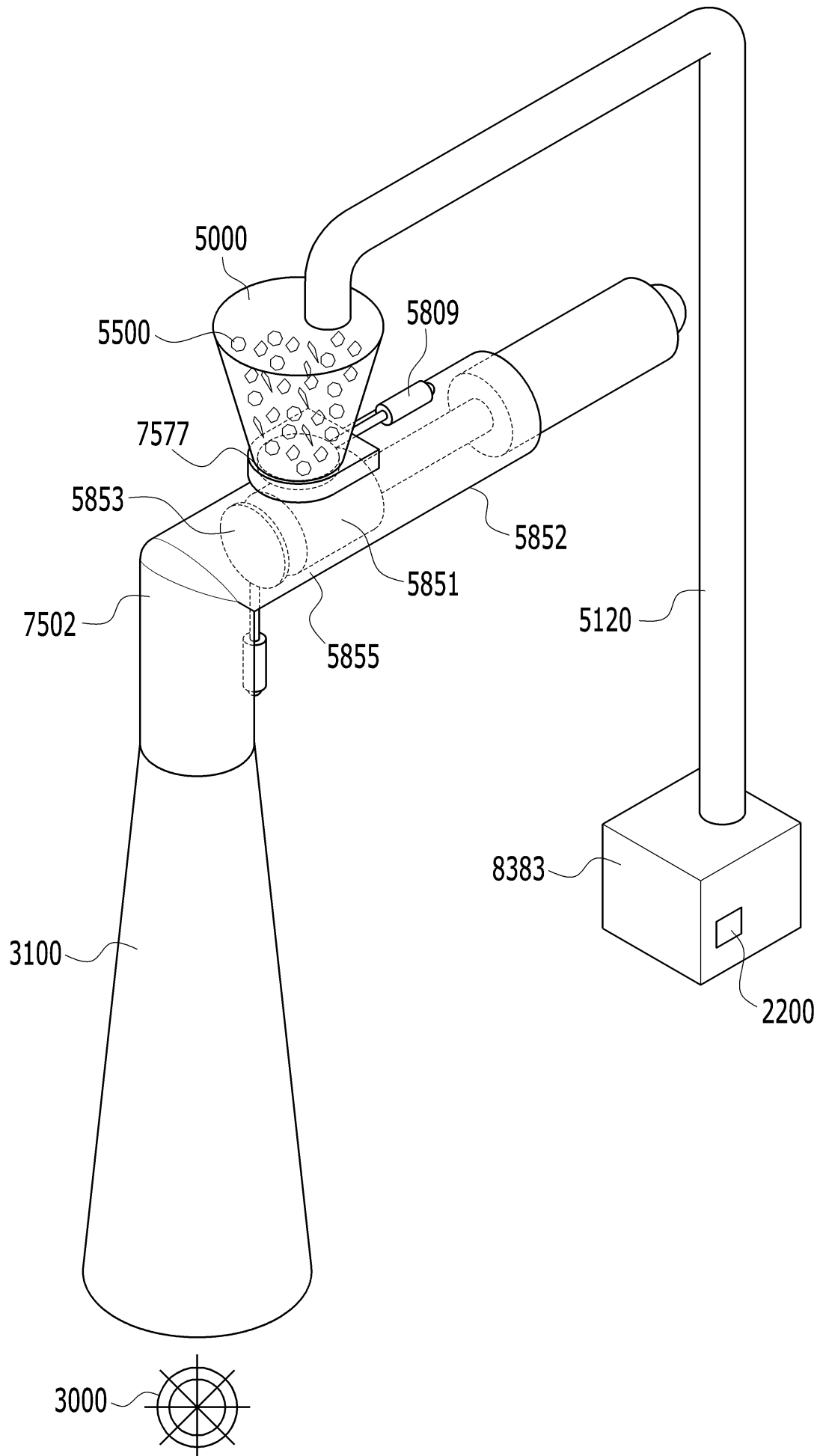
Family 44/200 - FAMPAT - ©Questel

Title

(KR20180009805)

Eco-friendly power generation method continuously generating electricity using gravity acceleration action generator combined with right angle falling power plant that increase power generation efficiency while greatly generating gravity acceleration action

Images



[KR20180009805](#)

A 2018-01-29 KR20180009805

Abstract

(KR20180009805)

The present invention relates to an eco-friendly power generation method which continuously generates electricity using a right angle falling power plant for generating an action of gravity and an action of gravity acceleration. More specifically, the eco-friendly pumped-storage power generation method is configured such that a first water storage apparatus such as a reservoir or a dam is installed by blocking the upstream of deep mountain valleys, a second water storage apparatus such as the reservoir or the dam that has a similar capacity to that of the first water storage apparatus is installed at the downstream, so that, at night, water stored in the second water storage apparatus is pumped to the first water storage apparatus by using an inexpensive thermal power or nuclear power, and then electricity is produced by hydropower generation in the daytime when electricity is in great demand.

Inventors

HAN, SANG-KWAN

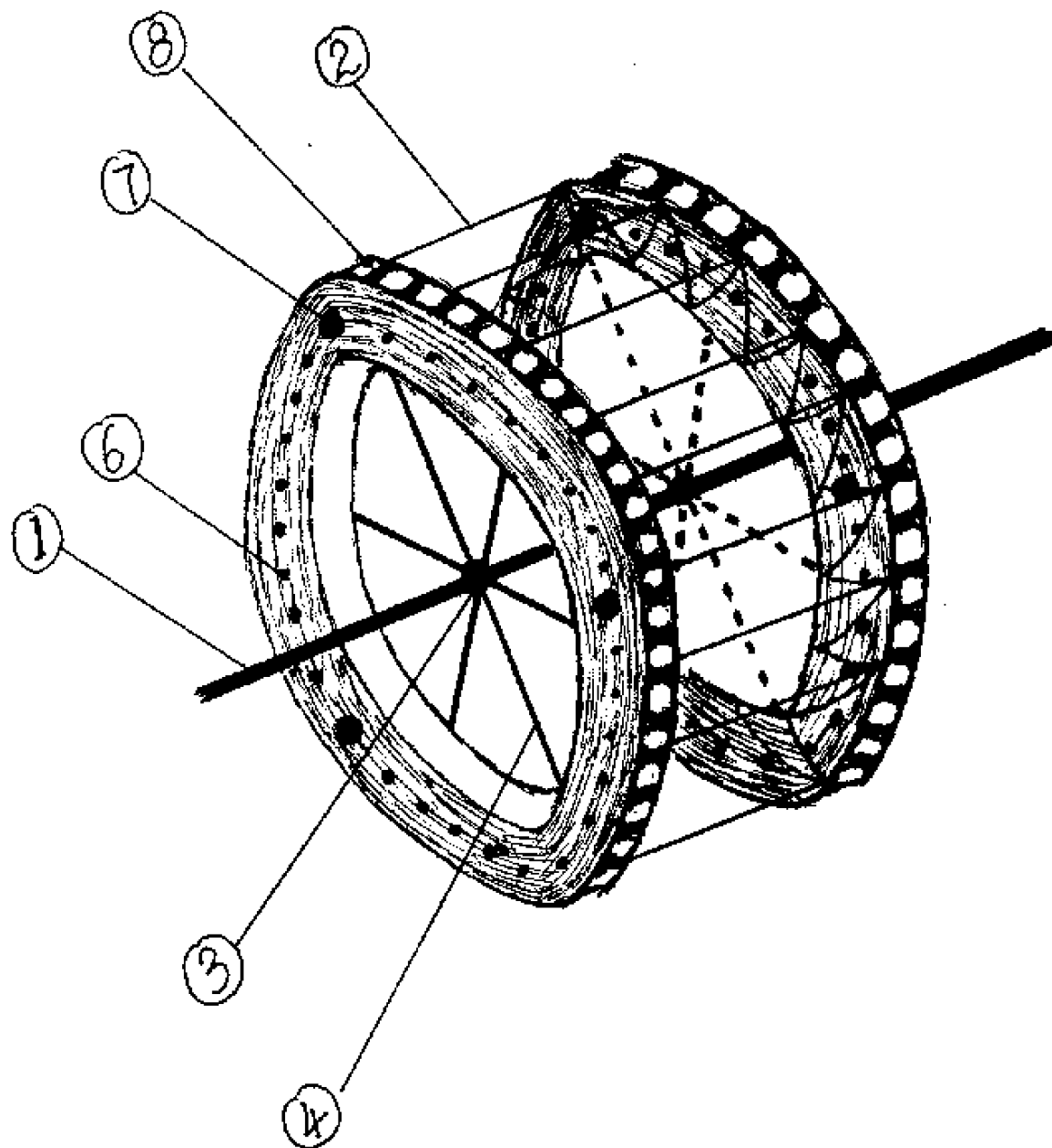
Family 45/200 - FAMPAT - ©Questel

Title

(CN1763364)

Waterwheel with gear

Images

**Publication data including kind & date**[CN1763364](#)

A

2006-04-26

CN1763364

**Abstract**

(CN1763364)

The invention discloses a toothed waterwheel, which comprises the following parts: (1) rotation shaft, (2) waterwheel fountain, (3) rolling bearing, (4) bracket, (6) screw hole, (7) fastened screw bolt hole and (8) gear. The invention provides technique support for effective utility and depth development of little flow power source.

Inventors

YUAN DEZE

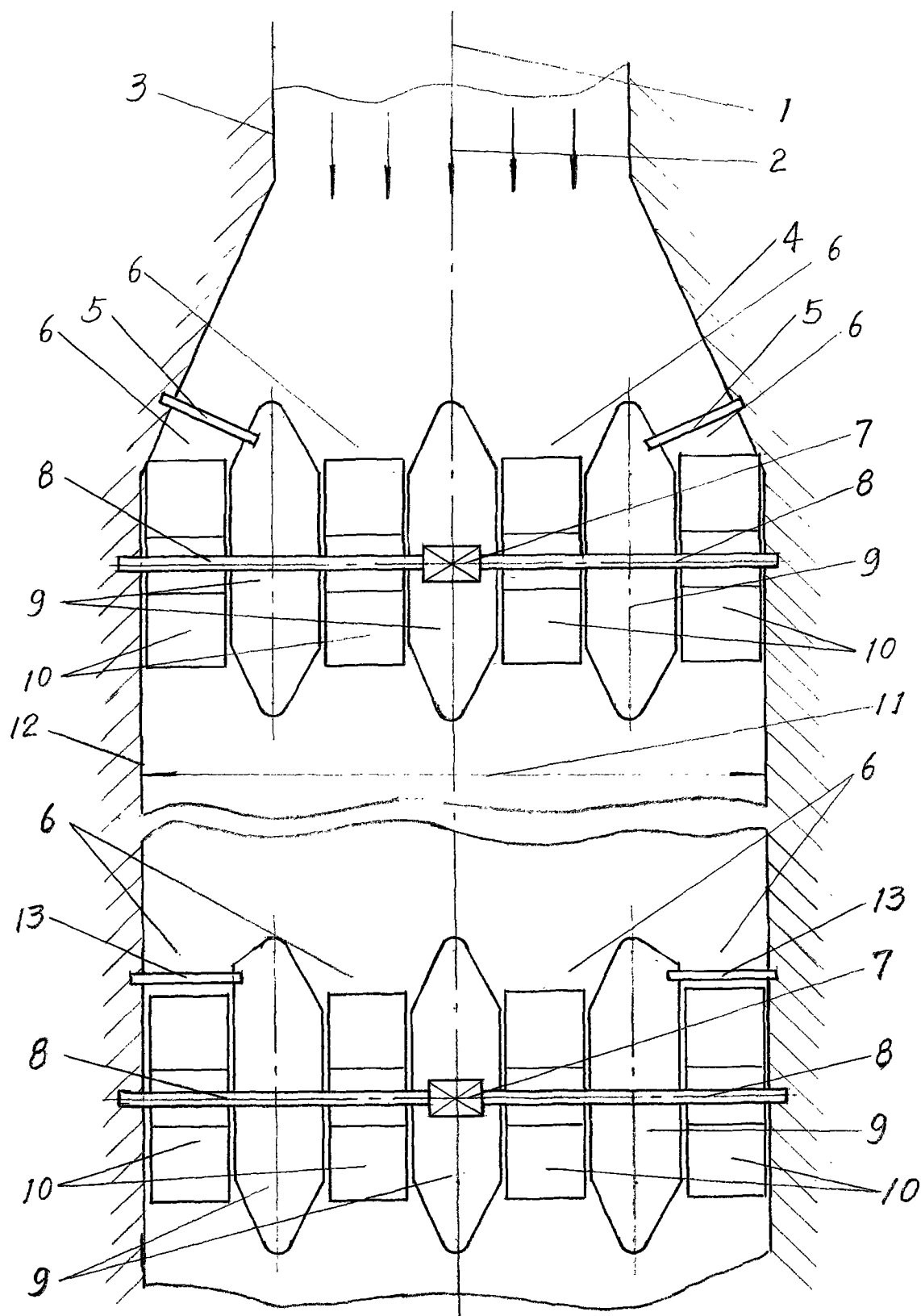
Family 46/200 - FAMPAT - ©Questel

Title

(CN101614179B)

Method for hydroelectric generation on medium and small-sized rivers

Images



Publication data including kind & date

CN101614179

A 2009-12-30

CN101614179

CN101614179

B 2011-07-27

CN101614179B



Abstract

(CN101614179B)

The invention discloses a device and a method for hydroelectric generation on medium and small-sized rivers. On the upstream of a section of available medium and small-sized river, the river width 1 of a section of river to be utilized before the treatment is widened to the river width 11 after the treatment by a transient dam 4. On the same cross section of the

section of widened river, a group of distributary dams 9 are parallelly constructed intermittently and equally, so that water current only can pass through a group of water wheel stress water channels 6 among the group of distributarydams, and the insides of the group of water wheel stress water channels are respectively provided with water wheels 10 with the same size which are assembled on the same water wheel spindle 8. The energy of the water current in the water wheel stress water channels is utilized to push the water wheels to rotate, and the rotating water wheels are utilized to drive a generator 7 to rotate through the water wheel spindle so as to achieve the aim of generating electricity. The above is a group of single bodies, and such single bodies are constructed every 10 to 50 meters on the section of the available medium and small-sized river from the upstream to the downstream, thereby forming a power station.

Inventors

HOU WEIDONG

ZHAO XUGUANG

Family 47/200 - FAMPAT - ©Questel

Title

(EP3485095)

Hydraulic water wheel for a directional water flow

Images

CHAUVIN PHILLIP

CARROLL MICHAEL THOMAS

PEDRAZZINI GIOVANNI

Latest standardized assignees - inventors removed

HELIOSALTAS

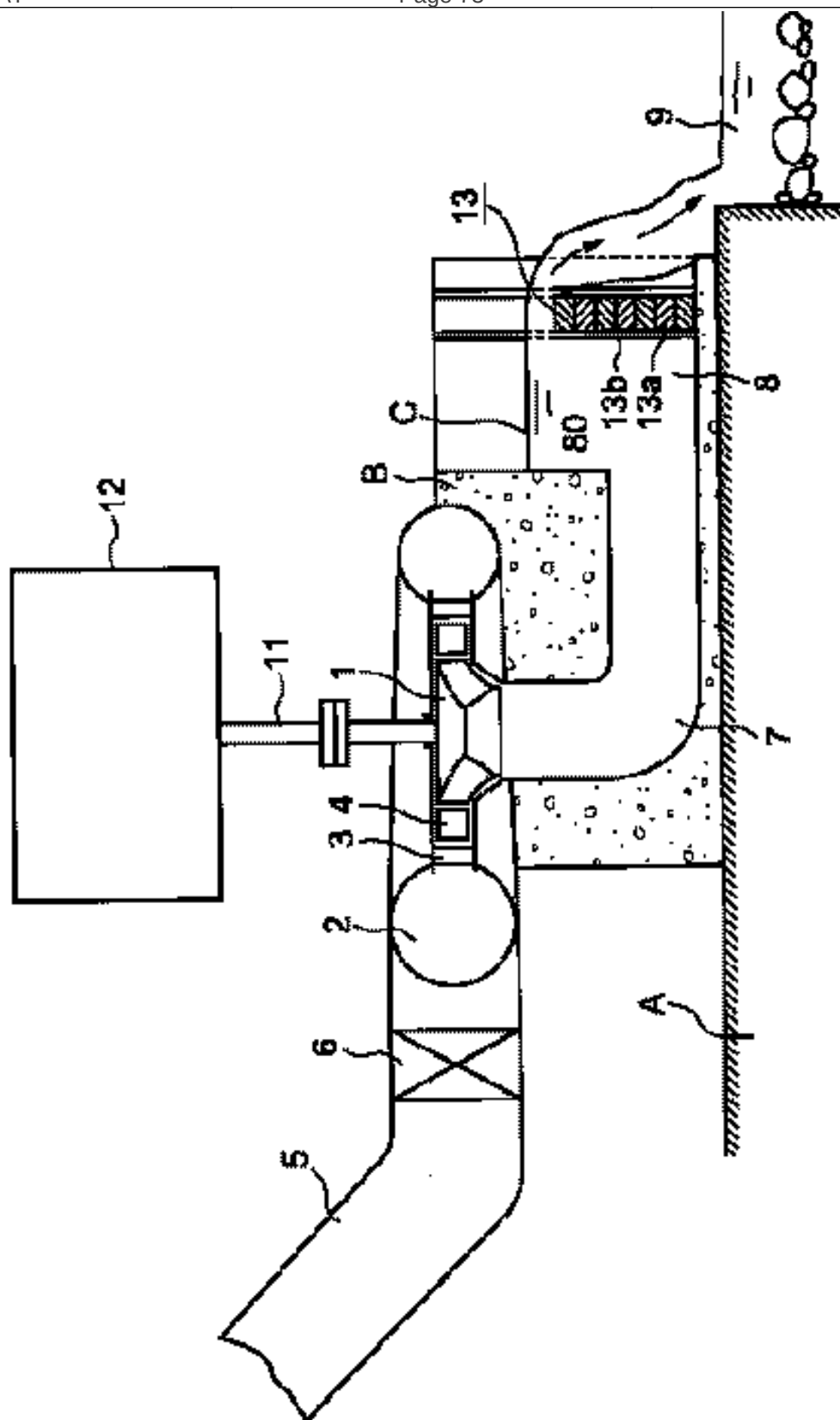
Family 48/200 - FAMPAT - ©Questel

Title

(JP2003021043)

Reaction type water turbine and operating and controlling method therefor

Images



Publication data including kind & date

[JP2003021043](#)

A 2003-01-24 JP2003021043



Abstract

(JP2003021043)

PROBLEM TO BE SOLVED: To provide a reaction type water turbine capable of stably operating a water turbine by regulating the water level of an outlet of a draft tube, regardless of the water level of a lower pond. **SOLUTION:** A rotatable runner 1 for converting position energy provided by water into rotating energy is provided within a casing 2. A middle pond 80 is formed in an outlet flow passage 8 of the draft tube 7 of the reaction type water turbine for discharging water from the runner 1 to the lower pond 9 through the draft tube 7. In the middle pond 80, the water level can be set and regulated to change the height of a dam 13. Water in the middle pond 80 is discharged to the lower pond 9 via the dam 13. Therefore, a

stable water turbine operation can be performed, even if the water level and flow rate of the lower pond 9 are changed, and development of air bubble eddy is suppressed to reduce vibration and noise.

Inventors

SHIMIZU KOICHIRO

MURAYAMA ATSUSHI

Latest standardized assignees - inventors removed

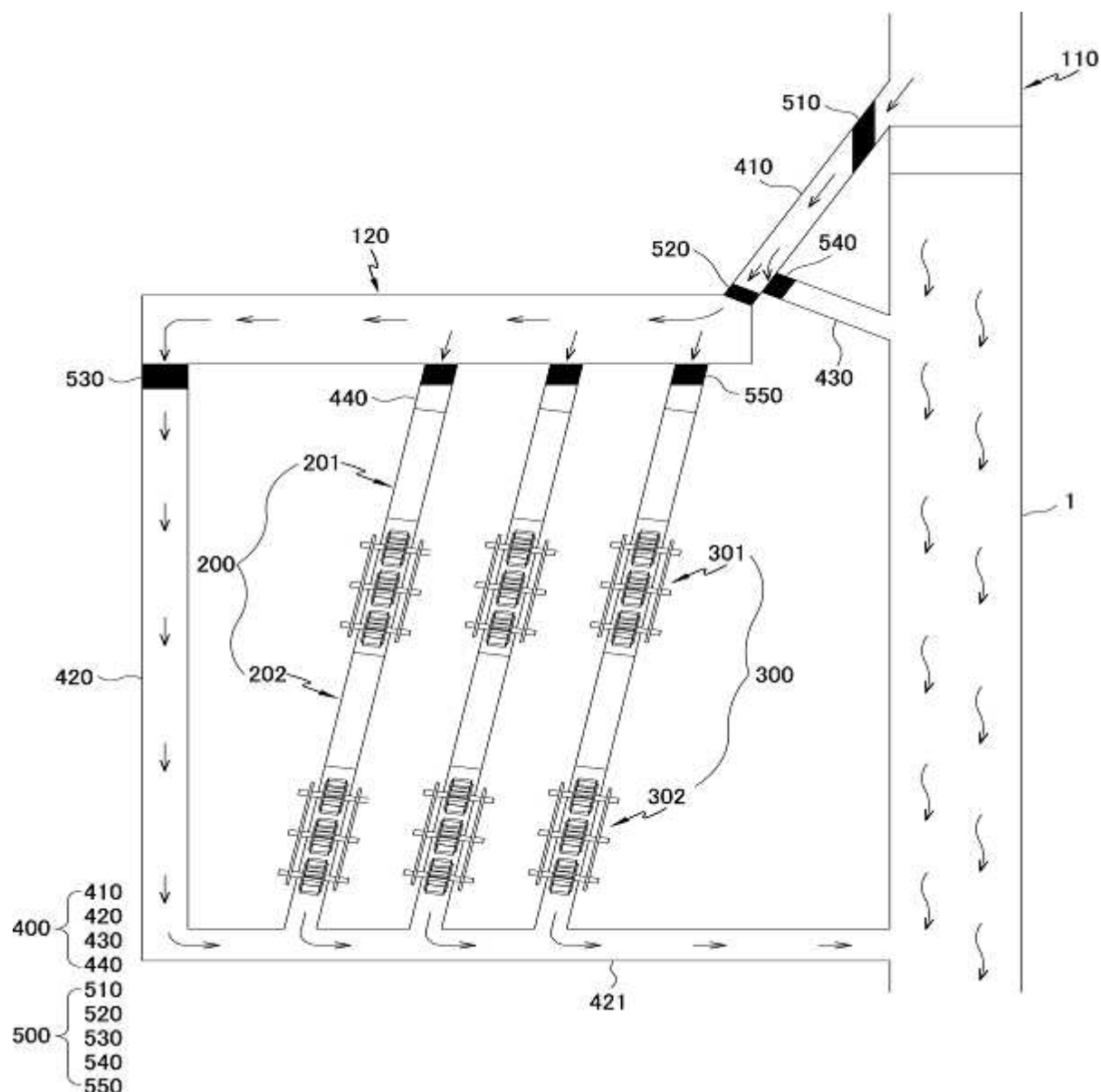
TOSHIBA

Family 49/200 - FAMPAT - ©Questel

Title

(KR101730530)

Water power generation system

Images**Publication data including kind & date**[KR20170013801](#) A 2017-02-07 KR20170013801[KR101730530](#) B1 2017-05-11 KR101730530**Abstract**

(KR101730530)

Disclosed is a hydroelectric power generation system using hydraulic pipes and hydraulic turbines to enhance the usage efficiency of flowing water. The hydroelectric power generation system includes: a first water tank which receives a

predetermined amount of flowing water to store the water at first; a second water tank which is arranged on the lower part of the first water tank in a direction parallel to the ground surface, receives a predetermined amount of flowing water from the first water tank to store the water secondarily, and maintains the predetermined amount of flowing water continuously; a water path including a first water path connecting the output port of the first water tank and the input port of the second water tank, a second water path connecting the output port of the second water tank and the rivers, a third water path connecting the first water path to the rivers, and a fourth water path formed between the second water tank and the second water path; a hydraulic turbines installed on the water path for hydroelectric power generation; and a water gate which is installed on the water path to adjust the inflow and outflow of the flowing water amount.

Inventors

KANG, SEOK-CHEOL

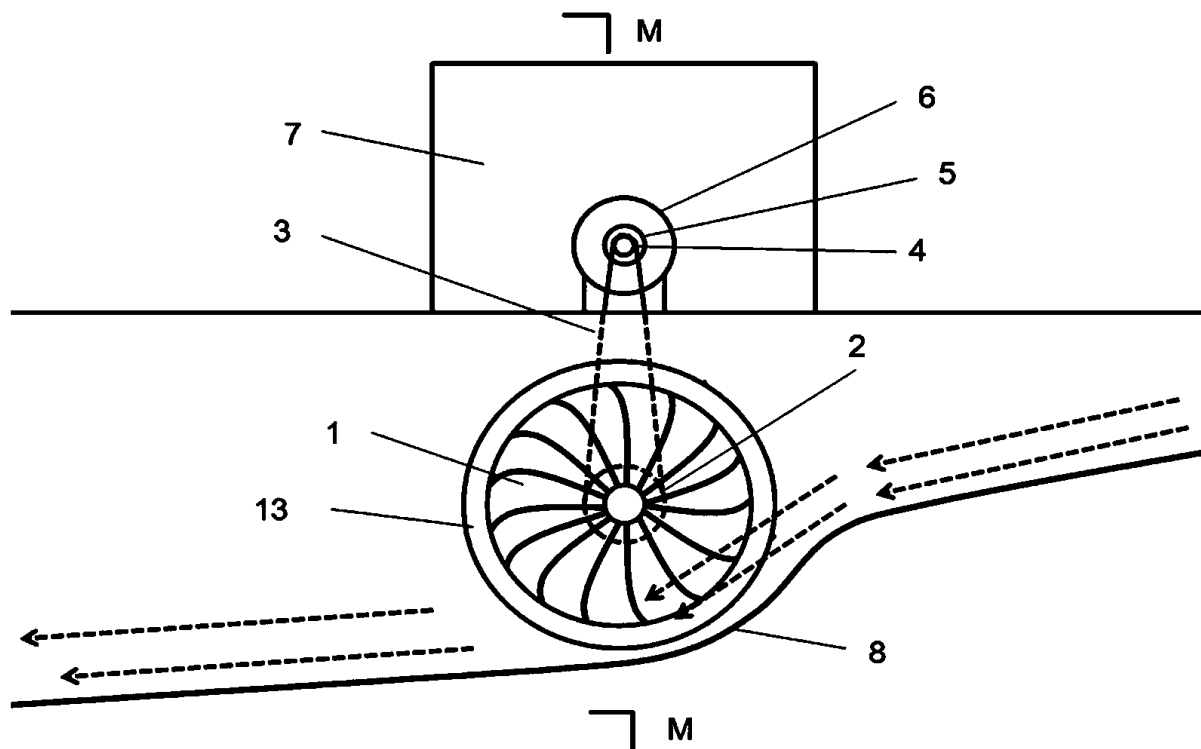
Family 50/200 - FAMPAT - ©Questel

Title

(CN104265549)

Water wheel type generator set and power station

Images



Publication data including kind & date

[CN104265549](#)

A 2015-01-07 CN104265549



Abstract

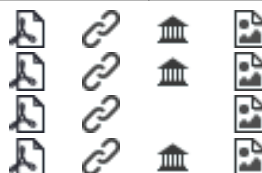
(CN104265549)

The invention discloses a water wheel type generator set and a power station, the generator set comprises a water wheel (1), a drive wheel (2) sleeved on the centre rotary shaft (1a) of water wheel, a generator (6), a driven wheel (4) sleeved on the centre rotary shaft (6a) of generator, a transmission belt (3) sleeved out the drive wheel (2) and driven wheel (4). The power station comprises a water wheel working channel (8) formed on beach or at one side of the riverway, a workshop (7) formed at the outer side of the water wheel working channel and higher than the highest water level, the generator (6) of the generator set is installed in the workshop, the water wheel (1) is installed at the downstream of the water wheel working channel. The generator set can take full advantage of water energy for generating the power, the generating cost is low, the generator set is safe, reliable, environment friendly and ecological.

Inventors

LUO FUQIANG

BR102017000284	A2	2017-08-22	BR102017000284
EA201692561	A3	2017-09-29	EA201692561
MX2017000420	A	2017-10-31	MX2017000420
AU2016277758	B2	2018-01-25	AU2016277758

**Abstract**

(EP3193009)

A synergic method for hydrodynamic energy generation includes providing a system and method utilization for producing electrical power or mechanical rotational pumping energy for pumping water to high level reservoir or to feeding a decorative water fall, providing a multi compartment housing, pumping water via the housing, providing a first vertically aligned compartment within or beside the housing, mechanically coupling a first water wheel, situated at the bottom of first compartment, to pump shaft, generating by the first wheel mechanical rotational power, providing a second vertically aligned compartment mechanically coupling a second water wheel to a generator, generating electrical or mechanical rotational power, by the generator, providing a third vertically aligned compartment providing a fourth compartment, a pump or external jet for removing water from the fourth compartment, utilizing energy and conductively coupling the hydrodynamic energy generation system with the external power source via a coupling.

Inventors

HANNA IBRAHIM

Latest standardized assignees - inventors removed

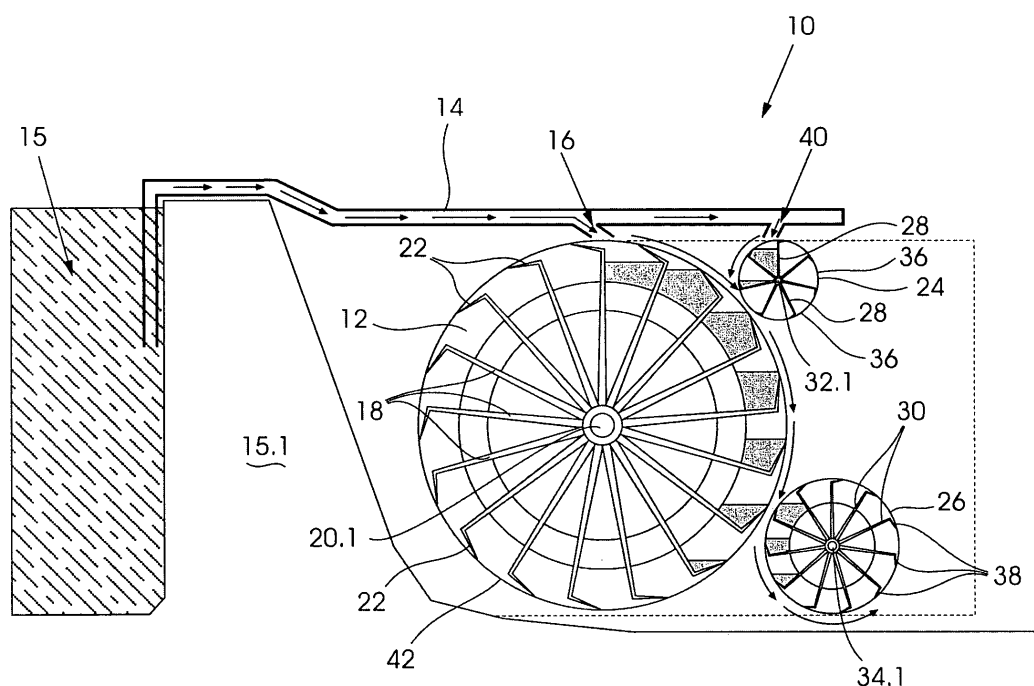
IBRAHIM HANNAH

Family 52/200 - FAMPAT - ©Questel

Title

(EP2340368)

An energy generating system using a plurality of waterwheels

Images**Publication data including kind & date**

WO2009/031016	A2	2009-03-12	WO200931016
CA2736164	A1	2009-03-12	CA2736164
AU2008294478	A1	2009-03-12	AU2008294478
WO2009/031016	A3	2010-02-18	WO200931016



AP201105652	A0	2011-04-30	AP201105652				
AP201105652	D0	2011-04-30	AP201105652				
EP2340368	A2	2011-07-06	EP2340368				
US20110173976	A1	2011-07-21	US20110173976				
CN102144090	A	2011-08-03	CN102144090				
EA201100458	A1	2011-10-31	EA201100458				
ZA201102478	B	2012-01-25	ZA201102478				
IN2462/DELNP/2011	A	2012-11-09	IN2011DN02462				
EP2340368	B1	2013-06-05	EP2340368				
BRPI0823068	A1	2016-06-14	BR200823068				
BRPI0823068	A2	2016-07-12	BR200823068				

Abstract

(EP2340368)

An energy generating system is provided, comprising a primary waterwheel for receiving water from a head penstock or upper pumping setup, the primary waterwheel comprising a plurality of radial arms rotatable about a primary axis, the radial arms terminating in water scoops for accommodating the water from the head penstock or upper pumping setup, the primary waterwheel defining head height. The system further comprises at least one additional waterwheel located within the head height of the primary waterwheel, the additional waterwheel also comprising a plurality of radial arms rotatable about an axis, the radial arms terminating in water scoops for accommodating either excess water from the head penstock or upper pumping setup or water that has spilled out of the water scoops of the primary waterwheel. In an example embodiment, the primary waterwheel and the at least one additional waterwheel are vertically orientated. In an example embodiment, the at least one additional waterwheel is smaller than the primary waterwheel.

Inventors

MEADON SEAN BRIAN

MEADON ANNE-MARIE

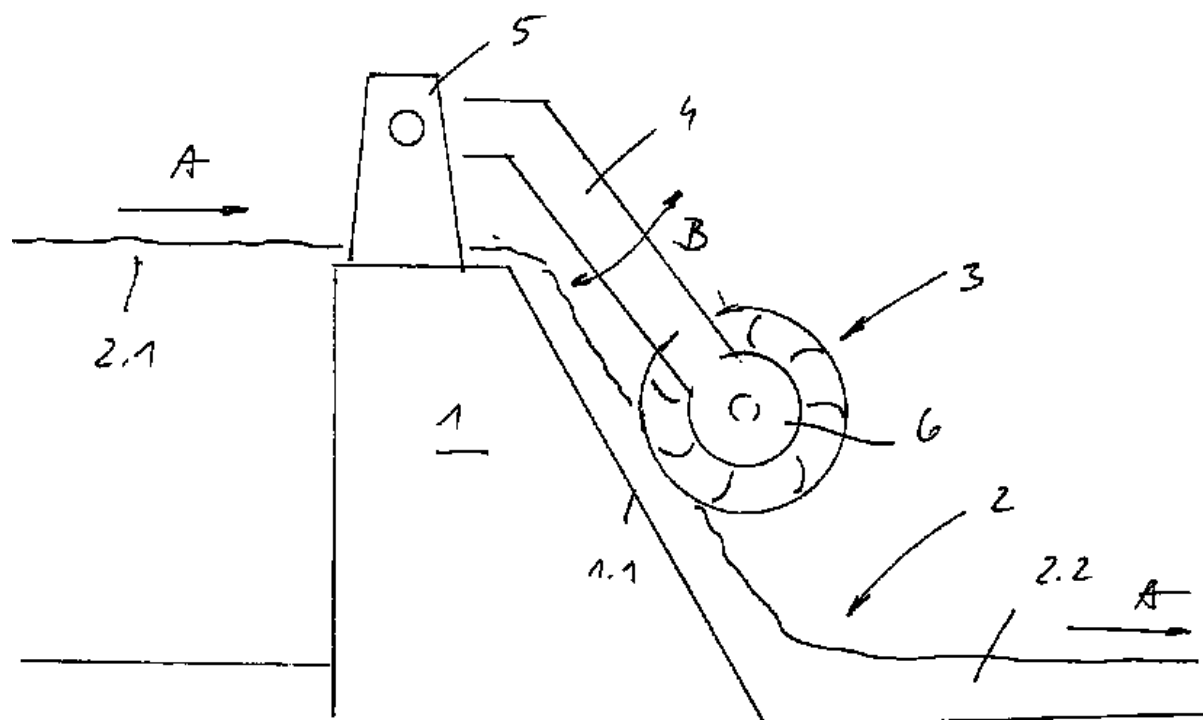
Family 53/200 - FAMPAT - ©Questel

Title

(DE10324791)

Hydroelectric power generation involves arranging impeller at slope of barrier, with slope located between upstream side and downstream side of water stream

Images

**Publication data including kind & date**[DE10324791](#)

A1 2004-10-21

DE10324791

**Abstract**

(DE10324791)

The method involves arranging an impeller (3) at the slope (1.1) of a barrier (1), with slope located between upstream side (2.1) and downstream side (2.2) of water stream (2). The impeller is rotatable about an axis horizontal, near horizontal, or transverse to the water stream.

Inventors

THALER RICHARD

Family 54/200 - FAMPAT - ©Questel

Title

(CN203257594U)

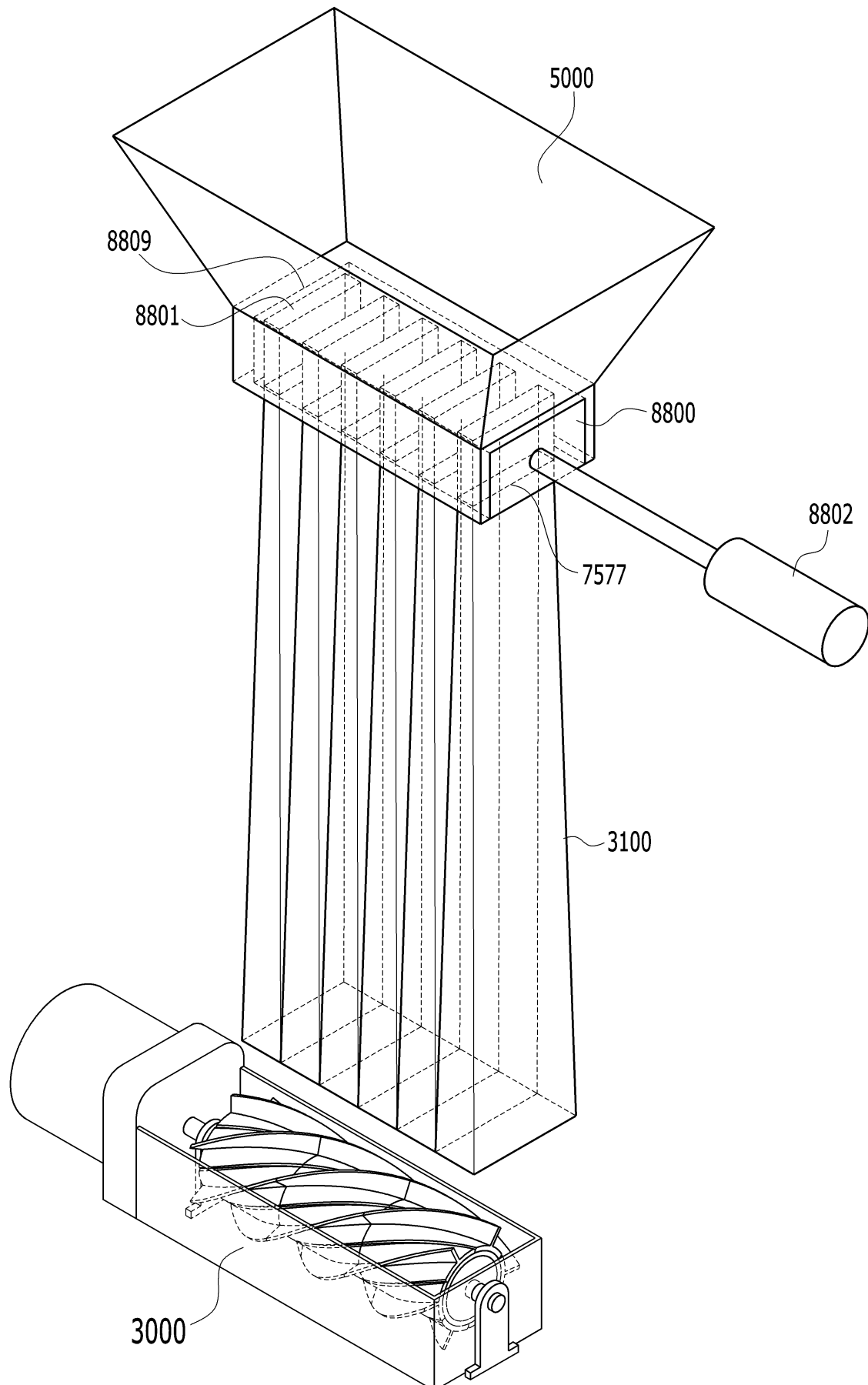
High-rise tap water fluid power generation system

Images

(KR20180003492)

Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration

Images



Publication data including kind & date

KR20180003492

A

2018-01-09

KR20180003492

**Abstract**

(KR20180003492)

The present invention relates to an economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate actions of gravity and gravitational acceleration, capable of restoring natural ecosystem. According to the present invention, the method comprises: a first reservoir (7000); a second reservoir (6000) formed on a top of a concrete basis (6150) formed on a bottom of a downside river with an altitude difference of about 5 to 100 m from the first reservoir (7000); a tilt drain pipe (5300) installed in a bottom of the first reservoir (7000); a drain control valve (5900) installed in a top of the tilt drain pipe (5300); a riser pipe (5320) installed in a bottom of the tilt drain pipe (5300); a water retransfer pipe (5120) installed in a top of an end of the riser pipe (5320); an air discharge control valve (1500) installed in a corner part of the water retransfer pipe (5120); a second drain pipe (5250); a second generation waterwheel (5130) installed in a bottom of the second drain pipe (5250); the gravitational acceleration generation vessel (5000) installed in a bottom of an end of the riser pipe (5320); a gravitational acceleration generation drain pipe (5200) installed in a bottom of the gravitational acceleration generation vessel (5000); a first generation waterwheel (5230) installed in a bottom of the gravitational acceleration generation drain pipe (5200); a drain control valve (5800) installed on one side of a bottom of a water intake pipe (6300); a water intake pump (6200) installed on one side of a bottom of the water intake pipe (6300); and an opening/closing valve (5310) to open/close the water intake pipe (6300).

Inventors

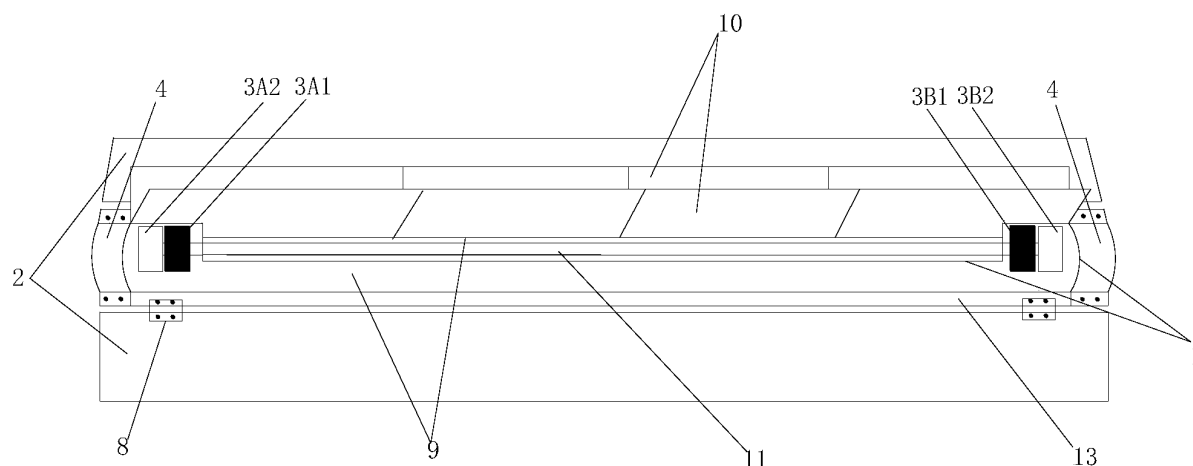
HAN, SANG-KWAN

Family 56/200 - FAMPAT - ©Questel

Title

(CN105370483)

Wide-width low-water-head water flow power generation flexible system

Images**Publication data including kind & date**

CN105370483

A

2016-03-02

CN105370483

**Abstract**

(CN105370483)

The invention belongs to the field of water flow power generation, and particularly relates to a wide-width low-water-head water flow power generation flexible system. The wide-width low-water-head water flow power generation flexible system is characterized in that wide-width low-water-heads of water landscape lighting projects such as an overflowing dam and a rubber dam are used for generating power on site, and power is supplied to a lighting light source directly. Main bodies of the water flow power generation flexible system comprise a rigid water flow power generation unit and a flexible connecting unit which are connected through a hinge, the rigid water flow power generation unit and the flexible connecting unit can be

jointed into a rolling mat type rigid and flexible combined massive structure, the system can be conveniently fixed to various pile faces, the wide-width low-water-heads are efficiently converted into rotation kinetic energy, and the power is supplied to the landscape projects. Wide-width low-water-head water flow energy wasted by water landscapes is recovered for power generation through the system, the energy resource is saved, flushing is reduced, noise is reduced, and original styles and features cannot be damaged. By means of the system, the limitations that long-distance cables must be embedded for traditional power supply through an alternating current network, the manufacturing cost is extremely high, and electric leakage potential safety hazards exist are broken through, and the system has the beneficial effects that compared with solar and wind energy power generation, the investment is small, and the environment is protected.

Inventors

LIU DONGSHENG

CHEN XIAOBING

CHEN LI

ZHAO JIAN

CHEN BO

CHOU JIANCHUN

YANG GUANG

Latest standardized assignees - inventors removed

HOHAI UNIVERSITY

Family 57/200 - FAMPAT - ©Questel

Title

(CN201502478U)

Waterwheel type hydraulic power generating device

Images

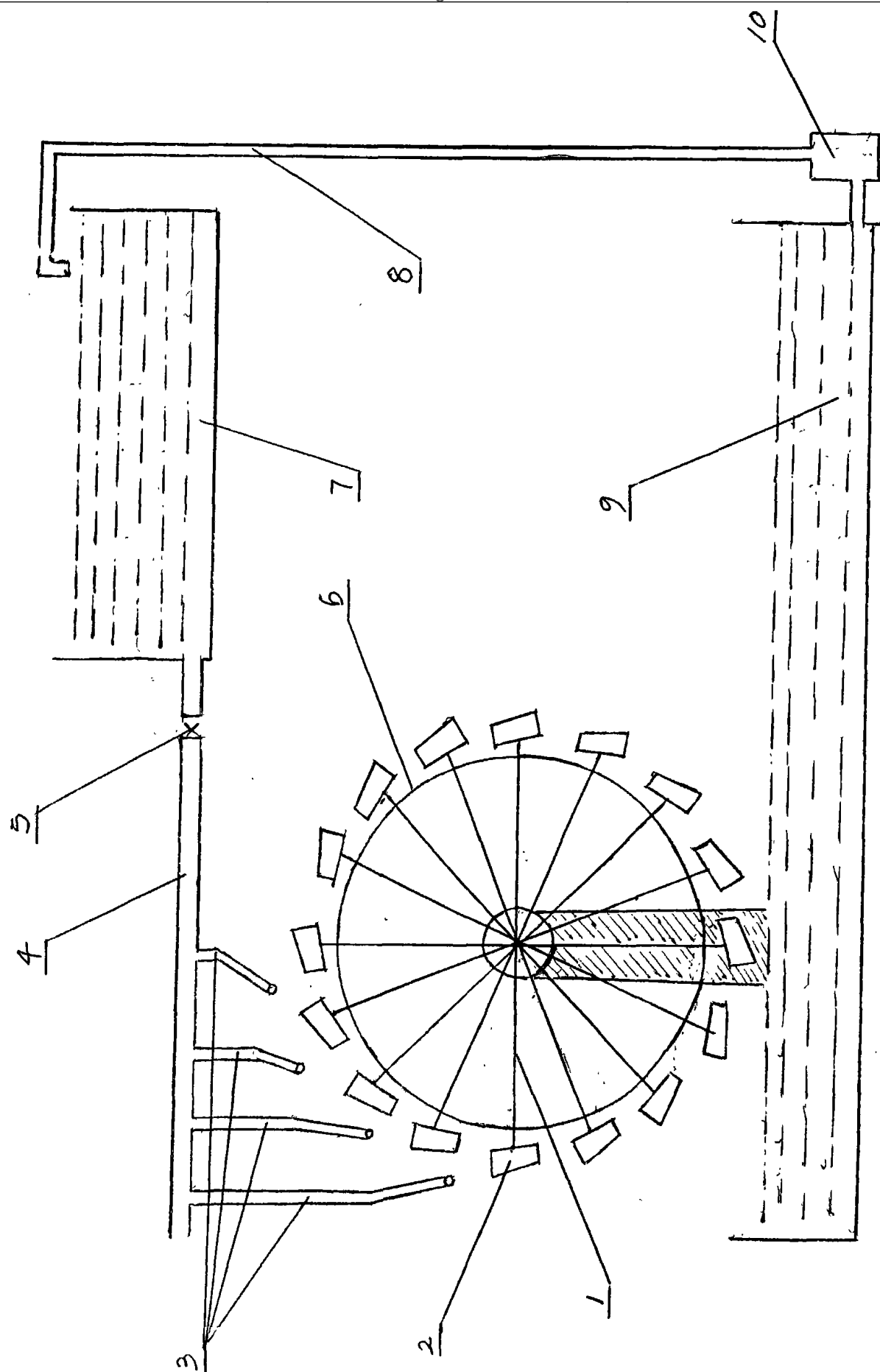


图 1

Abstract

(CN201502478U)

The utility model discloses a waterwheel type hydraulic power generating device which consists of a water wheel, a water turbine, a power generator and a water source. The water wheel adopts the traditional water wheel; a water bucket on the periphery of the water wheel is oppositely mounted; a reservoir is arranged in a position higher than the water wheel; water in the reservoir is led out through a water pipe; the water pipe is provided with a plurality of water outlet pipes; each water outlet pipe respectively corresponds to a position where the water bucket passes through; a water recycling tank is arranged in a position lower than the water wheel; and a water circulating pump is arranged between the water recycling tank and the reservoir. The utility model has the advantages of reasonable structure, no limitation of mounting places, adjustable installed capacity and convenient maintenance and repair.

Inventors

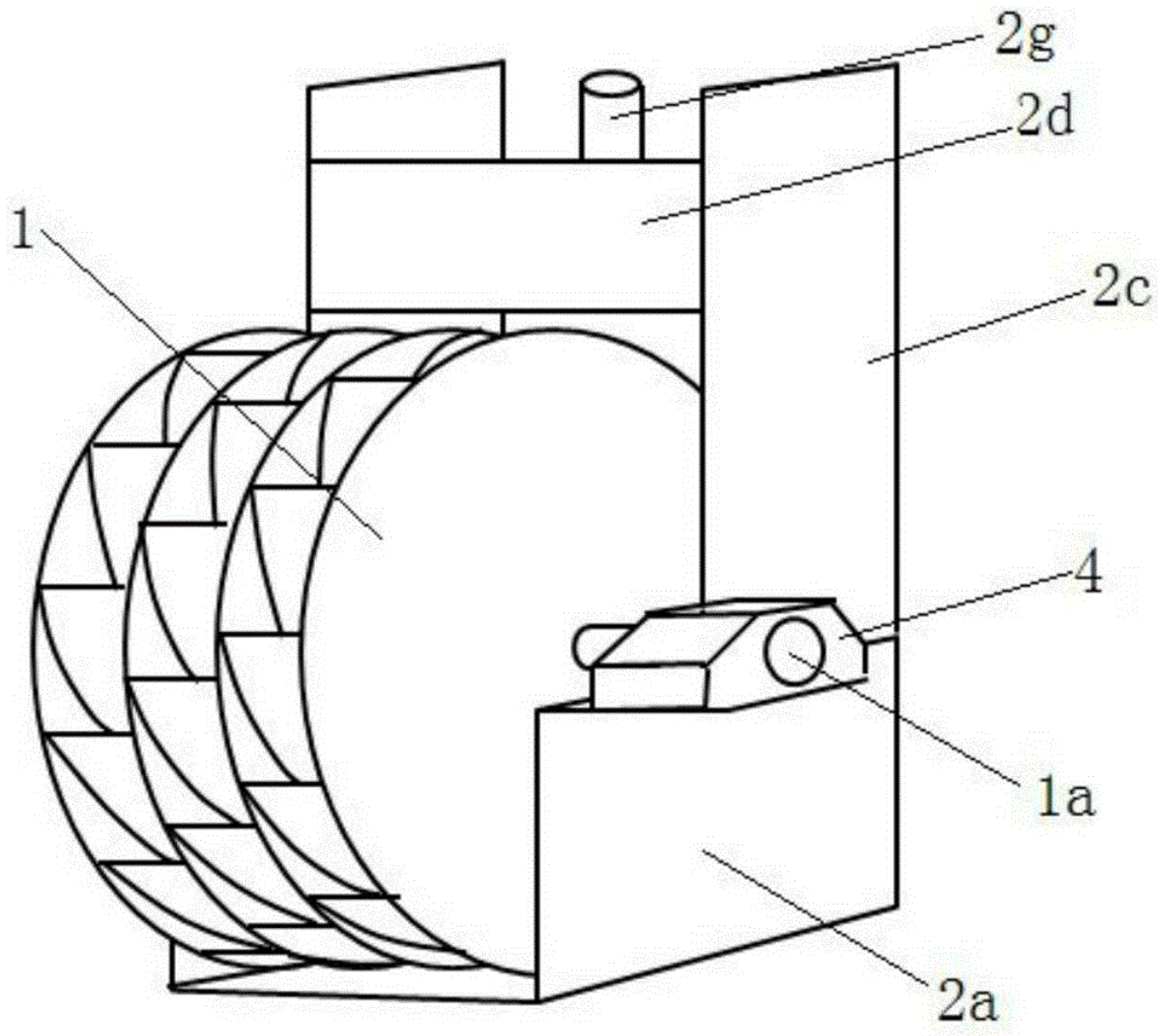
LI GUANGYI

Family 58/200 - FAMPAT - ©Questel

Title

(CN205225560U)

Waterwheel formula hydraulic generator's back upper place drainage formula waterwheel

Images**Publication data including kind & date**

CN205225560

U 2016-05-11 CN205225560U

**Abstract**

(CN205225560U)

The utility model provides a waterwheel formula hydraulic generator's back upper place drainage formula waterwheel,

including waterwheel (1) and diversion baffle, flow box is led including diversion guiding gutter and upper portion diversion to the diversion baffle, the diversion guiding gutter is including two cell body side shields (2a), bottom plate (2b), cause the intake arc water conservancy diversion plate washer (2f) of side lower part bucket of waterwheel with rivers, the diversion is led flow box and is flowed board (2d) including two upper portion side shields (2c) and the fender of connecting between two upper portion side shield front ends, is provided with the interior angle and prevents the contrary guide plate (2e) that pilots a ship into harbour of pressing towards 7 styles of calligraphy of waterwheel in flow box is led in the diversion, the waterwheel is intake, and the lower half of side sets up in diversion in the guiding gutter, first sets up in flow box is led in the diversion, and rivers are respectively along preventing that contrary diaphragm of pressing the diversion guide plate and diversion guiding gutter rear portion arc water conservancy diversion plate washer get into waterwheel intake side upper portion and lower part bucket, make a concerted effort to drive the waterwheel rotation. The utility model discloses hydroenergy can be high -efficiently utilized, waterwheel formula hydraulic generator generating capacity is improved by a wide margin.

Inventors

LUO FUQIANG

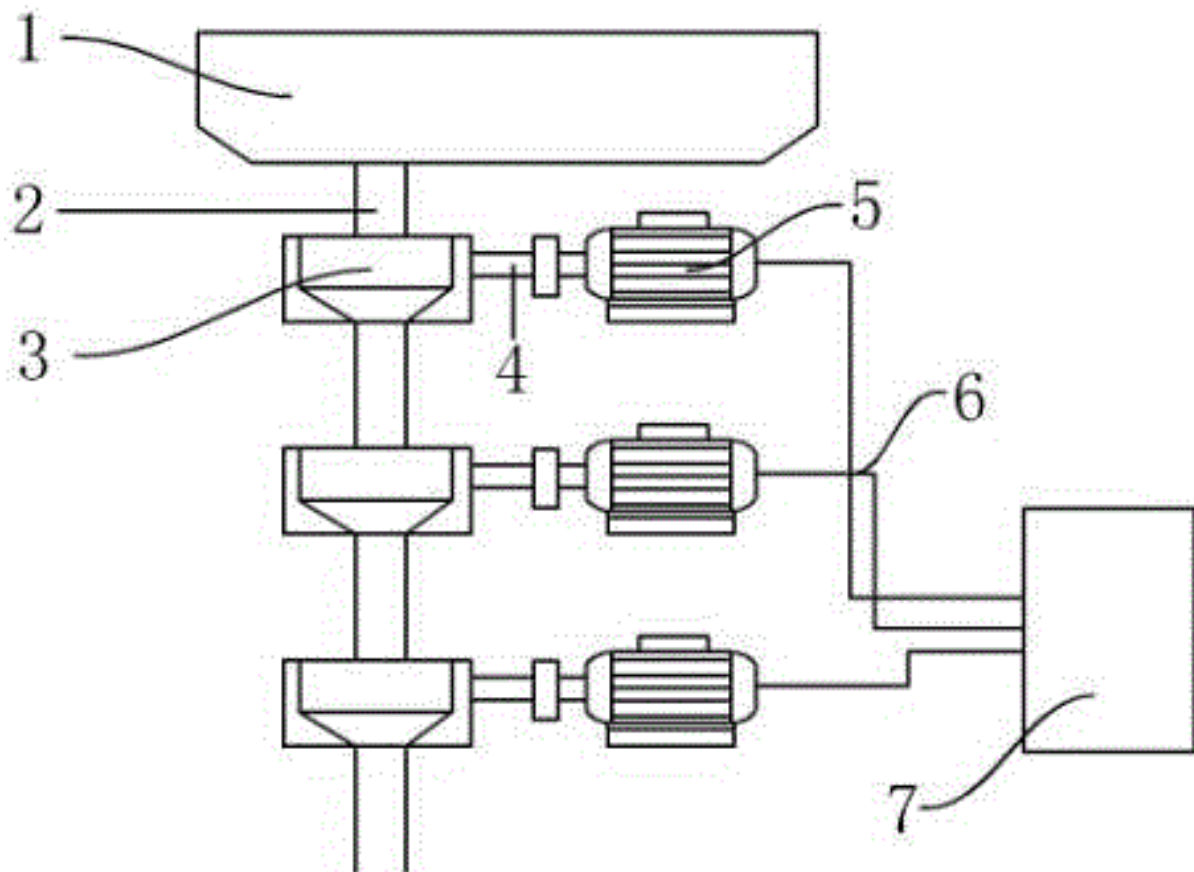
Family 59/200 - FAMPAT - ©Questel

Title

(CN205478082U)

Multistage water under high pressure power generation facility

Images



Publication data including kind & date

[CN205478082](#)

U

2016-08-17

CN205478082U



Abstract

(CN205478082U)

The utility model discloses a multistage water under high pressure power generation facility, including installing the high - order cistern on roof or mountain top, peg graft and have the connection standpipe in the bottom of high -order cistern, the vertical grafting of the other end of connecting the standpipe is at the top of the hydraulic turbine, and the hydraulic turbine be three the same groups at least, and every group hydraulic turbine is all through the connection of connection standpipe,

the right side of the hydraulic turbine is provided with machinery and rotates the axostylus axostyle, the other end that machinery rotated the axostylus axostyle is connected with the generator through transmission, the power?output end of generator is connected through circuit connection line and electricity generation distribution board electricity, the hydraulic turbine includes the shell, the top of shell and bottom pegged graft respectively inlet tube and outlet pipe, the inner chamber of shell is fixed with the rotation main shaft through the bearing, and this multistage water under high pressure power generation facility, the direct -flushing pressure cuff who utilizes the water under high pressure move hydraulic turbine operation, use with the cooperation of low -speed generator, furthest's utilization the weight of water assault and realize electric transformation of energy.

Inventors

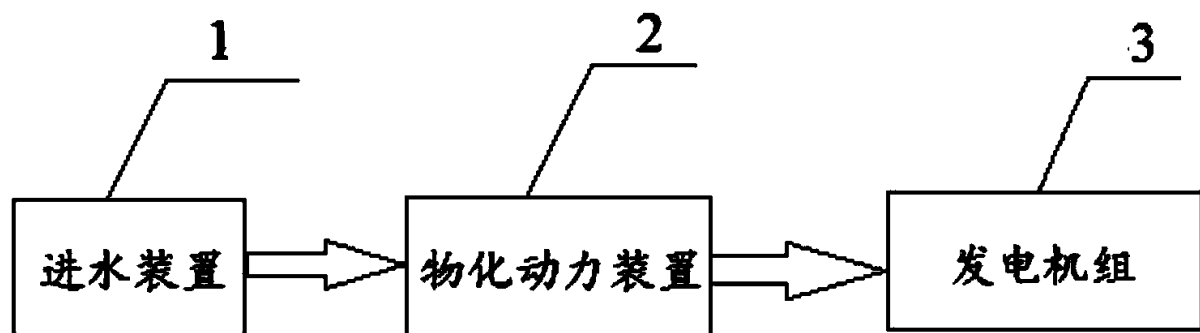
WEI FUFENG

Family 60/200 - FAMPAT - ©Questel

Title

(CN204061033U)

Multi-power water power driving generator set device

Images**Publication data including kind & date**[CN204061033](#)

U

2014-12-31

CN204061033U

**Abstract**

(CN204061033U)

The utility model discloses a multi-power water power driving generator set device. The device comprises a generator set, a water feeding device and a physicochemical power device. The water feeding device is arranged above the physiochemical power device connected with the generator set through a bearing. The water feeding device is provided with water channels, the physiochemical power device is a water wheel, and multiple sets of concentric circular rings are installed on the water wheel. A circle of bucket is embedded in each set of circular rings, wherein the bucket which is located on one side, slightly deviating from the central axis, of the top of each circular ring corresponds to one water channel. The weight of water inside the buckets generates torsion through resolution, the torsion pushes the water wheel to rotate around the bearing, with the help of the viscosity of the water and the rotation inertia of the water wheel, a physiochemical power system drives the generator set to work through a common shaft or a gear, and therefore electric energy is output. The buckets are installed on the different sets of circular rings, so that kinds of electric power are output, and then the electric energy of kinds of power is output through changing the positions of the buckets on the same physiochemical power device.

Inventors

WANG SHENG

HUANG MEIYUAN

Latest standardized assignees - inventors removed

XIAMEN TIANSHENG ENERGY TECHNOLOGY

Family 61/200 - FAMPAT - ©Questel

Title

SOLUTION: This hydraulic pressure reducing device includes: a first hydraulic turbine reducing hydraulic pressure from the upstream side; a pressure reducing device reducing hydraulic pressure at the downstream side of the first hydraulic turbine; a bypass pipe connected to the pressure reducing device; and a change over device connecting the first hydraulic turbine and the pressure reducing device when rotation speed of the first hydraulic turbine is less than prescribed rotation speed and connecting the first hydraulic turbine and the bypass pipe when the rotation speed of the first hydraulic turbine is not less than the prescribed rotation speed. Water flowing out from the pressure reducing device or the bypass pipe is supplied to a cooled mechanism as cooling water cooling the cooled mechanism.

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Inventors

Hukuhara Shigeru

Latest standardized assignees - inventors removed

CHUGOKU ELECTRIC POWER

YEOMLE INDUSTRY

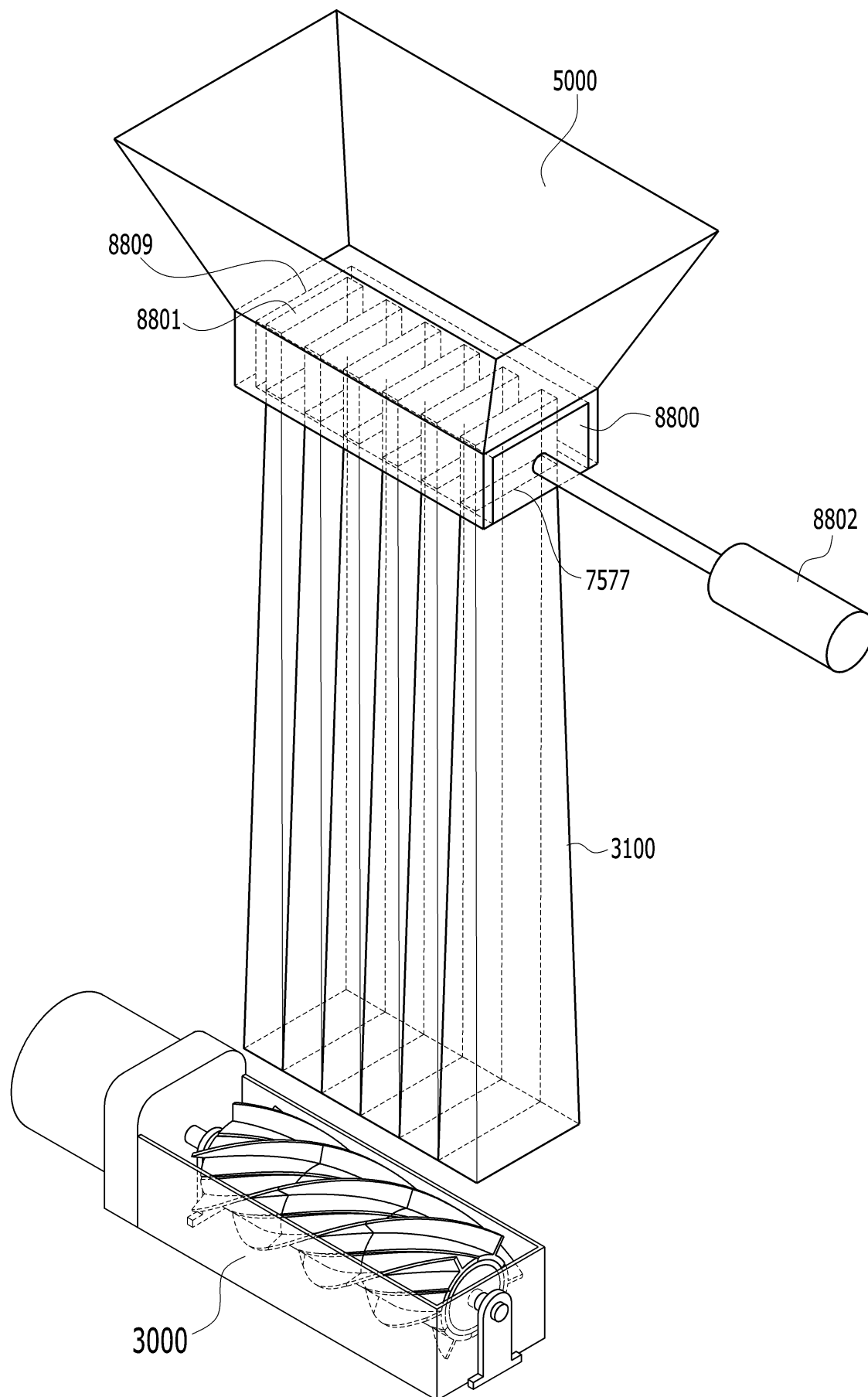
Family 62/200 - FAMPAT - ©Questel

Title

(KR20180002557)

Economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate gravitational acceleration

Images



Publication data including kind & date

[KR20180002557](#)

A 2018-01-08 KR20180002557



Abstract

(KR20180002557)

The present invention relates to an economically-friendly power generation method continuously producing electricity using gravitational acceleration generator coupled to vertical fall generation equipment to generate gravitational acceleration, capable of cleanly purifying polluted water and, at the same time, producing electricity at high efficiency. According to the present invention, the method comprises: a first reservoir (7000); a second reservoir (6000) formed on a top of a concrete basis (6150) formed on a bottom of a downside river with an altitude difference of about 5 to 100 m from the first reservoir (7000); a tilt drain pipe (5300) installed in a bottom of the first reservoir (7000); a drain control valve (5900) installed in a top of the tilt drain pipe (5300); a riser pipe (5320); a water retransfer pipe (5120) installed in a top of an end of the riser pipe (5320); an air discharge control valve (1500) coupled to an air discharge pipe (1510) installed in a corner part of the water retransfer pipe (5120); a second drain pipe (5250) coupled to a second gravitational acceleration generation vessel (5260) installed in an end of the water retransfer pipe (5120); a second generation waterwheel (5130) installed in a bottom of the second drain pipe (5250); a gravitational acceleration generation vessel (5000) installed in a bottom of an end of the riser pipe (5320); a gravitational acceleration generation drain pipe (5200) installed in a bottom of the gravitational acceleration generation vessel (5000); a first generation waterwheel (5230) installed in a bottom of the gravitational acceleration generation drain pipe (5200); a drain control valve (5800) to controller a drain amount of first generation water (6100); a water intake pump (6200) installed on one side of a bottom of a water intake pipe (6300); and an opening/closing valve (5310) installed in a top of the water intake pipe (6300) to open/close the water intake pipe (6300).

Inventors

HAN, SANG-KWAN

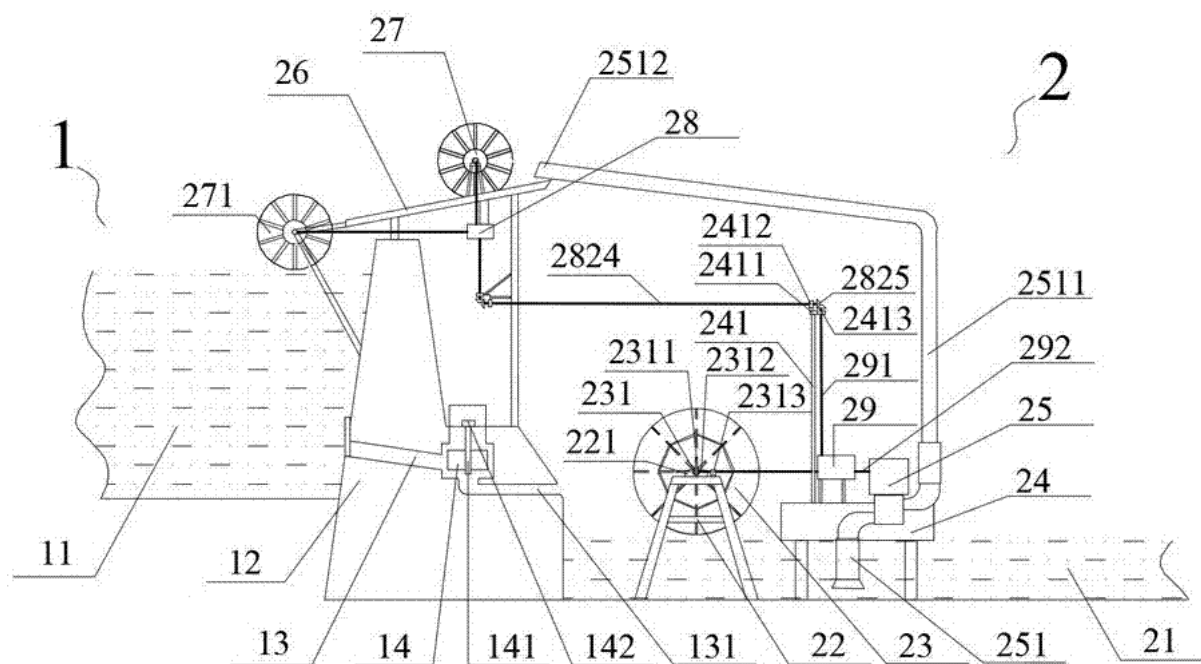
Family 63/200 - FAMPAT - ©Questel

Title

(CN107152372)

Water power recovery water drawing backflow type power generation method

Images



Publication data including kind & date

CN107152372

A 2017-09-12 CN107152372



Abstract

(CN107152372)

The invention belongs to a water power recovery water drawing backflow type power generation method. According to the specific water power recovery water drawing backflow type power generation method, a flushing water kinetic energy recovery device is used for recovering flushing water kinetic energy, the recovered kinetic energy is transmitted to a speed increase box, power is transmitted to a water pump after the rotating speed is increased through the speed increase box, and a part of water is absorbed back through operation of the water pump. The water power recovery water drawing

backflow type power generation method comprises a power generation system and a water return system. The power generation system comprises front stored water, a water dam body, a water valve, a water guide pipe, a drainage pipe, a water turbine, a transmission shaft and a generator. The water return system comprises rear flowing water, a water cart supporting body, a bearing pedestal, a supporting body, a supporting column, a supporting frame, a bearing, a water baffle water cart, a rotary shaft, a bevel gear, a transmission shaft, the water pump, a water absorption pipe, a drainage pipe, a backflow water guide groove, a flushing water plate, a suspension device and the speed increase box. The water power recovery water drawing backflow type power generation method can be used for a self-built water power recovery water drawing backflow type power station or used for the technical improvement of a traditional hydropower station.

Inventors

YANG LIN

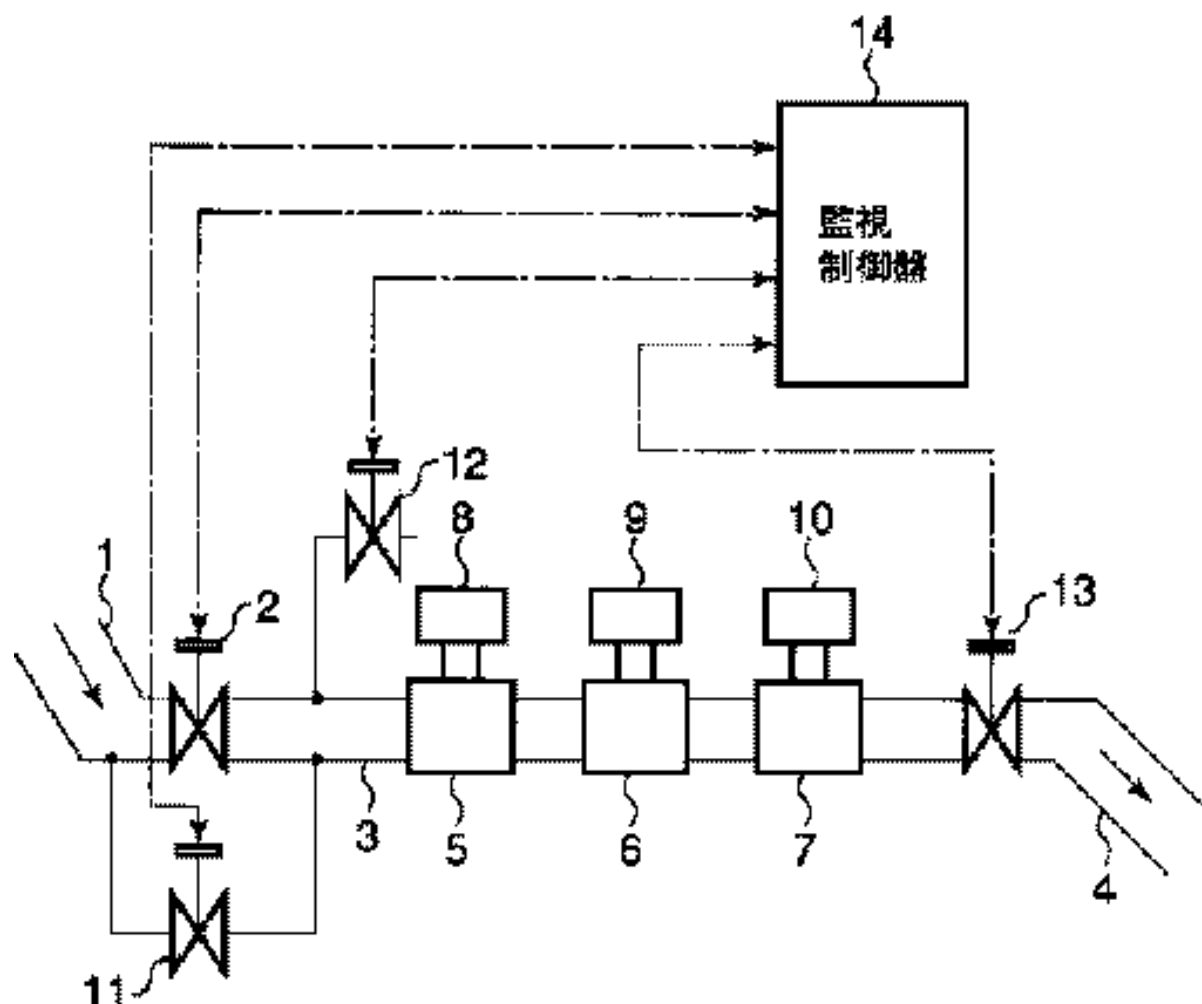
Family 64/200 - FAMPAT - ©Questel

Title

(JP2003042050)

Conduit type power generating system and its starting method

Images



Publication data including kind & date

JP2003042050

A

2003-02-13

JP2003042050



Abstract

(JP2003042050)

PROBLEM TO BE SOLVED: To start a plurality of small type water turbines in a stable state by the same output.
SOLUTION: Water from the high land side water source is caused to flow in an intermediate line 3 on the low land side through an upper line 1, through which water on the high land side flows down to the low land side, through an inlet valve 2. By energy of water flowing to a lower line 4 through the intermediate line 3, a plurality of water turbines 5-7 installed in a straight line in the intermediate conduit are respectively driven for power generation. In so formed conduit type power generating system, the system is provided with a side passage valve 11, opened during starting of the water turbine, the

intermediate line is filled with water through the upper line through bypass through the inlet valve 2 and closed during starting of the water turbine, an exhaust valve 12 communicated with the intermediate line communicated with the intermediate line and opened when the line is filled with water through a side valve, bleeding air in the line and closed when filling with water is completed; and a discharge valve 13, the inlet valve 2 being opened on a condition that air in the line is pulled by the exhaust valve 12 and the inlet valve 2 is opened on a condition that filling with water is completed, and opened thereafter.

Inventors

ODAGIRI SHIGETO

OTAKE NORIO

Yuichi Hino

Latest standardized assignees - inventors removed

TOSHIBA ENGINEERING

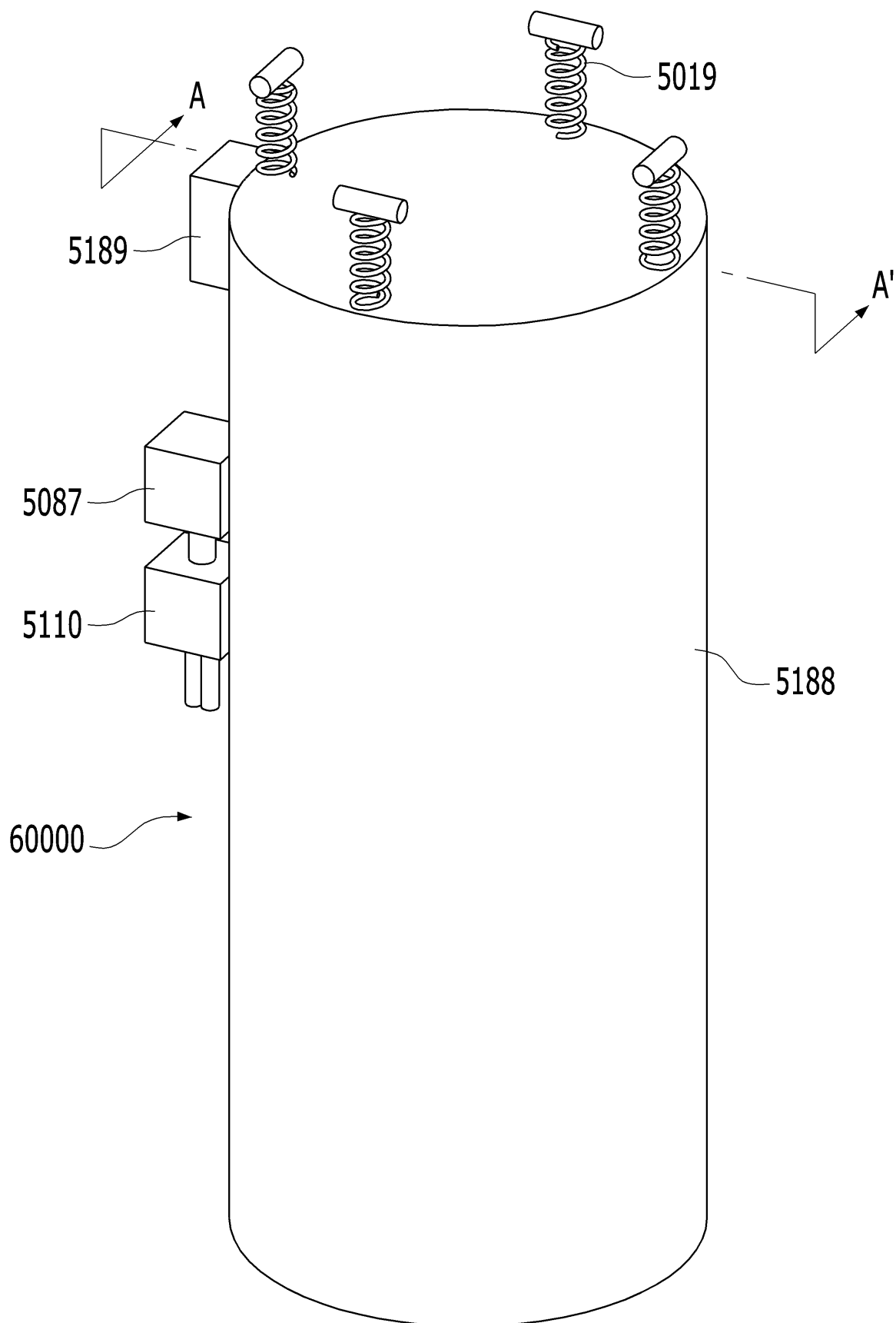
Family 65/200 - FAMPAT - ©Questel

Title

(KR20180025307)

Environmentally friendly power generating method for continuously producing electricity using gravitational acceleration generator

Images

**Publication data including kind & date**[KR20180025307](#)

A

2018-03-08

KR20180025307

**Abstract**

(KR20180025307)

The present invention relates to an environmentally friendly power generating method, comprising: a structure composed of a primary reservoir device (7000) for storing a large amount of primary power generating water (5100) in an upper end of a

base concrete (5150); and a structure composed of a secondary reservoir device (6000) in the upper end of the base concrete, wherein a lower end portion of the primary reservoir device (7000) is installed with an inclined discharge pipe (5300). In an upper end portion of the inclined discharge pipe (5300), a valve (5900) for controlling a discharge amount is provided. Thus, the present invention is able to cleanly purify contaminated water and is able to produce electricity at high efficiency at the same time.

Inventors

HAN, SANG-KWAN

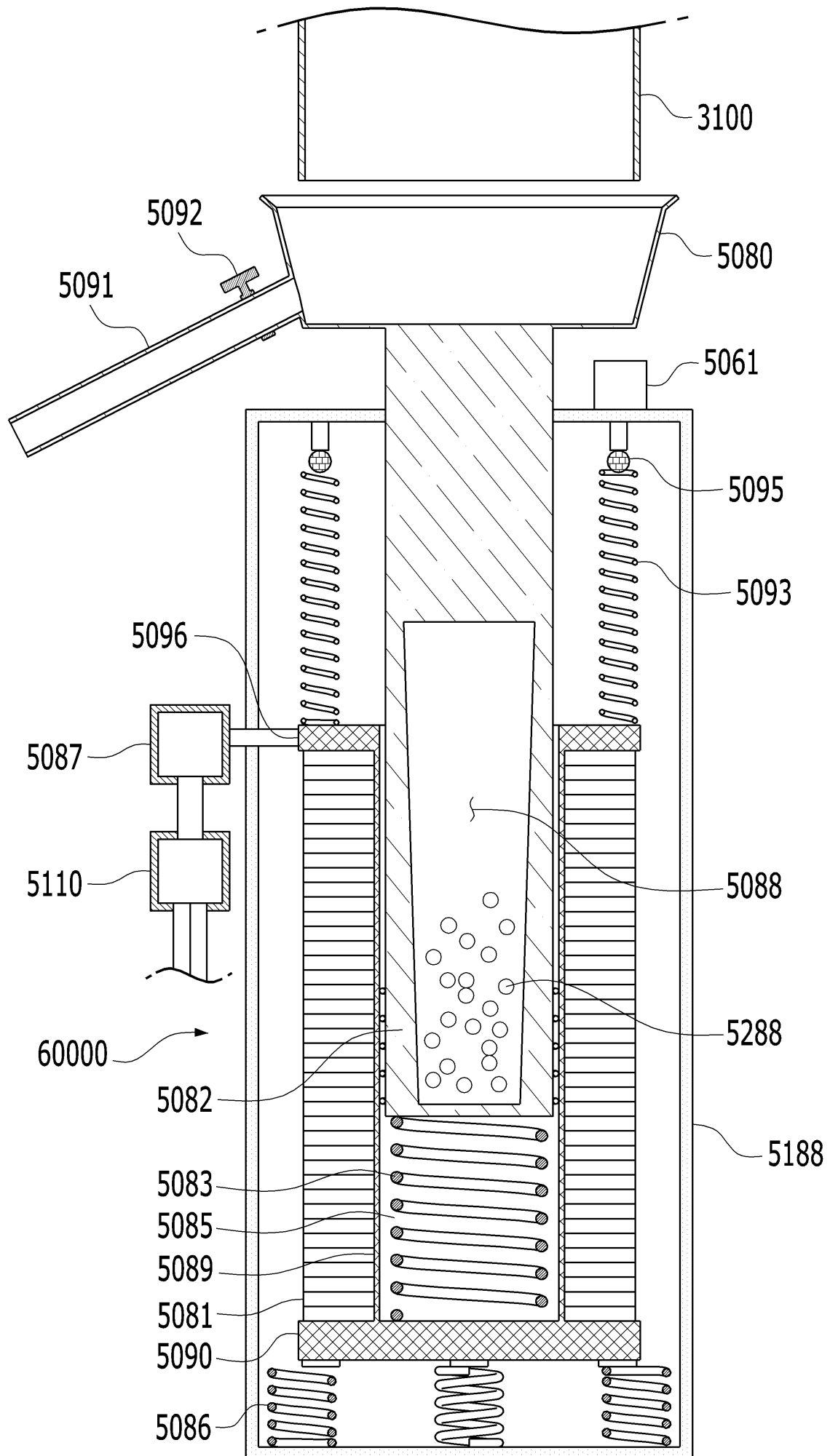
Family 66/200 - FAMPAT - ©Questel

Title

(KR20180021020)

Environmentally-friendly power generation method to continuously produce electricity using gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency by actions of gravitational acceleration and gravity

Images



Publication data including kind & date

KR20180021020

A 2018-02-28

KR20180021020

**Abstract**

(KR20180021020)

The present invention relates to an environmentally-friendly power generation method to continuously produce electricity using a gravitational acceleration generation device coupled to vertical drop power generation equipment increasing generation efficiency by actions of gravitational acceleration and gravity, capable of purifying polluted water and producing electricity with high efficiency. According to the present invention, to pump again secondary generation water (6100) filled in a secondary water storage device (6000) to a primary water storage device (7000) in a time with less power consumption by using cheap excessive electricity, such as from nuclear power, a water intake pump (6200) coupled to a water intake pipe (6300) is operated to pump again the secondary generation water (6100) filled in the secondary water storage device (6000) to the primary water storage device (7000); thereby rotating a secondary gravitational acceleration generation vessel (5260) and a secondary generation water wheel (5130) to produce the electricity and, at the same time, filling the primary water storage device (700) with primary generation water and discharging again the primary generation water (5100) filled in the primary water storage device (7000) in times of excessive electricity usage to continuously produce electricity.

Inventors

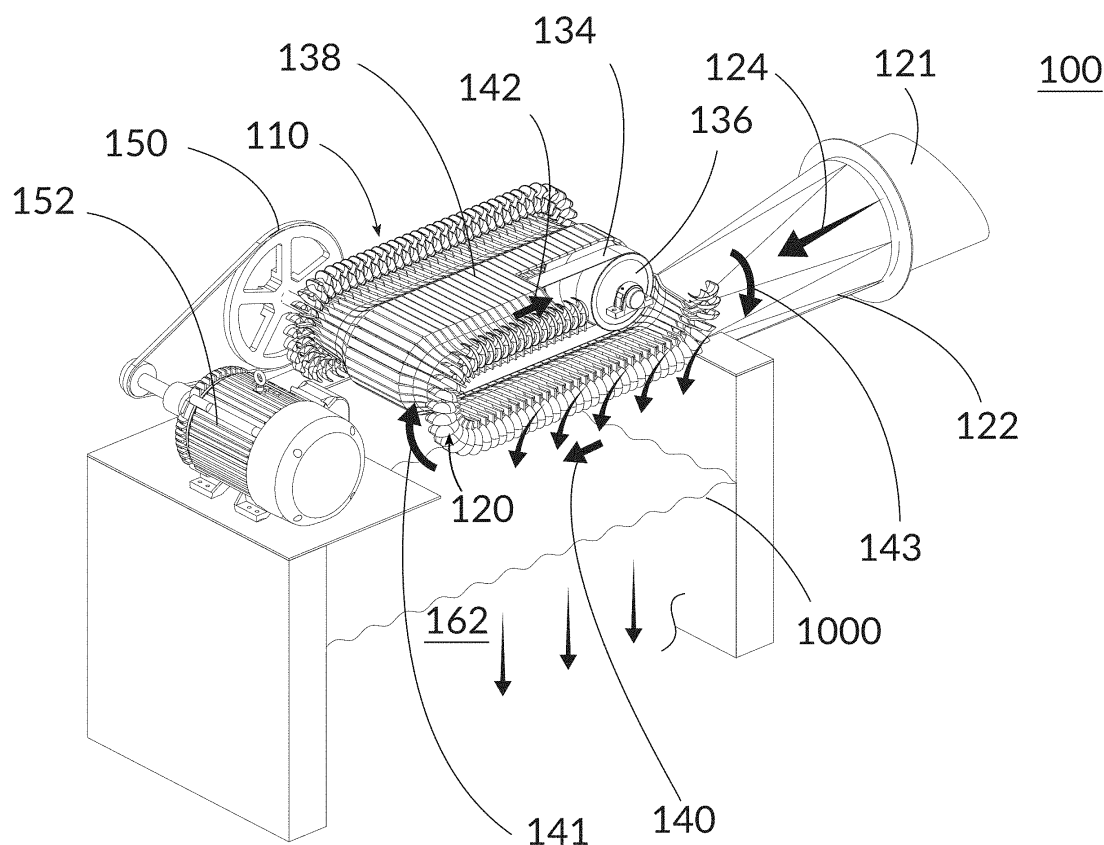
HAN, SANG-KWAN

Family 67/200 - FAMPAT - ©Questel

Title

(EP3491233)

Linear pelton turbine

Images**Publication data including kind & date**

CA3030757

A1 2018-02-01

CA3030757



US20180030948	A1	2018-02-01	US20180030948				
WO2018/022665	A1	2018-02-01	WO201822665				
US20180045170	A1	2018-02-15	US20180045170				
US10167844	B2	2019-01-01	US10167844				
BR112019001553	A1	2019-02-05	BR112019001553				
US10221830	B2	2019-03-05	US10221830				
CN109563800	A	2019-04-02	CN109563800				
IN201917002506	A	2019-04-26	IN201917002506				
BR112019001553	A2	2019-05-14	BR112019001553				
EP3491233	A1	2019-06-05	EP3491233				

Abstract

(EP3491233)

Systems and methods related to linear turbine systems are presented. Each embodiment described herein may be designed as a single-stage, linear, impulse turbine system. In an embodiment, a linear turbine includes a first shaft extending along a first axis; a second shaft extending along a second axis, the second axis being separated from and substantially parallel to the first axis; a first plurality of buckets to travel a first continuous path around the first shaft and the second shaft along a first plane, the first path including a first substantially linear path segment between the first axis and the second axis; and a nozzle configured to direct a first fluid jet to contact the first plurality of buckets in the first linear path segment.

Inventors

SCHNEIDER ABRAHAM D

Latest standardized assignees - inventors removed

NATEL ENERGY

Family 68/200 - FAMPAT - ©Questel

Title

(KR20190055952)

Acceleration of gravity action configured to generate a weighted orthogonal drop power generation facility associated with the action of the gravitational acceleration device for generating electricity by using the continuous production of environmentally friendly power generation method of a natural

Images**Publication data including kind & date**
[KR10-2019-0055952](#) A 2019-05-24 KR20190055952    
Abstract

(KR20190055952)

The present invention the entire length of the river inclined with respect to all dredging depth deeper 5 field 20m after the gabion gabion earthen or river or quarry or revetment optotype 1 are combined using a block clock or artificial reef stairs in use after servicing the river bottom concrete (5150) 1 on the basis of the difference and then the top of the concrete (5150) structure based on the mass of the primary power generating water (5100) reservoir 1 so that the primary water storage device (7000) 1 is constructed; the primary water storage device (7000) 1 and fall altitude difference of about 5m-100m downstream of the river is generated based on the bottom of the river area of the concrete (6150) after installing the primary water storage device (6000) 2 based on the upper end of the concrete structure; primary water storage device (7000) 1 to the lower end of the slope of the exhaust pipe (5300) laying; the inclination of the exhaust pipe (5300) to the top of a discharge amount control valve (5900) is composed of; the inclination of the exhaust pipe (5300) at its end to the lower end of the riser pipe (5320) that are configured in the shape of the user and constitute; upper end portion of the rising pipe (5320) shape constitutes a water pipe (5120) material in the form of a user; cornered portion on said water pipe (5120) of an air discharge pipe (1510) which is combined with the control valve (1500) structure is provided to discharge air; material

water pipe (5120) at an end portion of the vehicle 2 which is combined with the acceleration of gravity acting generating container (5260) is constructed of a secondary exhaust pipe (5250) 2; 2 the lower end of the primary exhaust pipe (5250) 2 and at the same time constituting a secondary power generation turbine (5130); at a lower end of the riser pipe (5320) of a wide end and narrow at the top of the lower end of the acceleration of gravity action which constitutes a generating container (5000); the lower end of the acceleration of gravity acting generating container (5000) for the generation of the exhaust pipe (5200) to constitute the acceleration of gravity acting structure; the acceleration of gravity acting in the lower parts of the exhaust pipe (5200) 1 for generating a secondary power generation structure is provided to the aberration (5230); the lower end of the acceleration of gravity acting on one side of the exhaust pipe (5200) 2 for generating the primary water storage device (6000) 2 from a water (6100) reservoir 1 to the primary water storage device (7000) to the secondary power generation when the acceleration of gravity acting on the pumping member for generating a discharge pipe (5200) 1 is discharged through a lower end of the primary power generating water (6100) to adjust the output of the quantity control valve (5800) is provided to a structure; the acceleration of gravity acting on the other side at the lower end of the exhaust pipe (5200) 2 for generating the primary water storage device (6000) 2 to the primary generator from a water (6100) reservoir 1 at the upper end of the primary water storage device (7000) is transferred to the water intake pipe (6300) and then the lower end of the pipe (6300) constituting the intake side of an intake pump (6200) and, at the upper end of the intake pipe (6300) to open and close the intake pipe (6300) structure is provided to the opening and closing valve (5310); environmentally friendly nature such as steel or generator which is constituted by natural friendly power generation system 1 of the primary water storage device (7000) is assigned to the interior of the water (5100) in the filled state of the secondary generator 1 to close the valve (5310) opening and closing the exhaust control valve (5800) 70%-95% as well as to the degree of the air exhaust pipe (1510) and a closed state in which the air discharge control valve (1500) coupled to a fully open position and inclination of the exhaust pipe (5300) and the riser pipe (5320) and the interior of the container (5000) and the acceleration of gravity action occurs the interior of the exhaust pipe (5200) for the acceleration of gravity action occurs between the interior of the water pipe (5120) material is filled in both the air discharge opening 100% in a state where the discharge valve for regulating the (5800) action of gravitational acceleration generated in the container (5000) 1 filled with water to (5100) the secondary power generation of the exhaust pipe as (5200) the acceleration of gravity acting foot draconis continuously discharged to a discharge pipe (5200) for the acceleration of gravity action occurs at the lower end of the primary powerplant 1 is configured as a continuous rotation of the wheel (5230) the primary water storage device (7000) 1 to be filled with the amount of secondary power generation water (5100) exhausted 1 80-95%? A large amount of electricity consumed until the time required to produce an inexpensive small time after electricity demand such as nuclear power surplus electricity by using the primary water storage device (6000) 2 which is filled with primary water storage device (7000) 2 to 1 primary power from a water source (6100) for pumping the material to open the control valve (1500) to discharge air after SEO sang-ki discharge amount adjusting valve (5900) and the exhaust control valve is closed (5800) to open and close the intake pipe (6300) in a state of the switching valve (5310) after opening the water intake pipe (6300) and coupled to the intake pump (6200) to actuate the primary water storage device (6000) 2 which are the primary generator from a water (6100) reservoir 2 the primary water storage device (7000) 1 to the pumping member to the end of the water pipe (5120) material that may be present in the second end of the action of gravity of the container (5260) 2 generated at the lower end of the primary exhaust pipe (5250) 2 that may be present in the secondary power generation turbine (5130) 2 to rotate at the same time as the electric continuously producing and the primary water storage device (7000) 1 to the interior of the secondary power generation amount of the water to (5100) fill it up. dull 1 many times required for the electric the primary water storage device (7000) 1 is filled in the primary water storage device (6000) 1 and the secondary power generation water (5100) pumped into the interior of the material 2 to produce electricity continuously inclined or river valley is inclined so that the water storage device is provided by using a multistage action of gravity and the action of gravity so as to generate clean water contaminated the purification and at the same time high efficiency of electricity generation environmentally friendly natural provided so the present invention provides a method which comprises

Inventors

HAN, SANG-KWAN

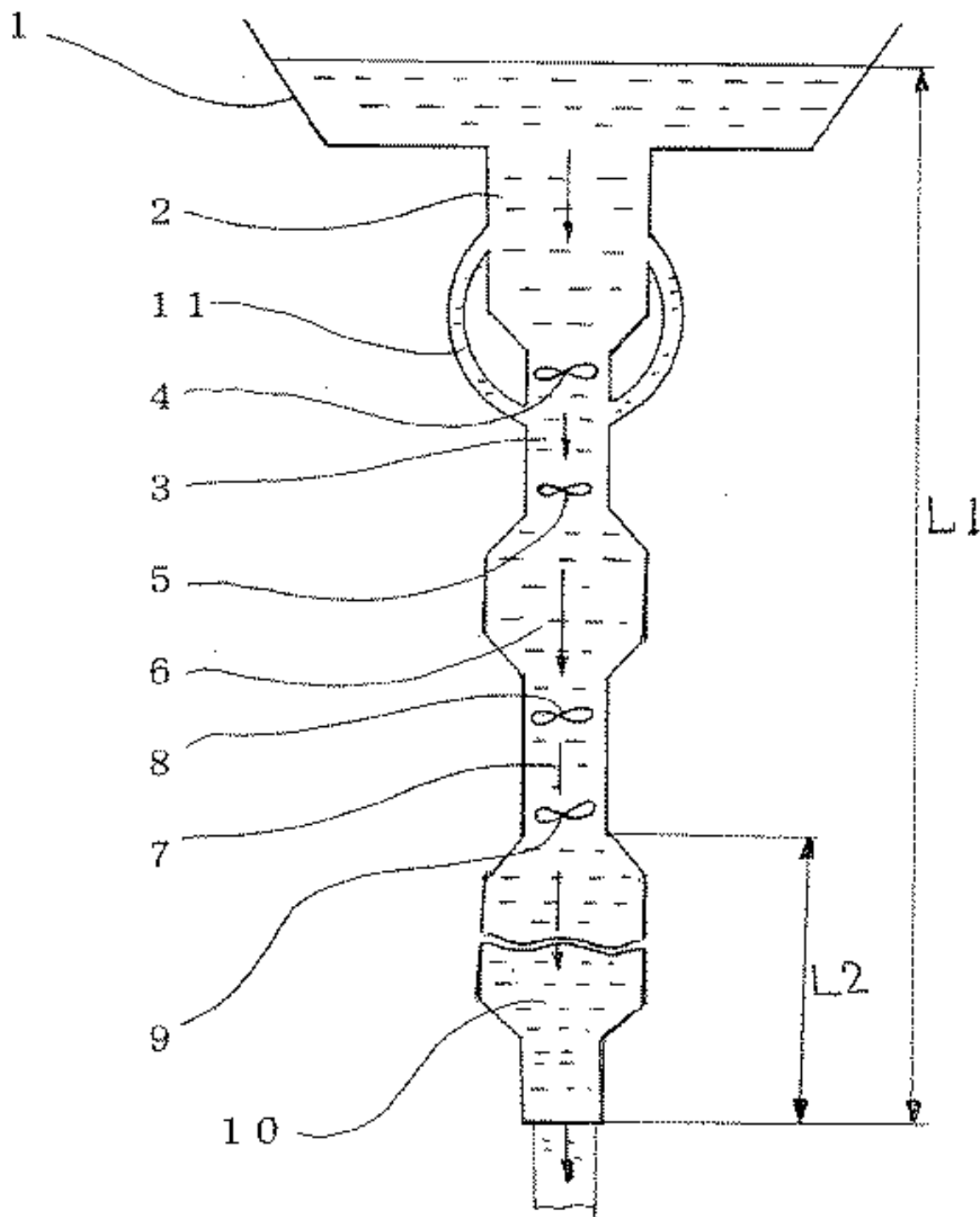
Family 69/200 - FAMPAT - ©Questel

Title

(JP2014118960)

Hydraulic power generation device

Images



Publication data including kind & date

[JP2014118960](#)

A 2014-06-30 JP2014118960



Abstract

(JP2014118960)

PROBLEM TO BE SOLVED: To eliminate defects found in the conventional hydraulic power device in which only one water turbine is arranged and it shows a low conversion efficiency. **SOLUTION:** This invention relates to a hydraulic power generation device in which a power generating water turbine 4 rotationally driven by a gravitational force of dropping water is arranged to improve a conversion efficiency and a power generator is driven by the power generating water turbine 4, and a plurality of water turbine chambers 3, 7 storing water turbines 4, 5, 8 and 9 are connected in series by an intermediate hydraulic pipe 6 between an upstream side hydraulic pipe 2 and a downstream side hydraulic pipe 10

connected to a storage reservoir (pond) 1.

Inventors

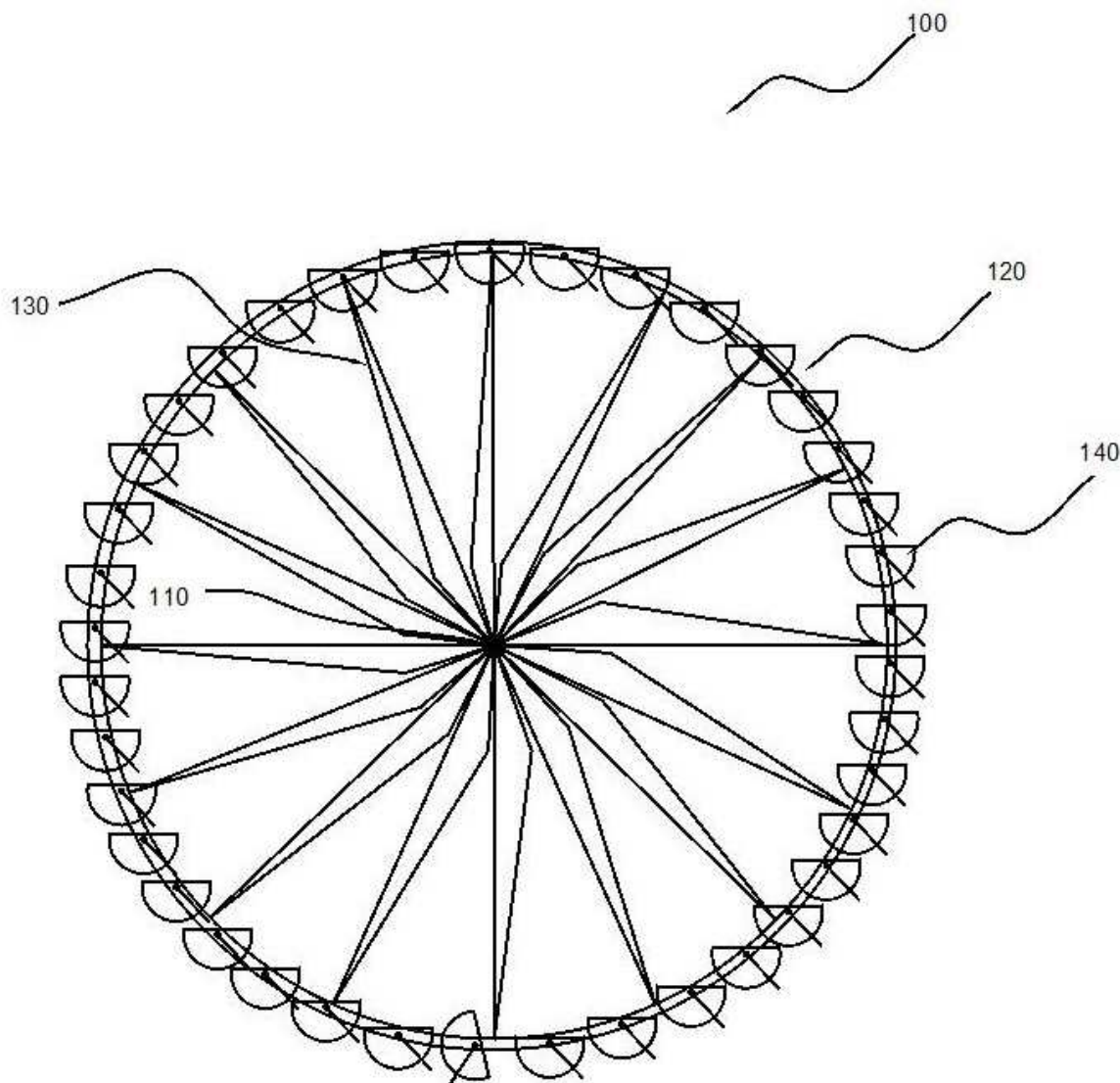
Shunji Kondo

Family 70/200 - FAMPAT - ©Questel

Title

(KR101907347)

Turbine device and the driving method thereof

Images**Publication data including kind & date**

[KR101907347](#)

B1 2018-10-11 KR101907347

**Abstract**

(KR101907347)

The present invention relates to a turbine device, and a driving method thereof configured to produce power through minimum water supply as compared to a conventional turbine and using wind power generated near an installation place to rotate the turbine, thereby maximizing efficiency of power generation.

Inventors

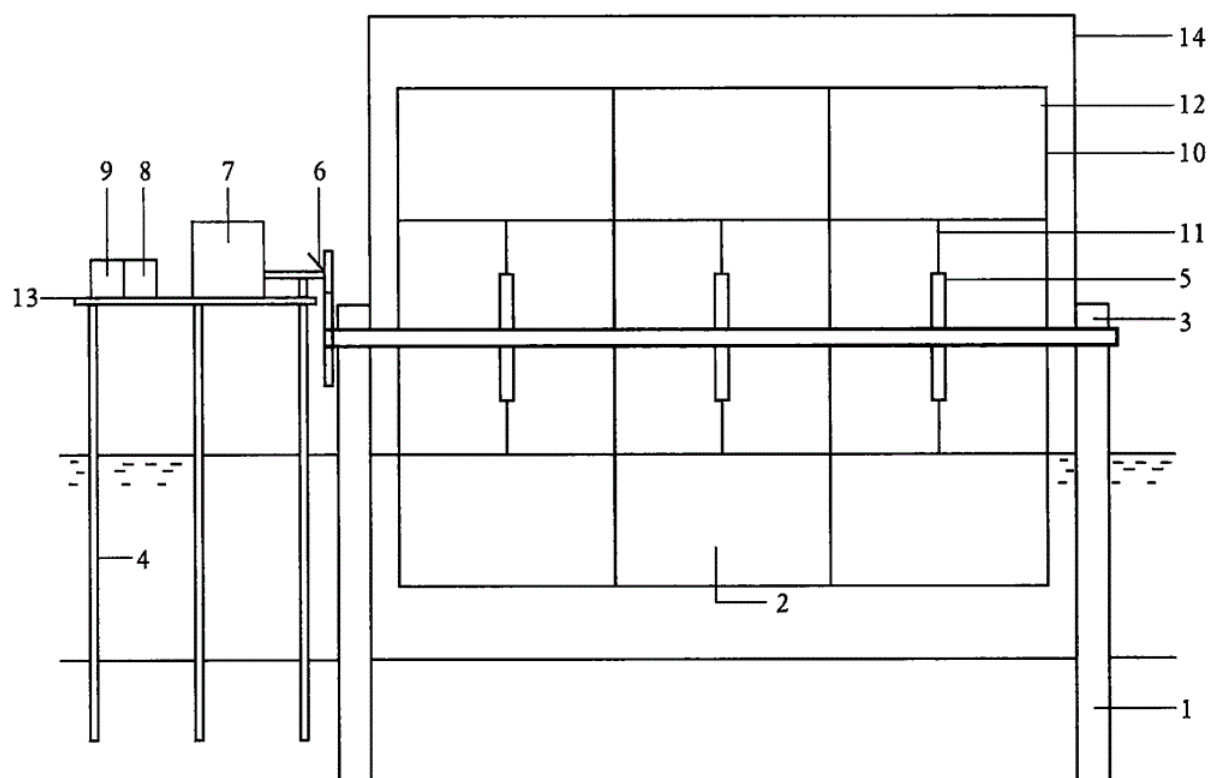
KIM, JEUM SIK

Family 71/200 - FAMPAT - ©Questel

Title

(CN106089543)

Ultra-large hydroelectric station

Images**Publication data including kind & date**

CN106089543

A

2016-11-09

CN106089543

**Abstract**

(CN106089543)

An ultra-large hydroelectric station can turn the kinetic energy generated through flowing seawater and flowing river water into mechanical energy, and then turn the mechanical energy into electric energy, and in this way, people can use clean and low-cost electric energy. Specifically, according to the ultra-large hydroelectric station, a water turbine central spindle is fixed in a movable mode, the position of a water turbine is unchanged and the water turbine is accumbent on the flowing water surface towards the direction of water flow. One half of the water turbine is in the water and the other half of the water turbine is in the air. Propellers of the water turbine are powered by waterpower to drive the water turbine to rotate. The rotating of the water turbine drives a generator to produce electricity and produce the electric energy day and night. The ultra-large hydroelectric station is arranged over the sea and the river all around for tens of thousands of square kilometers and produces huge electric power for the whole of China. The hydroelectric station belongs to a clean energy, a renewable energy and a lowest generating-cost energy. Even in the next one thousand years and the population of China reaches five billion, the power supply can also be met. The hydroelectric station can thoroughly solves the energy problem, the haze problem and the climatic change problem in China, and is the only right way for the current electric energy and energy development in China.

Inventors

CHEN YONGYUAN

CHEN ZI

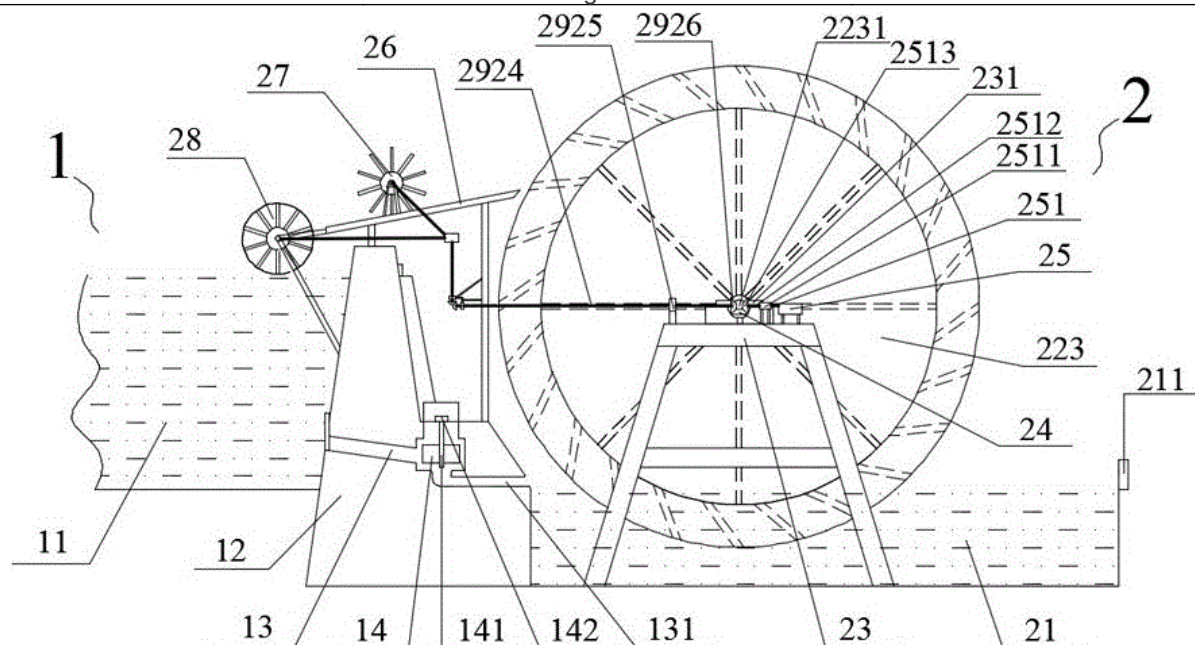
Family 72/200 - FAMPAT - ©Questel

Title

(CN105971808)

Recycling and electricity-generating method of fluid power

Images

**Publication data including kind & date**

CN105971808

A

2016-09-28

CN105971808

**Abstract**

(CN105971808)

The invention discloses a recycling and electricity-generating method of fluid power. The kinetic energy of flush water and flowing water is recycled through a water power recycling device, the recycled kinetic energy drives assembly waterwheels to operate, a variable-frequency motor supplements more kinetic energy for operation of the assembly waterwheels if the kinetic energy is insufficient, and water acts in a circulation mode. According to the method, an electricity-generating system and a power system are included; the electricity-generating system comprises a first-stage impounding tank, a dam body, a water valve, a drainage port, a drainage groove, a water guide pipe, a drainage pipe, a water turbine, a transmission shaft, an electricity generator, an electricity generator cover and a heat-conducting water pipe; the power system comprises a second-stage impounding tank, a drainage port, draft groove waterwheels, water baffle waterwheels, the assembly waterwheels, a bearing, a waterwheel supporting body, a bearing base, a planetary gear, the variable-frequency motor, a transmission shaft, a bevel gear, a backflow gutter, a supporting body, a water baffle, an outer baffle water flushing plate, a speed reduction gearbox and a hanging device. The method has the advantages that the construction mode is flexible, the construction cost is low, the influence of construction environment limitation is small, and the application environment is wide.

Inventors

YANG LIN

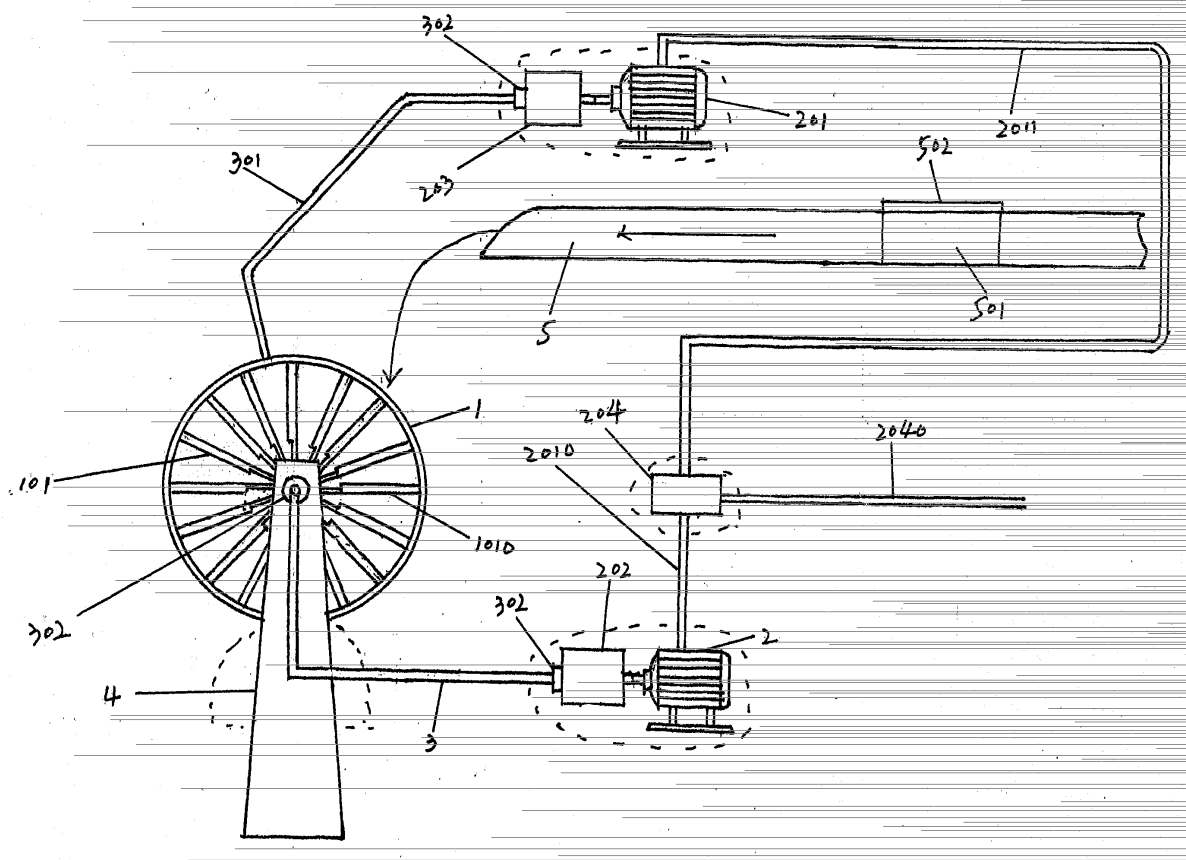
Family 73/200 - FAMPAT - ©Questel

Title

(CN204253255U)

Electric generating set by utilizing flexible shafts to waterwheel for driving power

Images

**Publication data including kind & date**

CN204253255

U 2015-04-08

CN204253255U

**Abstract**

(CN204253255U)

Provided is an electric generating set by utilizing flexible shafts to a waterwheel for driving power. The electric generating set comprises the waterwheel, a first flexible shaft, a second flexible shaft, a third flexible shaft, a first speed changer, a second speed changer, a first electric generator, a second electric generator, a third electric generator, a first transformer and a second transformer and is characterized in that the waterwheel is installed at a river or a trunk canal, or an approach channel or a drainage channel of a power plant. A flexible shaft installed at an end opening of a left shaft is connected with the second speed changer for driving electric generators to operate. A flexible shaft installed at an end opening of a right shaft of the waterwheel is connected with the first speed changer for driving the electric generators to operate. The electric quantity of the second electric generator and the third electric generator is transmitted to the first transformer and the second transformer via a second conducting wire and a first conducting wire. Direct supply or grid-tied operation can be performed by outgoing electric wires. With the electric generating set by utilizing the flexible shafts to the waterwheel for driving power, shortage of electric power can be alleviated to certain degree.

Inventors

WANG WEI

FENG LIANG

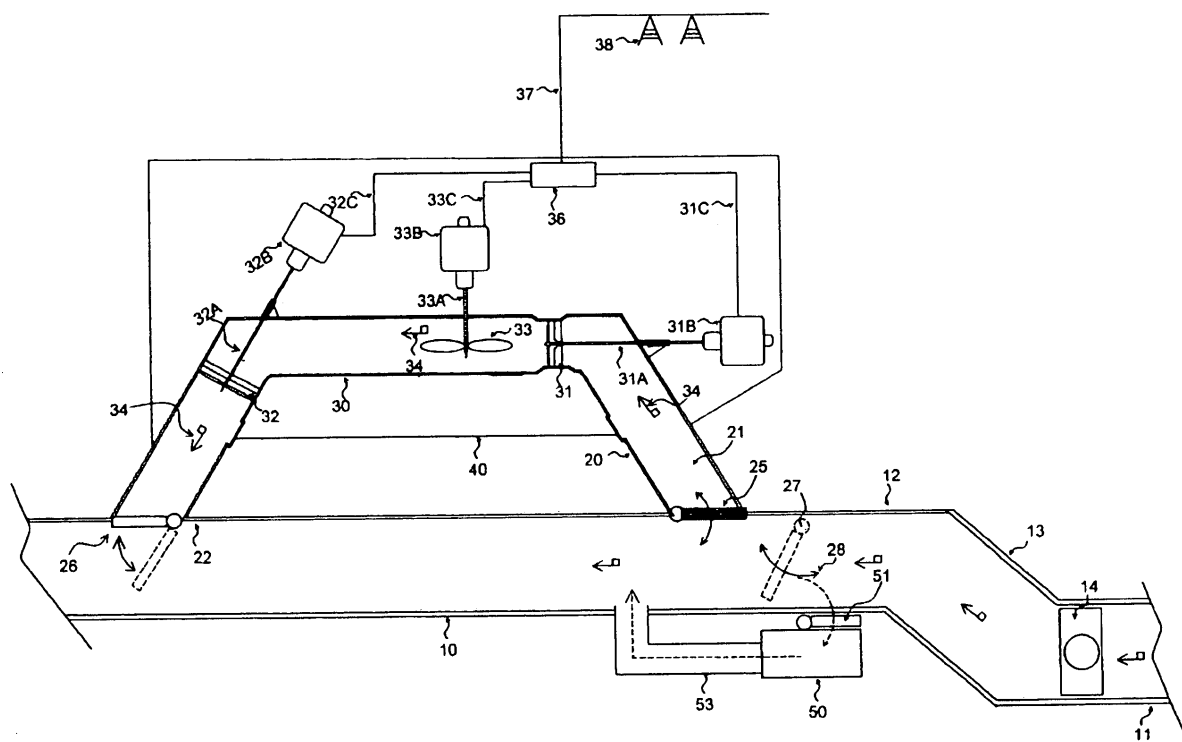
Family 74/200 - FAMPAT - ©Questel

Title

(WO200721295)

Waste water electrical power generating system

Images



Publication data including kind & date

WO2007/021295	A2	2007-02-22	WO200721295
US20070041790	A1	2007-02-22	US20070041790
WO2007/021295	A3	2007-06-07	WO200721295
WO2007/021295	A8	2007-07-26	WO200721295
US20080031691	A1	2008-02-07	US20080031691
GB0802477	D0	2008-03-19	GB200802477
GB2442424	A	2008-04-02	GB2442424
US7357599	B2	2008-04-15	US7357599
CN101287873	A	2008-10-15	CN101287873
US7452160	B2	2008-11-18	US7452160
US20090179427	A1	2009-07-16	US20090179427
US7802942	B2	2010-09-28	US7802942
GB2442424	B	2010-12-15	GB2442424
US20100314880	A1	2010-12-16	US20100314880
US8002499	B2	2011-08-23	US8002499
US20110248502	A1	2011-10-13	US20110248502
US8147168	B2	2012-04-03	US8147168
US20120153623	A1	2012-06-21	US20120153623
CN101287873	B	2012-09-05	CN101287873B
CN102776871	A	2012-11-14	CN102776871
US8550746	B2	2013-10-08	US8550746
US20130343870	A1	2013-12-26	US20130343870
US8794873	B2	2014-08-05	US8794873
US20140298793	A1	2014-10-09	US20140298793
US9157411	B2	2015-10-13	US9157411
CN102776871	B	2015-11-25	CN102776871B
US20150354526	A1	2015-12-10	US20150354526
CN102776871	B8	2016-04-06	CN102776871
US9593664	B2	2017-03-14	US9593664



Abstract

(WO200721295)

An environmental protective electrical power generating system is formed by a penstock connected at its opposite ends to a large sewer for conveying waste water from feeder pipelines to a sanitary treatment station. Sewer waste water is propelled through the sewer line by pumping equipment which simultaneously pulverizes most large objects carried by the waste water. The waste water is diverted, through a control gate, into the penstock where it flows through and operates one or more water-operated turbines. The turbines are operatively connected to electrical power generators for producing electrical power and dispersing the power through an electrical power transmission system. Depending upon the size of the sewer pipes, the volume of liquid flowing there-through, and the turbine and generator equipment, electrical power is generated without affecting the environment or ecology and without the use of fossil fuels.

Inventors

CRIPPS JEFFREY L

Latest standardized assignees - inventors removed

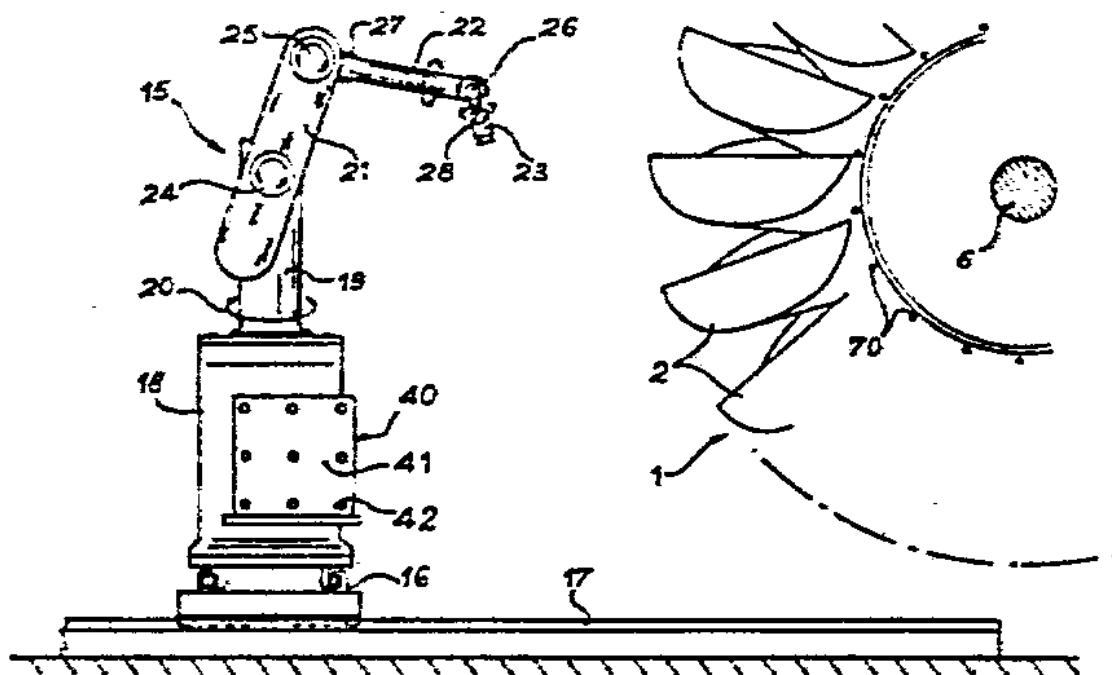
CRIPTONIC ENERGY SOLUTIONS

Family 75/200 - FAMPAT - ©Questel

Title

(FR2641607)

System for remote measurement of the surface of an article, especially a Pelton turbine bucket, using an optical sensor

Images**Publication data including kind & date**[FR2641607](#) A1 1990-07-13 FR2641607[FR2641607](#) B1 1993-12-31 FR2641607**Abstract**

(FR2641607)

System, for measuring the surface of an article 1 which can be immobilised on a support 6, which comprises a laser emitting a plane illumination beam, and an obliquely directed camera 23, both being mounted on a mobile articulated arm on a support independent from that of the article 1. The system also comprises a target (reticle) 40 to provide a reference for positioning the laser 30 and the camera 23. <IMAGE>

Inventors

JEAN-CLAUDE JULLIARD

DANIEL AVENAS

JEAN-MICHEL BOVERAT

Latest standardized assignees - inventors removed

EDF - ELECTRICITE DE FRANCE

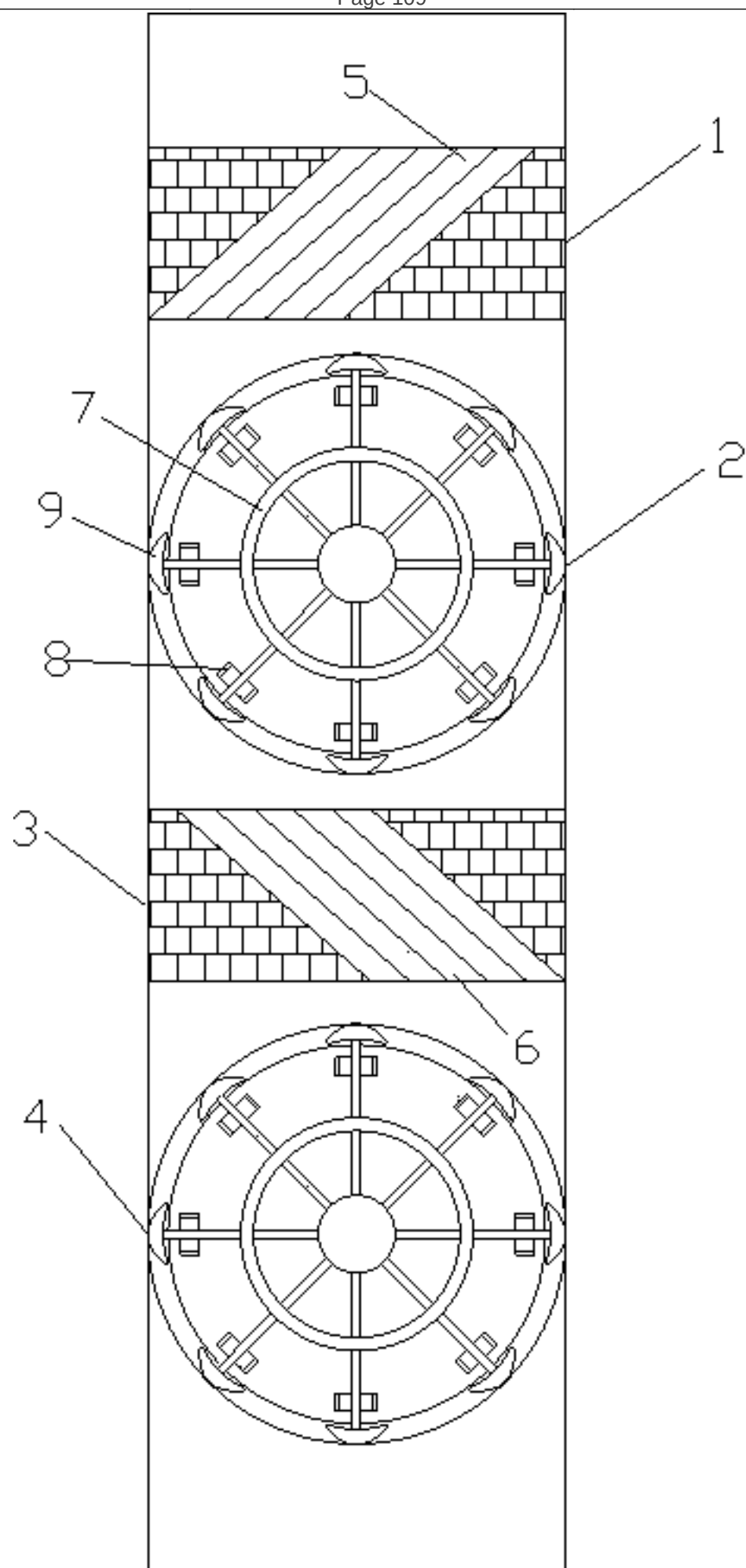
Family 76/200 - FAMPAT - ©Questel

Title

(CN204267206U)

Power generation device

Images



U 2015-04-15 CN204267206U

Abstract

(CN204267206U)

The utility model discloses a power generation device. The device comprises a first guiding groove, a first water wheel, a second guiding groove and a second water wheel, wherein the first guiding groove, the first water wheel, the second guiding groove and the second water wheel are arranged from top to bottom in sequence, one or more first oblique grooves are formed in the first guiding groove, one or more second oblique grooves are formed in the second guiding groove, the directions of the first oblique grooves are different from the directions of the second oblique grooves, the first water wheel and the second water wheel are of the same structure, the first water wheel comprises a reinforcing wheel, a water tank and a hollow floating device, a water injection port is formed in one end of the water tank, the direction of the water injection port is matched with the corresponding first oblique groove or second oblique groove, and gaps are reserved between the first guiding groove, the first water wheel, the second guiding groove and the second water wheel. The power generation device is reasonable in structure, high in efficiency, and capable of well utilizing the height of water of a small dam.

Inventors

PENG WEICHENG

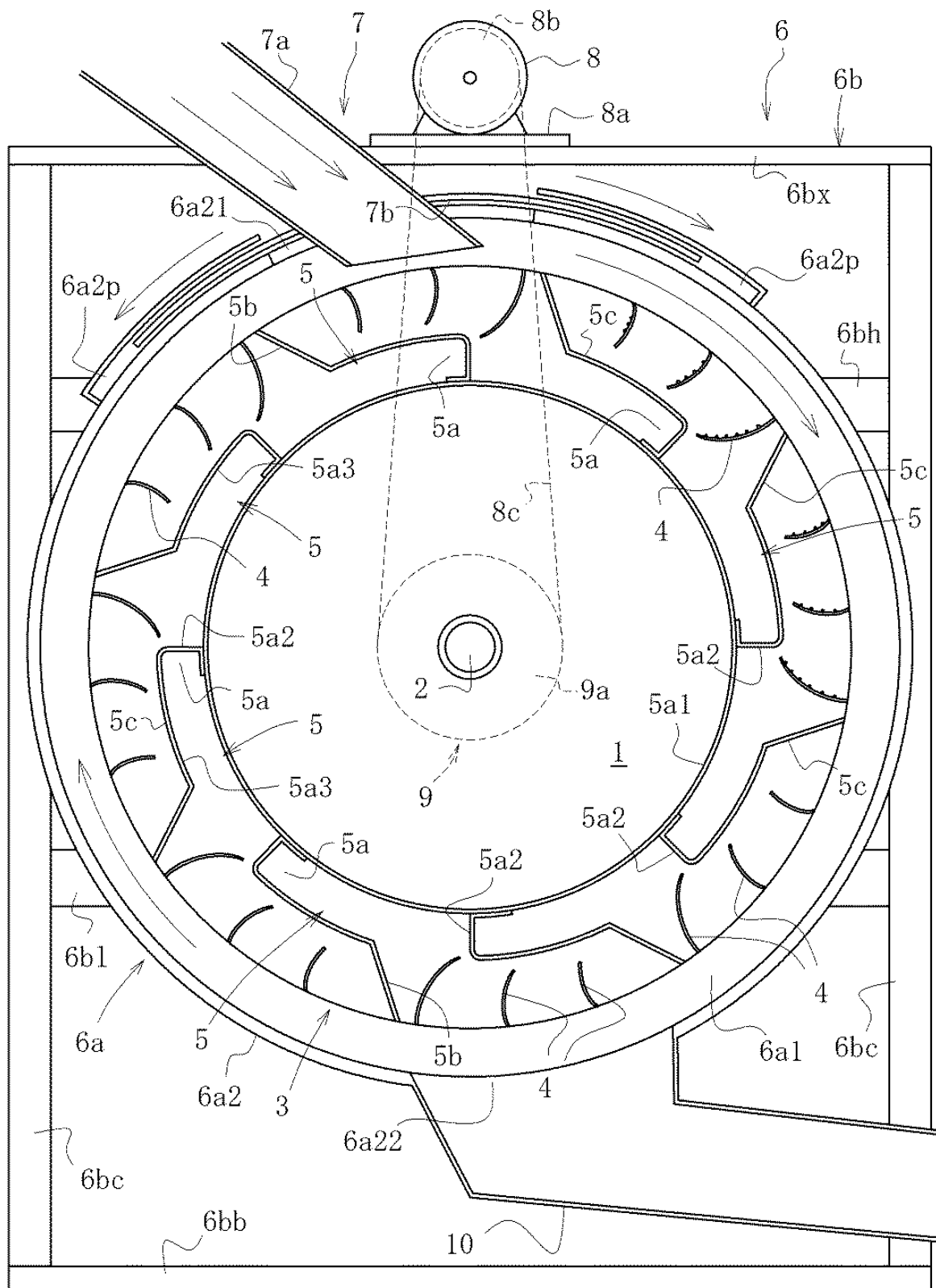
Family 77/200 - FAMPAT - ©Questel

Title

(JP2014227839)

Water turbine device for power generator

Images



Publication data including kind & date

JP5615402

B1 2014-09-19 JP5615402

JP2014227839

A 2014-12-08 JP2014227839



Abstract

(JP2014227839)

PROBLEM TO BE SOLVED: To provide a water turbine device for a power generator that can efficiently obtain turning force by utilizing both injection energy (motion) and potential energy (weight) of river water or the like configured to flow in from the upper part thereof. **SOLUTION:** A water turbine device for a power generator includes: a water turbine body 3 formed of a pair of circular side plates 1 and a rotation shaft 2 fixed to a shaft center of the circular side plates; a plurality of injected water receiving plates 4 continuously provided on an inner side near an outer periphery of the circular side plates

1; a plurality of tank parts 5 provided toward the center of the water turbine body 3 than the injected water receiving plates 4 arranged on the inner side of the circular side plates 1, each of which temporarily retains water flowing down from a set of three injected water receiving plates 4 while rotating and transferring the water toward the lower part; an injection pipe 7a arranged above the water turbine body 3, for injecting the water to the injected water receiving plates 4 positioned at the upper part at the time; and two chain wheels 8b and 9a and a chain 8c hung across the chain wheels, for transmitting rotational force from the rotation shaft 2 of the water turbine body 3 to a power generator 8.

Inventors

MINAKI HIDEO

Latest standardized assignees - inventors removed

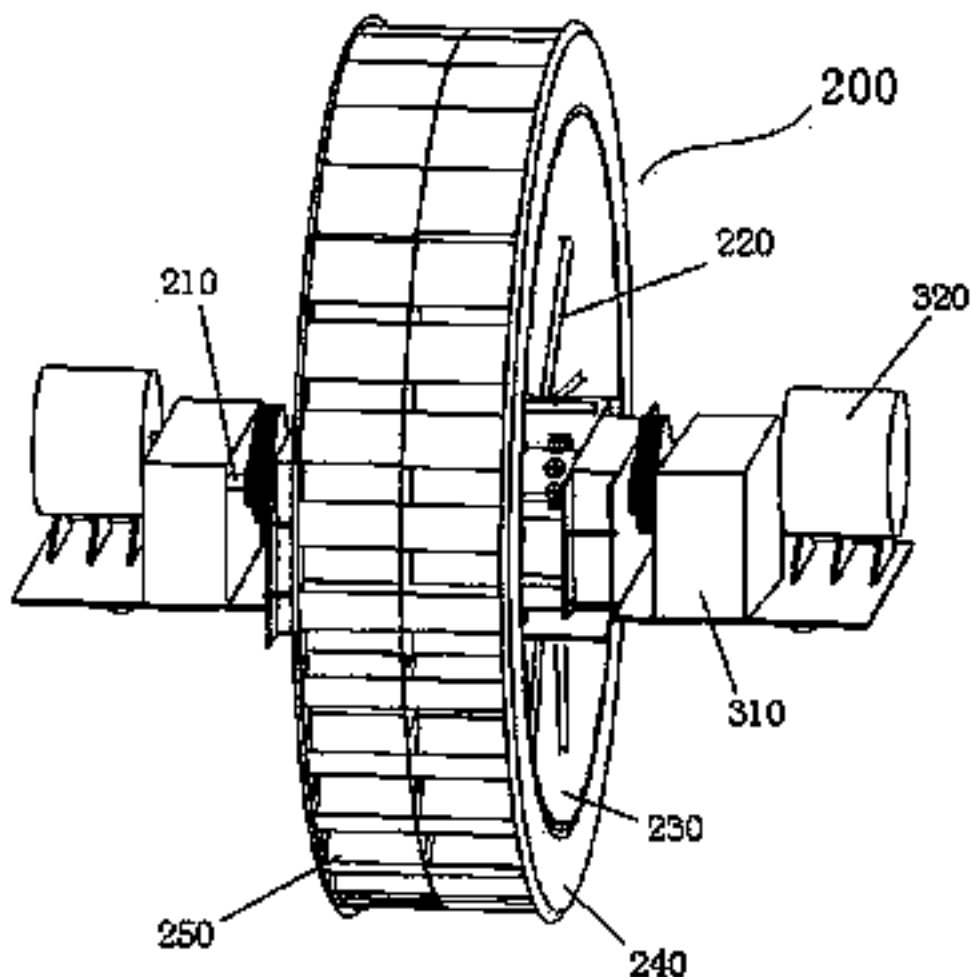
POWER GIKEN

Family 78/200 - FAMPAT - ©Questel

Title

(CN203856638U)

River-flow Pelton type generation waterwheel structure

Images**Publication data including kind & date**[CN203856638](#)

U

2014-10-01

CN203856638U

**Abstract**

(CN203856638U)

The utility model discloses a river-flow Pelton type generation waterwheel structure. The river-flow Pelton type generation waterwheel structure comprises a rotation shaft, a waterwheel supporting framework, a waterwheel wheel body, waterwheel fixing boards and a plurality of water buckets, wherein the rotation shaft is rotatably fixedly arranged on the central axis of the waterwheel wheel body through a bearing; the rotation shaft is fixedly connected with the waterwheel wheel body through the waterwheel supporting framework; the waterwheel fixing boards are arranged at the both sides of

the waterwheel wheel body, and commonly form mounting grooves for mounting the water buckets with the surface of the waterwheel wheel body; the water buckets are arranged to be an arc-shaped groove structure; each water bucket comprises an arc-shaped groove for containing water; the both sides of the water buckets are fixedly mounted with the waterwheel fixing boards; the plurality of water buckets are arranged and mounted inside the mounting grooves; the opening directions of the arc-shaped grooves of the water buckets are opposite to the rotation direction of the waterwheel. The river-flow Pelton type generation waterwheel structure provided by the utility model has the advantages of good working stability and high generation efficiency, and is very applicable to popularization and application.

Inventors

CHEN GUOJI

Latest standardized assignees - inventors removed

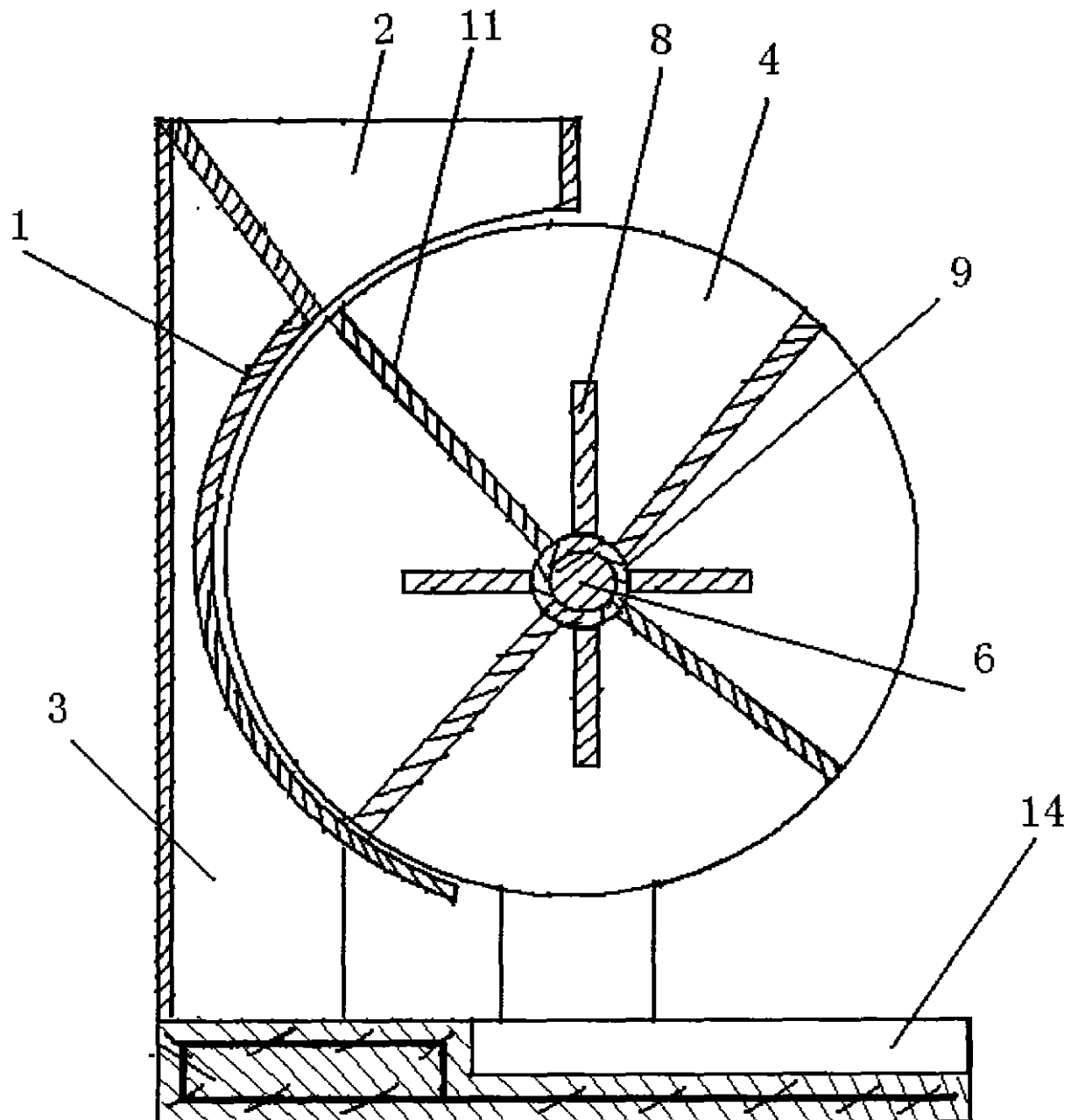
LU YING

Family 79/200 - FAMPAT - ©Questel

Title

(CN203809194U)

Water turbine using water gravitational energy

Images

CN203809194

U 2014-09-03 CN203809194U

Abstract

(CN203809194U)

A water turbine using water gravitational energy is formed by a water baffle plate, a water inlet, a water baffle plate support, a reinforced concrete pedestal, a discharging groove, a water turbine wheel, a bearing, a main shaft, a water turbine rack, half separation plates, a wheel hub, an external side plate, main separation plates and a water bucket, wherein the water baffle plate fixedly connected with the water inlet thereover is fastened on the rack; a water baffle plate surface and the water turbine wheel are on the same circle center arc along a surface and partially wind one side of the water inlet of the water turbine wheel; the width of the water baffle plate is slightly larger than the axial width of the water turbine wheel; the water turbine wheel is formed by a plurality of water buckets possessing the same size and each with a sector-shaped positive projection; each water bucket is formed by the wheel hub, the external side plate and the separation plate in a gapless way; the half separation plate is fixedly connected between two main separation plates in each water bucket; the main separation plates and the half separation plates are all fixedly connected with the wheel hubs and the side plates; the radial length of each half separation plate is half of the length of each main separation plate; the main shaft passes through the circle center of the water turbine wheel and then is fixedly connected with each wheel hub; the main shaft is hinged with and fastened on the rack via the bearing; the water baffle plate support and the water turbine rack are all fastened on the reinforced concrete pedestal; and the pedestal is provided with the discharging groove.

Inventors

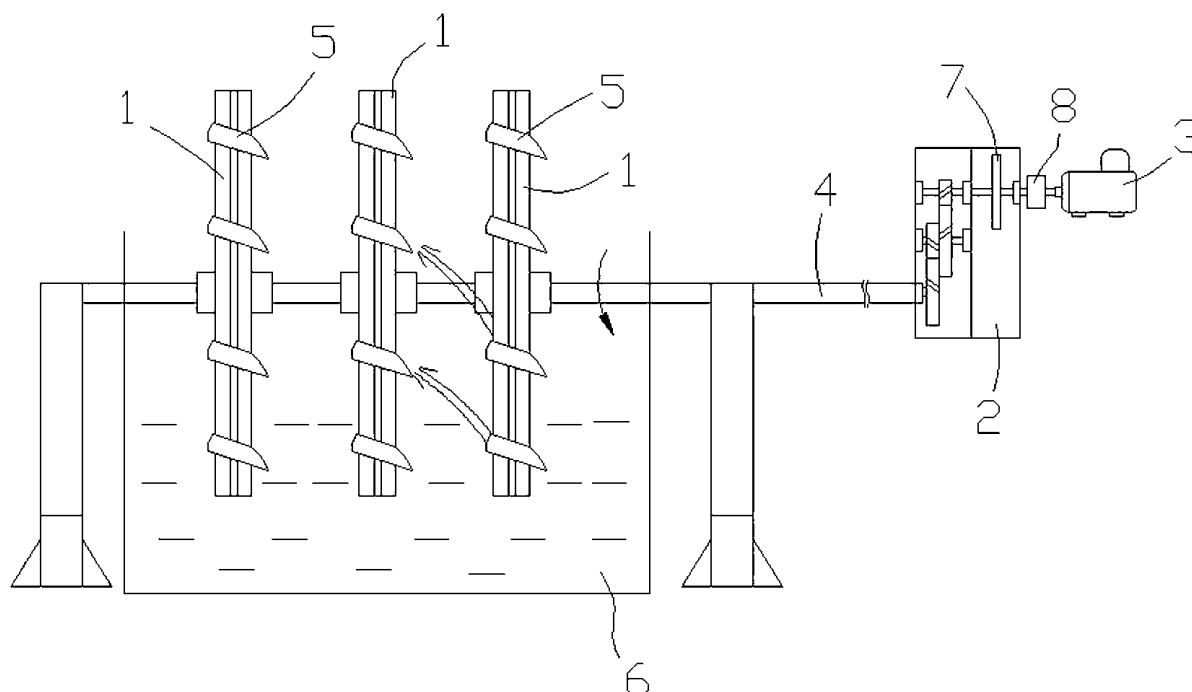
GUO QIANG

Family 80/200 - FAMPAT - ©Questel

Title

(CN103089524)

Power generating device

Images**Publication data including kind & date**

CN103089524

A 2013-05-08 CN103089524

**Abstract**

(CN103089524)

The invention relates to the technical field of power generating devices, in particular to a water power generating device. The device comprises water wheels, a transmission and a power generator. A plurality of water wheels are arranged at intervals on an output shaft and a plurality of buckets are distributed at the edges of the water wheels respectively; the

lower portions of the water wheels are immersed in the flowing water; the output shaft transmits the rotating force to the power generator by the aid of the transmission; the gap between two water wheels can enable the buckets of the back water wheel to pour water to push the front water wheel to rotate; the water power generating device generates power through rotating water wheels driven by rotating water, and utilizes the action of adding water and pouring water by the buckets of the water wheels to further drive the water wheels to rotate; the buckets of the back water wheel pour water to push the front water wheel to rotate so as to continuously drive the water wheels to rotate, and the water power is transmitted to the generator through the output shaft to generate power. The power generating device is simple in structure, can be used in a small water flowing area, can reduce the environmental restraint, and is convenient to mount and use and is energy-saving.

Inventors

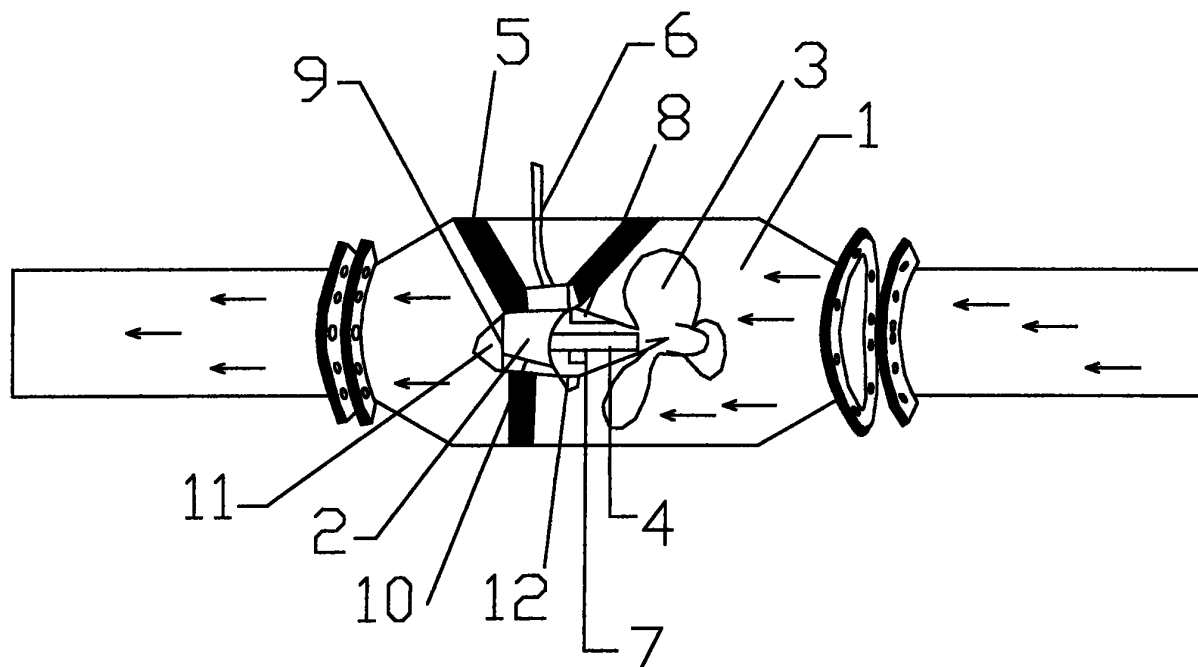
CHEN LIQIN

Family 81/200 - FAMPAT - ©Questel

Title

(CN202023678U)

Pipeline potential energy generating system of tap water works

Images**Publication data including kind & date**[CN202023678](#)

U

2011-11-02

CN202023678U

**Abstract**

(CN202023678U)

The utility model discloses a pipeline pressure generating system, in particular to a pipeline potential energy generating system suitable for water works. The system comprises a pipeline and a generator, wherein the generator is arranged in the pipeline, one end of the generator is fixedly connected with the inner wall of the pipeline through a support, and the other end of the generator is provided with an impeller shaft along the axle direction of the pipeline. Impellers are arranged on the impeller shaft along the circumference of the impeller shaft, the generator is further provided with a cable, and the cable penetrates through the pipeline to be connected with an external boost distribution box. The pipeline potential energy generating system of the water works makes full use of pressure of existing tap water pipelines in delivery of water flow, can generate under the condition without increasing original water pressure, and is provided with a plurality of pipeline integration water wheel driven generators. Generated electric energy can be directly merged into regional power networks. The pipeline potential energy generating system of the water works has the advantages of being low in construction cost, easy to manage and maintain, stable and reliable in generated voltage and constant in electric generation.

Inventors

LI ZHENGFU

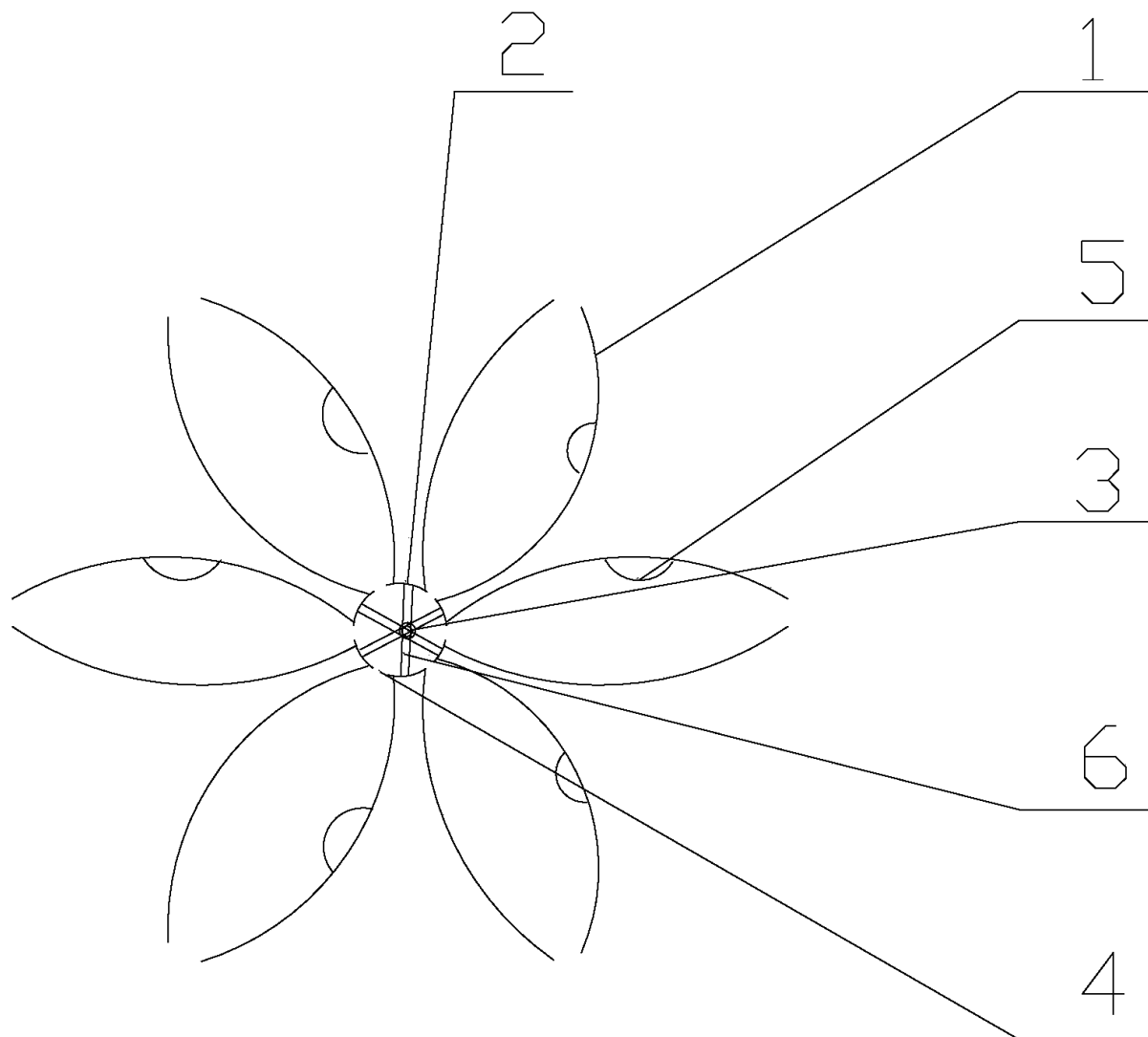
LI MINGJI

Family 82/200 - FAMPAT - ©Questel

Title

(CN204458179U)

Waterwheel

Images**Publication data including kind & date**[CN204458179](#)

U

2015-07-08

CN204458179U

**Abstract**

(CN204458179U)

The utility model relates to a waterwheel which comprises bucket blades, a water wheel and an electric generator main shaft. The waterwheel is characterized in that the bucket blades are in a circular arc shape, and the surfaces of the bucket blades are concave to form water storage concave surfaces; the concave directions of circular arcs of two adjacent bucket blades are reverse, the bucket blades are fixedly connected with the water wheel, the surface of the water wheel is provided with openings, one opening is formed between every two adjacent bucket blades, the electric generator main shaft is arranged in the center of the water wheel, and luminescent lamp bodies are arranged on the bucket blades at intervals. The waterwheel not only can rotate to generate electricity in the water with stronger streaming potential, but also can be driven to rotate through the drop of the water flow in the bucket blades in the water with weaker streaming potential, the lamp bodies on the waterwheel can be turned on to give out light at night, and therefore the ornamental value of the waterwheel is improved.

Inventors

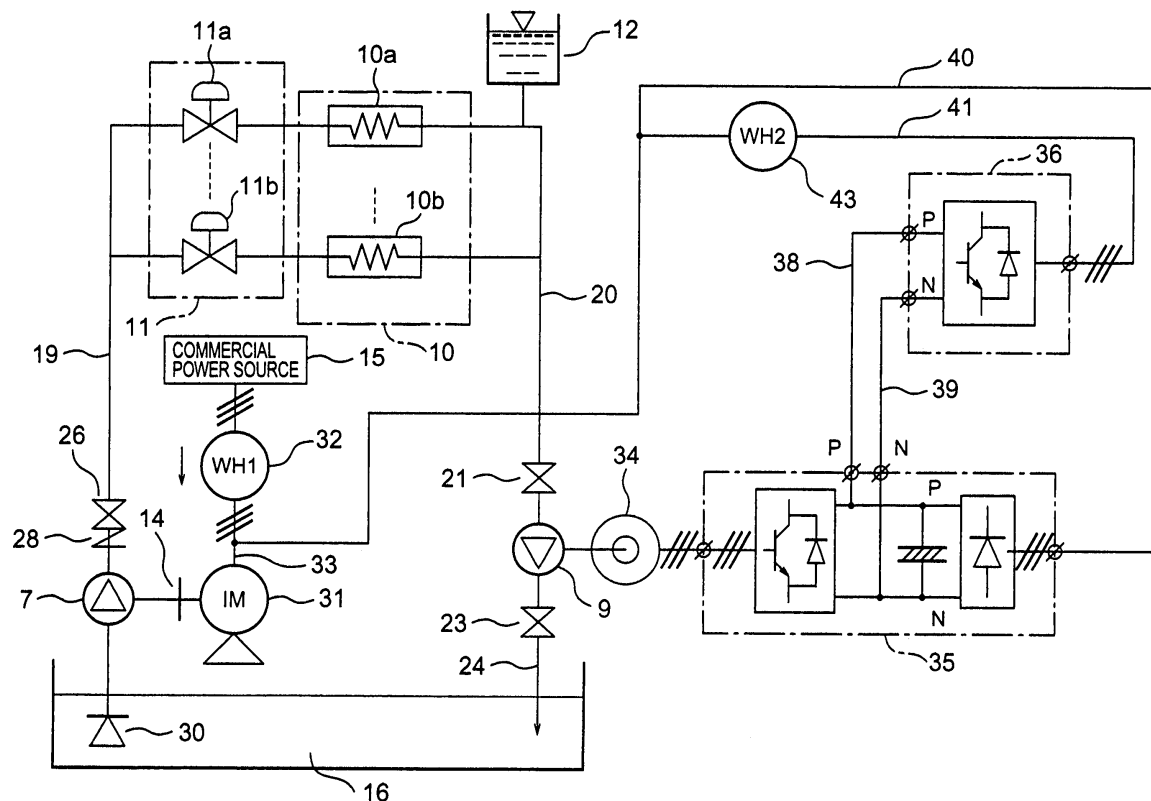
WANG KAIMING

Family 83/200 - FAMPAT - ©Questel

Title

(EP1553356)

Energy recovery apparatus and method of operating energy recovering apparatus

Images**Publication data including kind & date**

EP1348913	A1	2003-10-01	EP1348913
TW200304519	A	2003-10-01	TW200304519
US20030222457	A1	2003-12-04	US20030222457
JP2004003437	A	2004-01-08	JP2004003437
TW571016	B	2004-01-11	TW-571016
EP1553356	A2	2005-07-13	EP1553356
US7019411	B2	2006-03-28	US7019411
US20060113797	A1	2006-06-01	US20060113797
US7081688	B2	2006-07-25	US7081688
EP1553356	A3	2006-07-26	EP1553356
JP2009106151	A	2009-05-14	JP2009106151
JP4332357	B2	2009-06-26	JP4332357
JP4969561	B2	2012-04-13	JP4969561

**Abstract**

(EP1553356)

It is provided an object of the invention to recover unutilized energy as electric power by the hydraulic turbine power generation so as to reuse it. An energy recovery apparatus of the invention includes a heat storage tank provided at a lower portion of a building, a secondary system-side storage pump for pumping water from the heat storage tank and for feeding it to a group of air-conditioning loads, a first water feed pipe provided between an outlet port of the storage pump and the air-conditioning load group, a second water feed pipe for returning the water, discharged from an outlet port of the

air-conditioning load group, to the heat storage tank, an expansion tank or a vacuum breaker provided at an uppermost portion of the second water feed pipe, a hydraulic turbine, which is provided on a lower portion of the second water feed pipe, and is located at such a position as to recover the potential energy of the water discharged from the air-conditioning load group, a generator driven to be rotated by a torque of the hydraulic turbine to produce electric power, an inverter connected to an output terminal of the generator so as to produce DC power, and a system connecting device which receives the DC power from the inverter, and converts it into AC power, and supplies it to an electric motor for driving the secondary system-side storage pump.

Inventors

SATO K

YANAGISAWA S

TANAKA Y

TAKAHASHI S

FUJITA Y

MATSUMOTO O

Latest standardized assignees - inventors removed

HITACHI

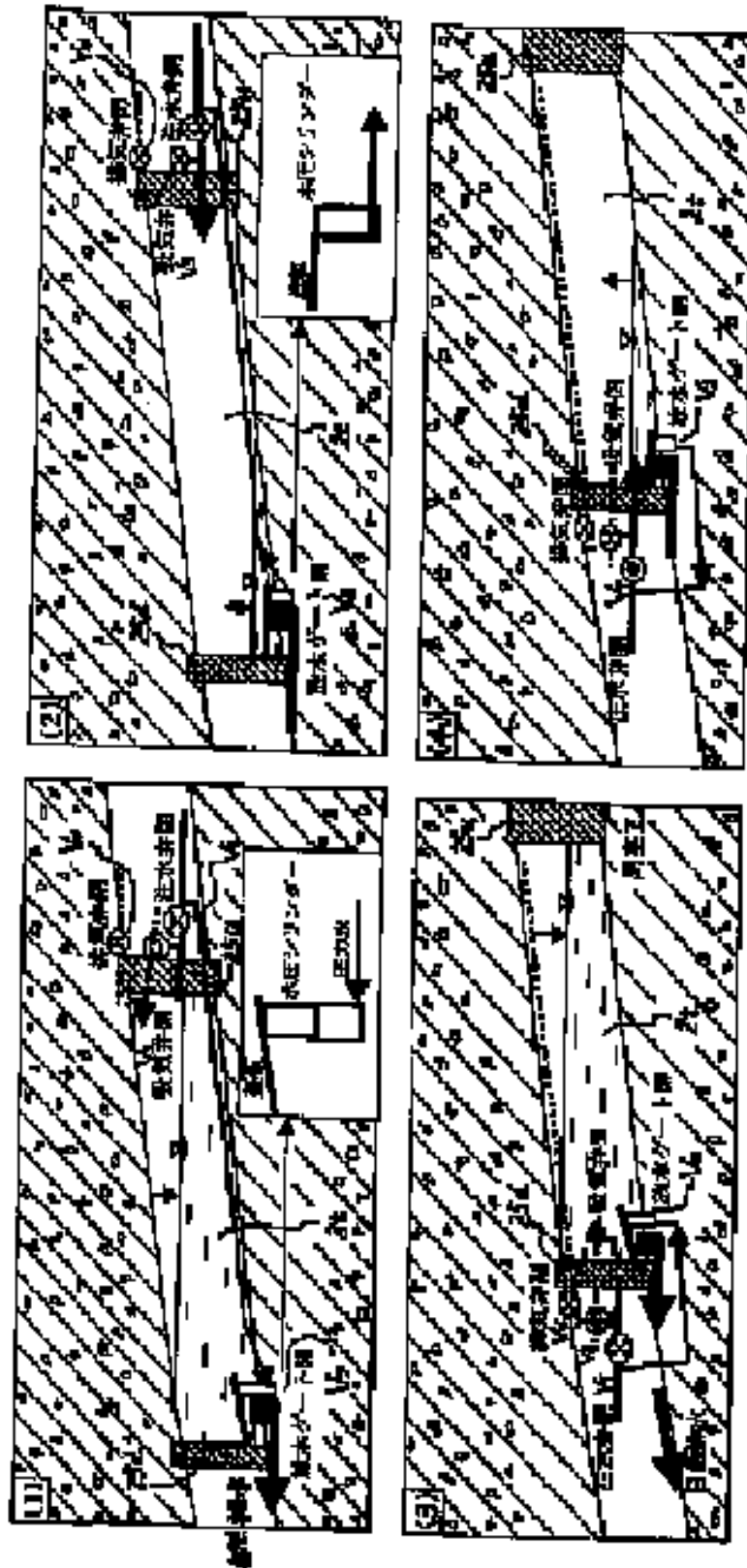
Family 84/200 - FAMPAT - ©Questel

Title

(JP2000257544)

Air energy utilizing system utilizing dam or its circumferential facility

Images



Publication data including kind & date

JP2000257544

A

2000-09-19

JP2000257544



Abstract

(JP2000257544)

PROBLEM TO BE SOLVED: To establish a system capable of utilizing compressed air energy by effectively utilizing a dam or its circumferential facility. **SOLUTION:** In a tunnel 2t manufactured for a temporary drain or the like, its upper side is closed by closing execution 25u, and its lower side is closed by closing execution 25d, and thereby, a manufacturing chamber 2t of compressed air is formed. A conduit for leading water of the dam lake to the air manufacturing chamber 2t is penetrated from the closing execution 25u to the air manufacturing chamber 2t, and a water filling valve V1 is disposed. A intake valve V3 for intaking outside air into the air manufacturing chamber 2t and an exhaust valve V4 for supplying

compressed air which is manufactured to an utilizing side, are disposed. When water is filled from the dam lake into the air manufacturing chamber 2t, a water level is raised gradually, air of an upper space is compressed, and the compressed air is manufactured. Since a large compressed air manufacturing chamber is realized utilizing a conventional tunnel of the dam facility, much compressed air is manufactured in low costs.

Inventors

Kawasaki Hideaki

YACHIYO ENGINEERING CO LTD

SAKAMOTO TADAHIKO

Latest standardized assignees - inventors removed

OKINAWA DEVELOPMENT AGENCY OKINAWA GENERAL BUREAU

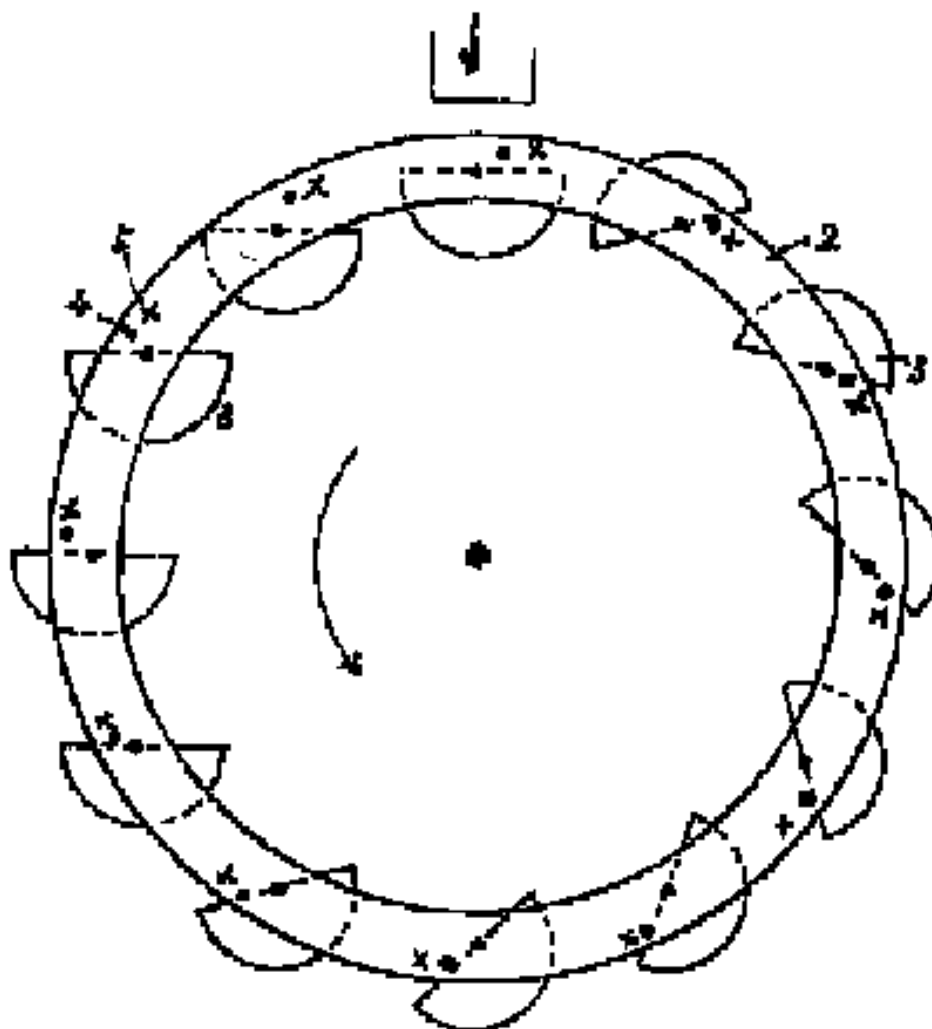
Family 85/200 - FAMPAT - ©Questel

Title

(JP08193567)

Bucket hydraulic wheel

Images



Publication data including kind & date

JPH08193567

A

1996-07-30

JP08193567



Abstract

(JP08193567)

PURPOSE: To take out effectively the potential energy of a running water by furnishing buckets in lieu of vanes of a vertical type hydraulic wheel, hanging the buckets, and discharging the water through inclining of the bucket which has come to the down position. **CONSTITUTION:** In a hydraulic wheel of vertical type concerned, buckets 3 are hung instead of usual vanes of hydraulic wheel. When each of the buckets 3 comes to the down position, it is inclined and the water is discharged, which leads to a great enhancement of the efficiency. The bucket inclining can be achieved by placing a contacting piece on the ground or using a contacting rod 4 to be installed to the side plate 2 of hydraulic wheel to incline the bucket 3 by

changing the relative position of the rotor with bucket 3. When the contacting rod 4 is used, the shock given when the bucket 3 is turned over must be relieved, and therefore, a stopper 5 of a soft material is furnished or a vortex is generated by a magnet to give a braking force.

Inventors

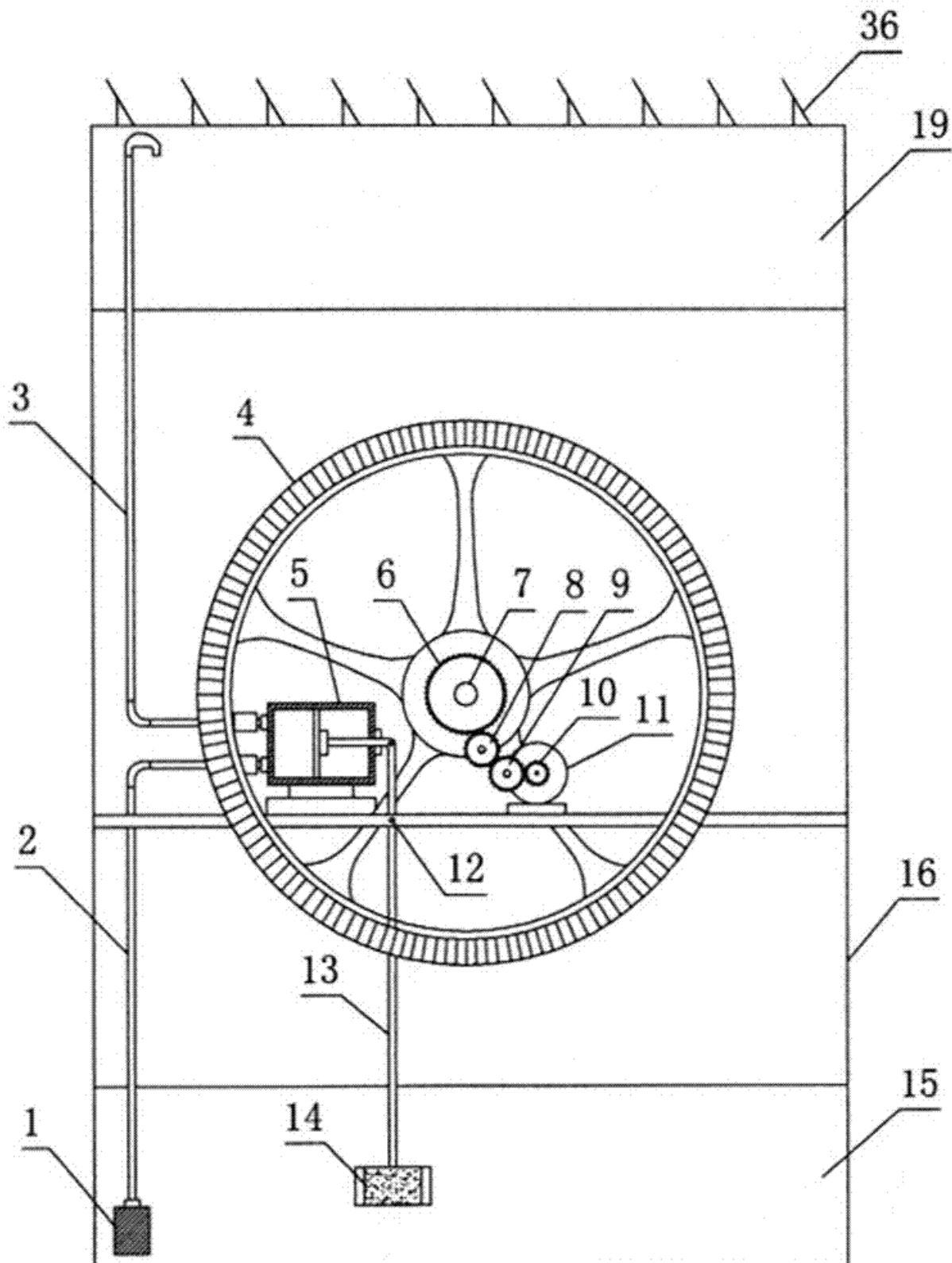
SANO SADAJIRO

Family 86/200 - FAMPAT - ©Questel

Title

(CN108194252)

Hydroelectric generator utilizing solar energy to generate power to drive piston type pressure water pump for water storage

Images

Publication data including kind & date[CN108194252](#)

A

2018-06-22

CN108194252

**Abstract**

(CN108194252)

The invention discloses a hydroelectric generator utilizing solar energy to generate power to drive a piston type pressure water pump for water storage. According to the hydroelectric generator, the middle of a machine frame is provided with a center shaft, a water turbine is arranged on the center shaft, the inner side of the water turbine is provided with a central large gear, the lower side of the central large gear is provided with an accelerator, and the lower left side of the accelerator is provided with a power generator; the rear side of the machine frame is provided with the pressure water pump, a cylinder body of the pressure water pump is internally provided with a piston, the front side of the piston is provided with a piston rod, and the front outer end of the piston rod is provided with a universal ball; and the lower end of the pressure water pump is provided with a motor, and the upper end of the motor is provided with a reduction gearbox. During working, a speed reducer drives an eccentric guide rod on a connection disc, the push-pull piston rod drives the piston, thus, water in a lower water box is sucked into the cylinder body and then pressed into an upper water box, the water in the upper water box is ejected out through a water nozzle and then enters the water turbine, the water turbine drives the central large gear to rotate, and the central large gear is accelerated through the accelerator and then drives the power generator to generate power for daily use.

Inventors

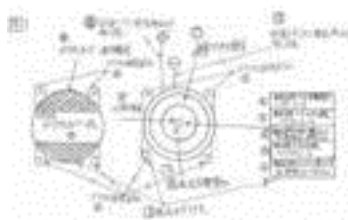
LIU XIPU

Family 87/200 - FAMPAT - ©Questel

Title

(JP2013083268)

Semipermanent water circulation power amplification power generation system loaded with high output dynamo by water power dam

Images**Publication data including kind & date**[JP2013083268](#)

A

2013-05-09

JP2013083268

**Abstract**

(JP2013083268)

PROBLEM TO BE SOLVED: To provide a semipermanent water circulation power amplification type power generation dam system that clearly realizes prevention of depletion of natural resource, temperature rise on the earth, and emission of carbon dioxide. SOLUTION: The water power dam of the semipermanent water circulation power generation system can increase an amount of electric power generation with rotation of dynamo power generation device and electro-magnetic induction power generation rotary machinery by a portion where the falling head of water is lengthened since the flow speed of water that hits water wheel boards becomes faster by replacing a concrete straight water pipe with an equal screw eddy shape screw water pipe to construct a structure suited for increasing the speed of the dam water that can create amplification power generation.

Inventors

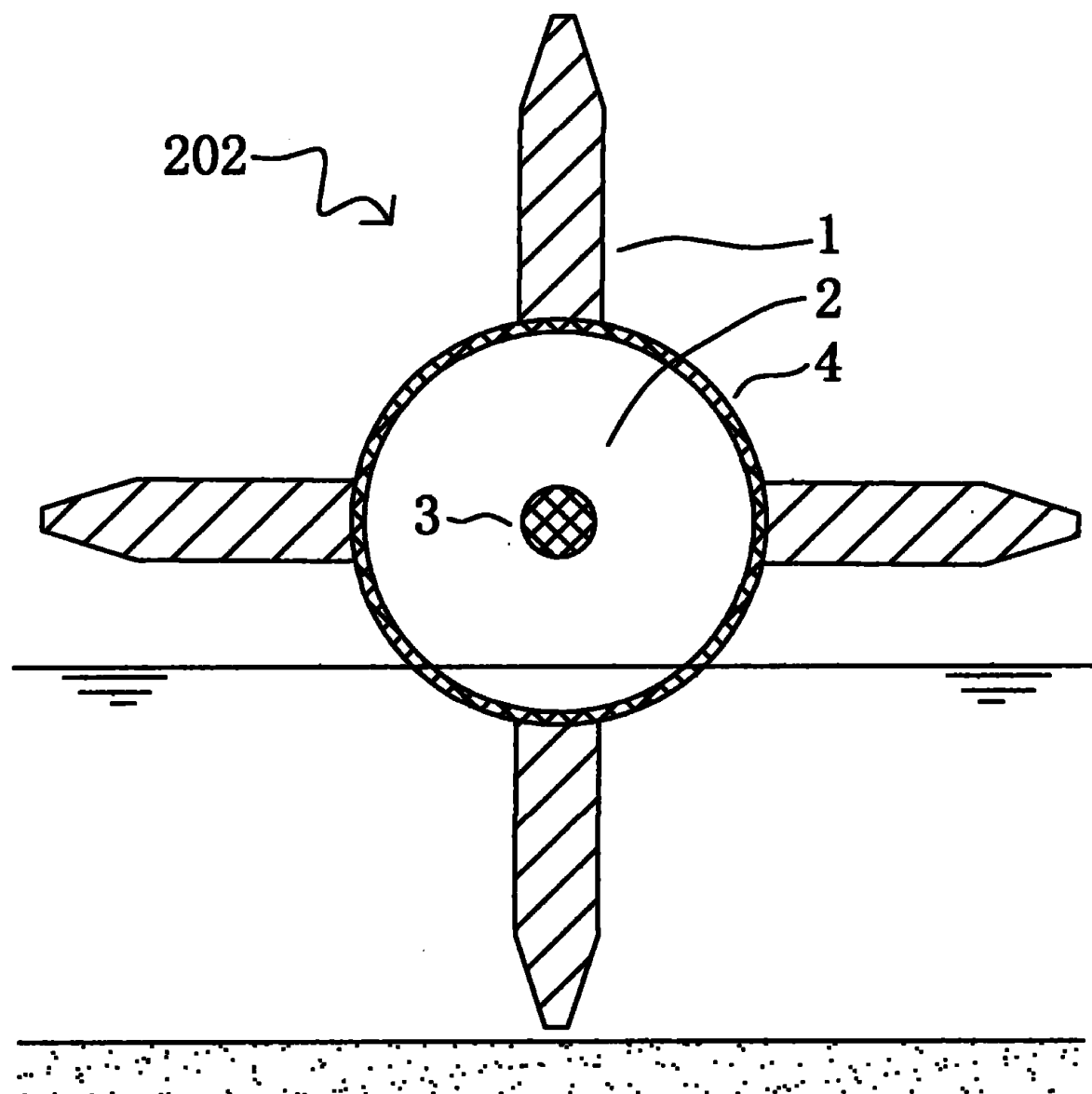
SONNO KAZUO

Family 88/200 - FAMPAT - ©Questel

Title

(CN102345549)

Floating wheel type water turbine

Images**Publication data including kind & date**[CN102345549](#)

A

2012-02-08

CN102345549

**Abstract**

(CN102345549)

The invention relates to a water turbine used for operations such as hydroelectric power generation, water pumping and the like by using nature water flow and low water head. The water turbine is characterized in that a water wheel is composed of a floating barrel and blades provided with independent seal cavities, the water wheel rotates by absorbing water energy so as to provide power for the water turbine and generally provide buoyant force support for the water turbine simultaneously; and the water turbine is divided into a built-in type water turbine and an external type water turbine and the main difference between the two types of water turbine is that a generator, a gear case and the like are placed inside or outside the floating barrel. The water turbine provided by the invention has the advantages of low manufacturing cost and operating cost and high energy conversion rate, and is applicable to multiple occasions.

Inventors

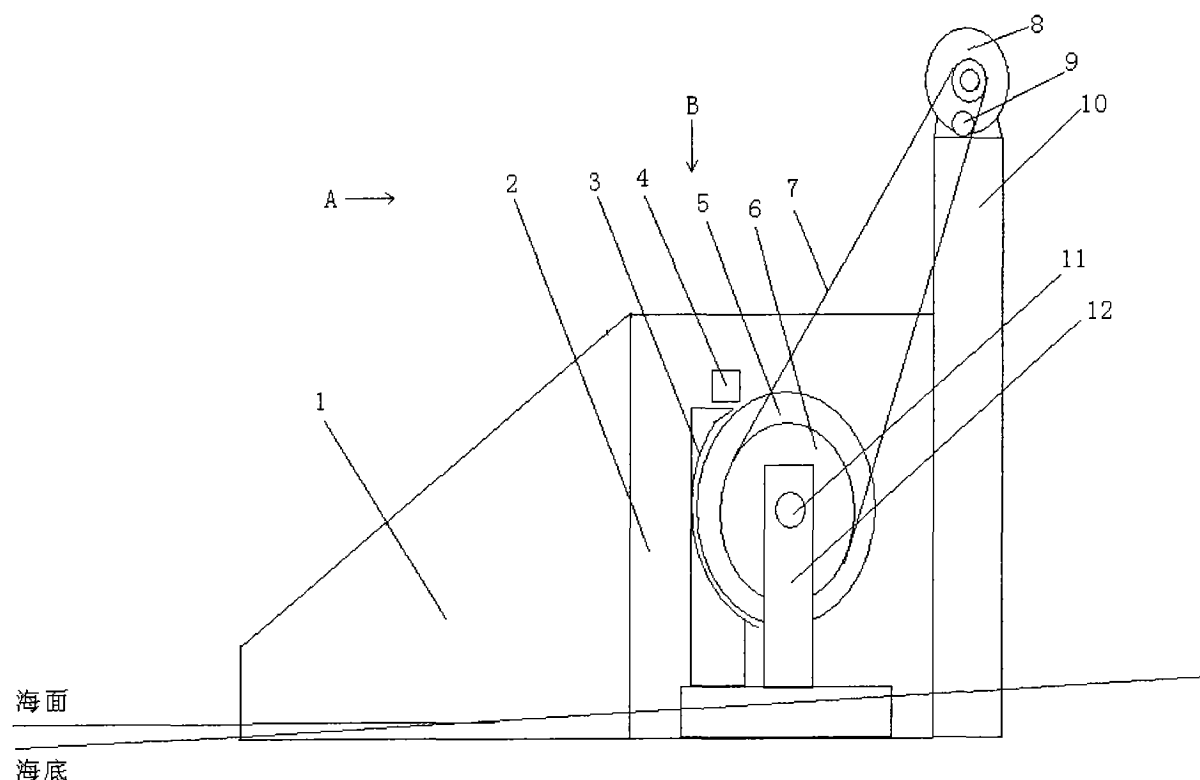
YANG CHUNYI

Family 89/200 - FAMPAT - ©Questel

Title

(CN201679617U)

Intertidal zone wave energy electricity generating system

Images**Publication data including kind & date**

CN201679617

U

2010-12-22

CN201679617U

**Abstract**

(CN201679617U)

The utility model provides an intertidal zone wave energy electricity generating system, belonging to the technical field of wave electricity generation. The intertidal zone wave energy electricity generating system is characterized in that a main dam is a dam body with a stable base; the main dam is provided with an impounding reservoir; a wave raising groove is a ladder-shaped waterway which is inclined relative to the bottom surface at the middle part of the main dam and is wide in the lower part and narrow in the upper part; the top of the wave raising groove is enclosed by the impounding reservoir in a concave manner; the lower part of the wave raising groove is in butt joint with a plurality of wave collecting dams; the wave collecting dams are trumpet-shaped dams which are symmetrically built out of the main dam, are gradually risen from the ahead sea surface to the top of the wave raising groove, and are wide in the outer part and narrow in the inner part; a water outlet pipe is opposite to a water bucket of a water bucket water cart; the water bucket water cart is articulated with a bracket of the water cart through a main shaft to be fixed on the main dam; one side of the water cart for injecting the water is fixedly provided with a semicircular water baffling board which has the same radian as the outer edge of the water cart; the water baffling board is fixedly arranged on the main dam; the water baffling board is slightly wider than the edge of the water bucket and has the gapped semi-package relative to the water bucket water cart; the water bucket water cart is provided with a synchronous belt wheel; the synchronous belt wheel is connected with an electric generator through a synchronous belt; a belt tightening wheel is fixedly arranged on a support column of the electric generator to be contacted with the synchronous belt wheel in a rolling way; and the electric generator is fixedly arranged on the support column higher than the seawater.

Inventors

GUO QIANG

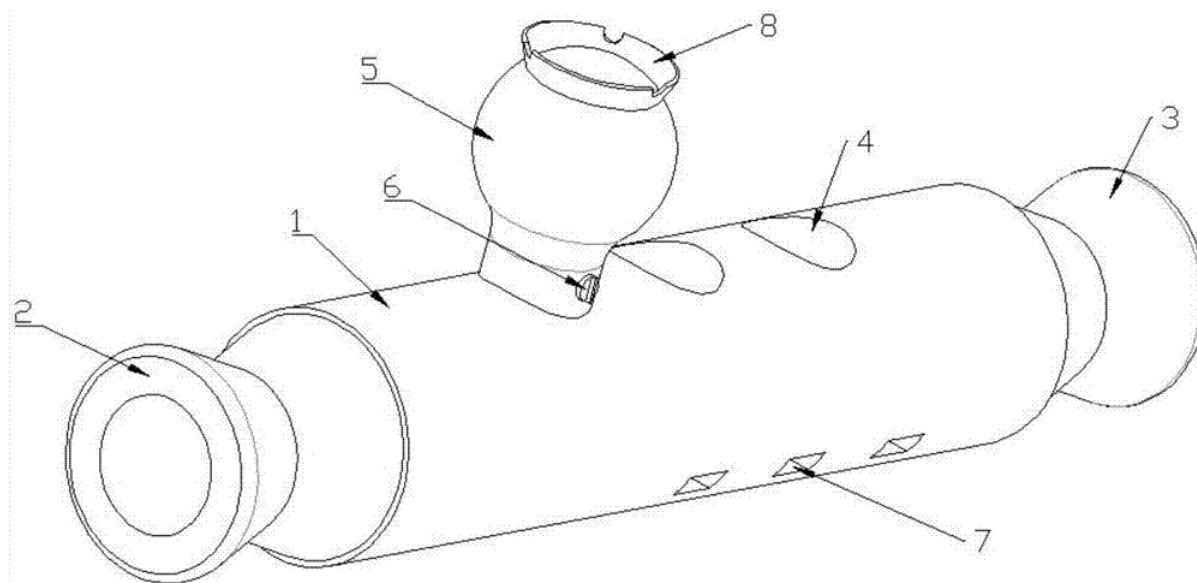
Family 90/200 - FAMPAT - ©Questel

Title

(CN107461293)

Water current power generation device

Images



Publication data including kind & date

[CN107461293](#)

A 2017-12-12 CN107461293



Abstract

(CN107461293)

The invention provides a water current power generation device which comprises a barrel, a water turbine and a power generator. The water current power generation device is characterized in that the barrel is of a hollow structure, a water inlet and a water outlet are formed in the two ends of the barrel, a water turbine rotating unit and a power generator are arranged inside the barrel, the water turbine rotating unit is connected with the power generator through a bearing, the power generator is connected with a rectifier and a storage battery through wires, the storage battery is connected with an inverter and a power port sequentially through wires, and the power port is formed in one side of the barrel. According to the water current power generation device, the kinetic energy of water in a water pipe is utilized for driving the water turbine to rotate so that power can be generated, and energy is sufficiently utilized.

Inventors

FENG WEIFENG

Latest standardized assignees - inventors removed

FOSHAN DAODAO ELECTRONIC TECHNOLOGY

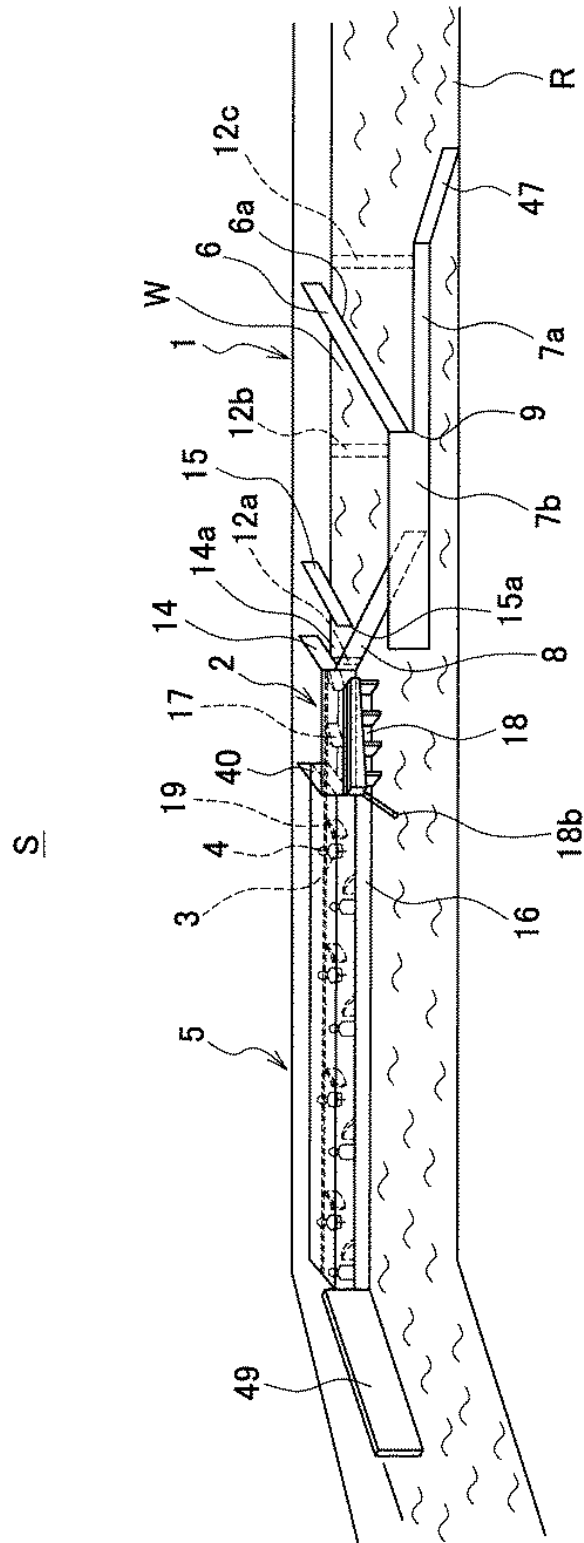
Family 91/200 - FAMPAT - ©Questel

Title

(JP2010116771)

Hydroelectric power generation system and comprehensive hydroelectric power generation system

Images



Publication data including kind & date

JP2010116771	A	2010-05-27	JP2010116771
JP4586104	B2	2010-09-10	JP4586104



Abstract

(JP4586104)

PROBLEM TO BE SOLVED: To provide a hydroelectric power generation system capable of regulating the water quantity

and water flow velocity to desired ones according to the state and size of a river.

SOLUTION: This hydroelectric power generation system S includes a water quantity regulating part 1 which is installed in a flow passage W formed by partitioning a part of the river R by a wall, formed in such a manner that the width of the flow passage W on the downstream side is narrower than that on the upstream side, and regulates the water quantity of the river R to a predetermined one, a water flow regulating part 2 for regulating the flow velocity and the hydraulic pressure of the water flowing from the downstream side of the water quantity regulating part 1 into the system, and a power generation part 5 for driving a power generator 4 for power generation by supplying the water flowing from the downstream side of the water flow regulating part 2 into the system to a turbine 3 installed in the flow passage W to provide a torque.

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Inventors

SHIDAO TETSUO

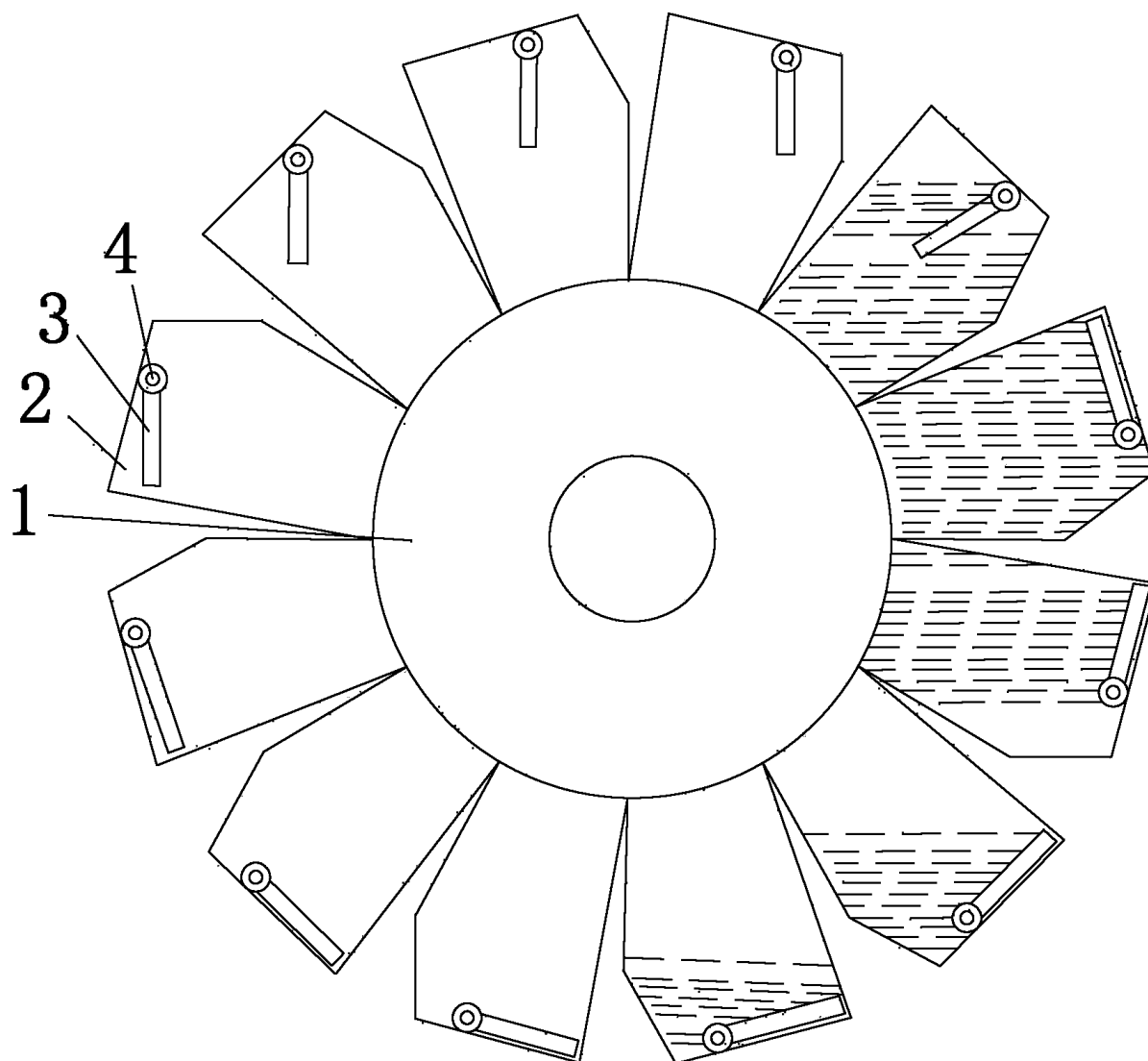
Family 92/200 - FAMPAT - ©Questel

Title

(CN203978695U)

Water wheel for hydroelectric generation device

Images



Publication data including kind & date

[CN203978695](#)

U 2014-12-03 CN203978695U



Abstract

(CN203978695U)

The utility model provides a water wheel for a hydroelectric generation device. The water wheel comprises a rotating wheel

and a plurality of fountains, the rotating wheel can be fixed onto a spindle, the fountains are arranged along the circumferential direction of the rotating wheel, and water baffles are hinged into the fountains. By the aid of the water wheel for the hydroelectric generation device, water in the fountains can be prevented from rapidly spilling, and the rotating speed of the fountains is ensured.

Inventors

LÜ GANBIN

LÜ YONGJIANG

Latest standardized assignees - inventors removed

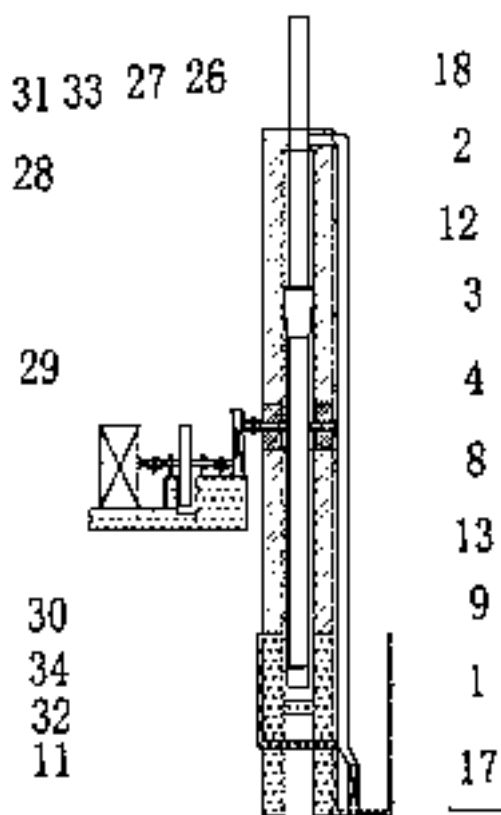
L B ENTERPRISES

Family 93/200 - FAMPAT - ©Questel

Title

(CN103244339)

Power generation system using water

Images**Publication data including kind & date**[CN103244339](#)

A

2013-08-14

CN103244339

**Abstract**

(CN103244339)

The invention provides a power generation system using water. The power generation system comprises a water supply unit, a water wheel box unit and a power generation unit, a water wheel box forms a plurality of water receiving hoppers with openings through blades, a wheel ring and side plates, abrasion-resistant nylon soft rubber plates are arranged at the top ends of the blades and the side plates and are matched with a semi-tight air guide sleeve, and by the aid of a structure adopting the lever principle, and gravity and impact force of the water are exponentially magnified by the water wheel box unit through the lever principle. By the aid of scientific design, the power generation system meets excessive requirements of a water-power generator for water pressure, the service cycle of equipment is prolonged, manpower and material resource investment for daily maintenance of the equipment is decreased, production cost is effectively reduced, the power generation system is durable in use, high in efficiency, unique and simple in structure, easy to machine and low in requirement for water sources, can use the water sources including ravine stream, water channels, ponds, circulating water

in heat-engine plants and water drained from hydraulic power plants, can also use underground water sources or other water sources, scarcely consumes water except for natural evaporation, can be widely used for mountainous areas with abundant water power, and provides new energy for remote mountainous areas.

Inventors

CHEN TUO

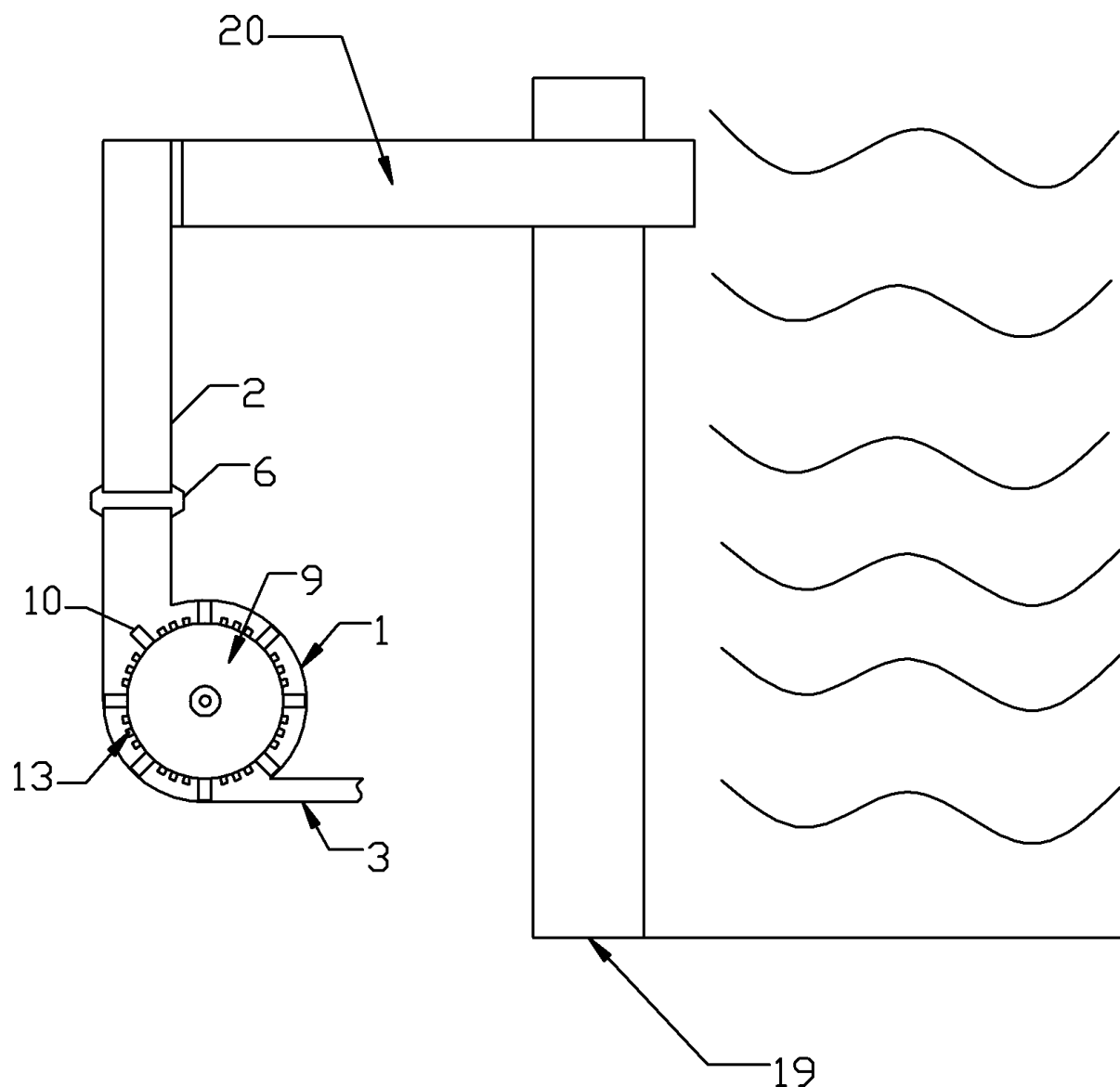
Family 94/200 - FAMPAT - ©Questel

Title

(CN102562421B)

Hydroelectric generating set and dam power generation system

Images



Publication data including kind & date

CN102562421	A	2012-07-11	CN102562421
CN102562421	B	2014-06-18	CN102562421B



Abstract

(CN102562421B)

The invention discloses a hydroelectric generating set which comprises a cylindrical water cylinder with a water inlet and a water outlet, a water conduit, a water wheel, a water outlet pipe and a generating set, wherein the water conduit is connected with the water inlet of the water cylinder, the water outlet pipe is connected with the water outlet of the water cylinder, the water conduit is vertically arranged in the tangent direction of the water inlet of the water cylinder, and the extension line of the water conduit is vertical to the extension line of the water outlet pipe; and the water wheel is arranged

in the water cylinder and is coaxially connected with the generating set at the outside. The invention provides the hydroelectric generating set and a dam power generation system and provides a dam power generation building structure and a more effective water injection mode, therefore, the water has much more free falling movement potential energy, and the geopotential energy guarantees strong water turbine power, small water requirement for acting and high mechanical efficiency.

Inventors

GAO HONGLIANG

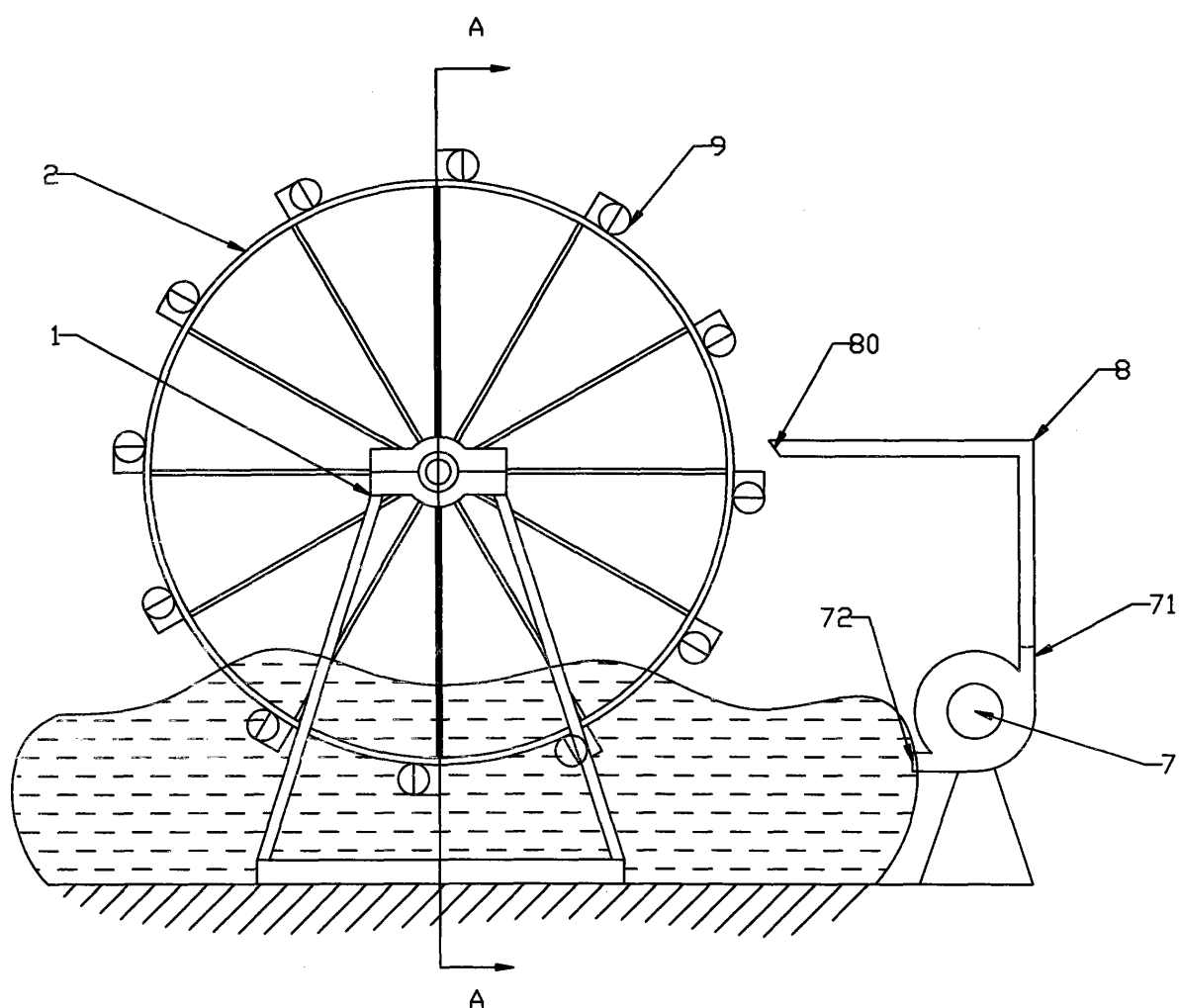
Family 95/200 - FAMPAT - ©Questel

Title

(CN201851263U)

Hydropower generating device

Images



Publication data including kind & date

CN201851263

U

2011-06-01

CN201851263U



Abstract

(CN201851263U)

The utility model discloses a hydropower generating device, and aims to solve the problems of large scale, high cost, and the like in the prior art. The hydropower generating device comprises a support, a water wheel and a power generator, wherein, the support comprises two parallel vertical frames arranged at intervals; a bearing seat and a bearing are arranged at the top of each vertical frame; a main shaft pass through two bearing inner rings; the water wheel comprises an inner wheel hub, an outer wheel hub arranged concentrically with the inner wheel hub, and a plurality of wheel spokes connecting the inner and the outer wheel hubs in the radial direction; a plurality of water buckets are arranged on the outer edges of the inner and the outer wheel hubs; the buckets are arranged in the radial direction of the inner and the outer wheel hubs; the water wheel is arranged between the two vertical frames; the main shaft is arranged in the inner wheel

hub; and one end of the main shaft is outwards connected with an input end of the power generator. The water wheel is placed in water, and the kinetic energy of water flow or the geopotential energy of water is utilized to scour the water buckets; as the water buckets can store water, the power generator is driven to generate power by utilizing the gravity of the water and the inertia of the water wheel; a dam is not needed to be built, and as long as water flows, the power generator can be driven to generate power; the scale of the hydropower generating device can be flexibly arranged according to requirements; and furthermore, the hydropower generating device has a simple structure and requires low cost.

Inventors

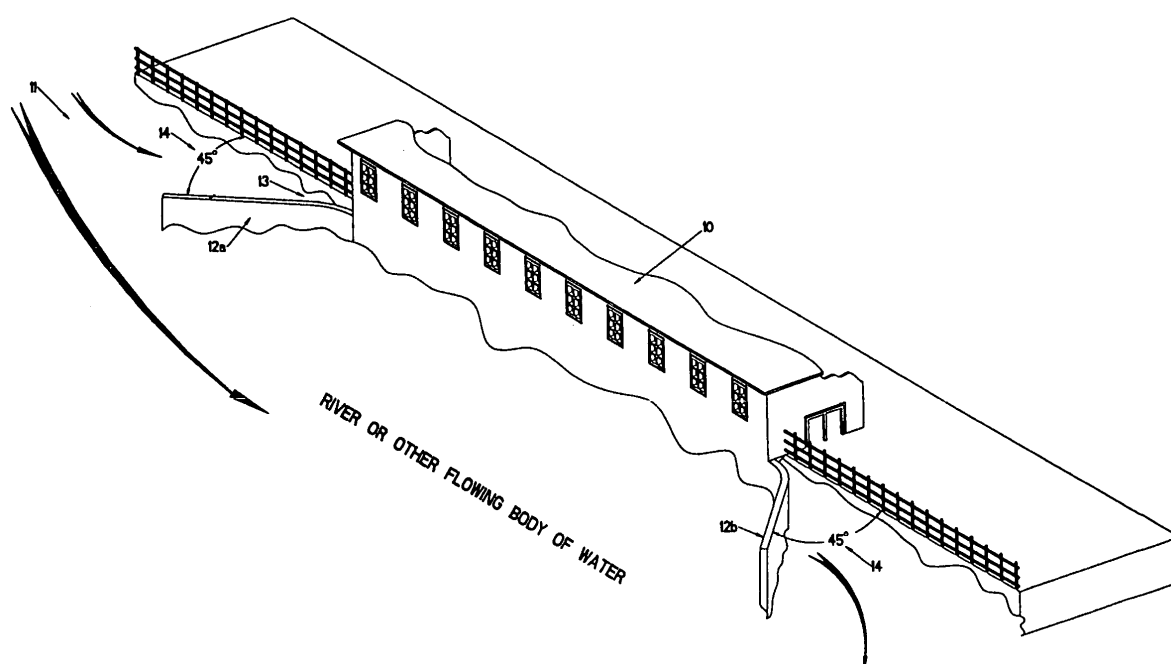
CENG YAQING

Family 96/200 - FAMPAT - ©Questel

Title

(US7262517)

Hydro-electric power generating system

Images**Publication data including kind & date**[US7262517](#)

B1 2007-08-28 US7262517

**Abstract**

(US7262517)

A hydroelectric power plant for use in flowing bodies of water is described which includes a new spillway canal constructed to enhance the flow of water by increasing the water pressure. Because the canal has the angled feature on both ends, the water flow can be enhanced when backflow conditions exist as well as when primary flow conditions are present. In addition the canal utilizes a unique combination of both traditional and Pelton type water wheels to convert the water pressure to electric power. The canal, the extensions and both types of water wheels are also adjustable in nature to maximize the amount of power obtainable from any given body of water.

Inventors

SRYBNIK SIMON

SRYBNIK LOUIS

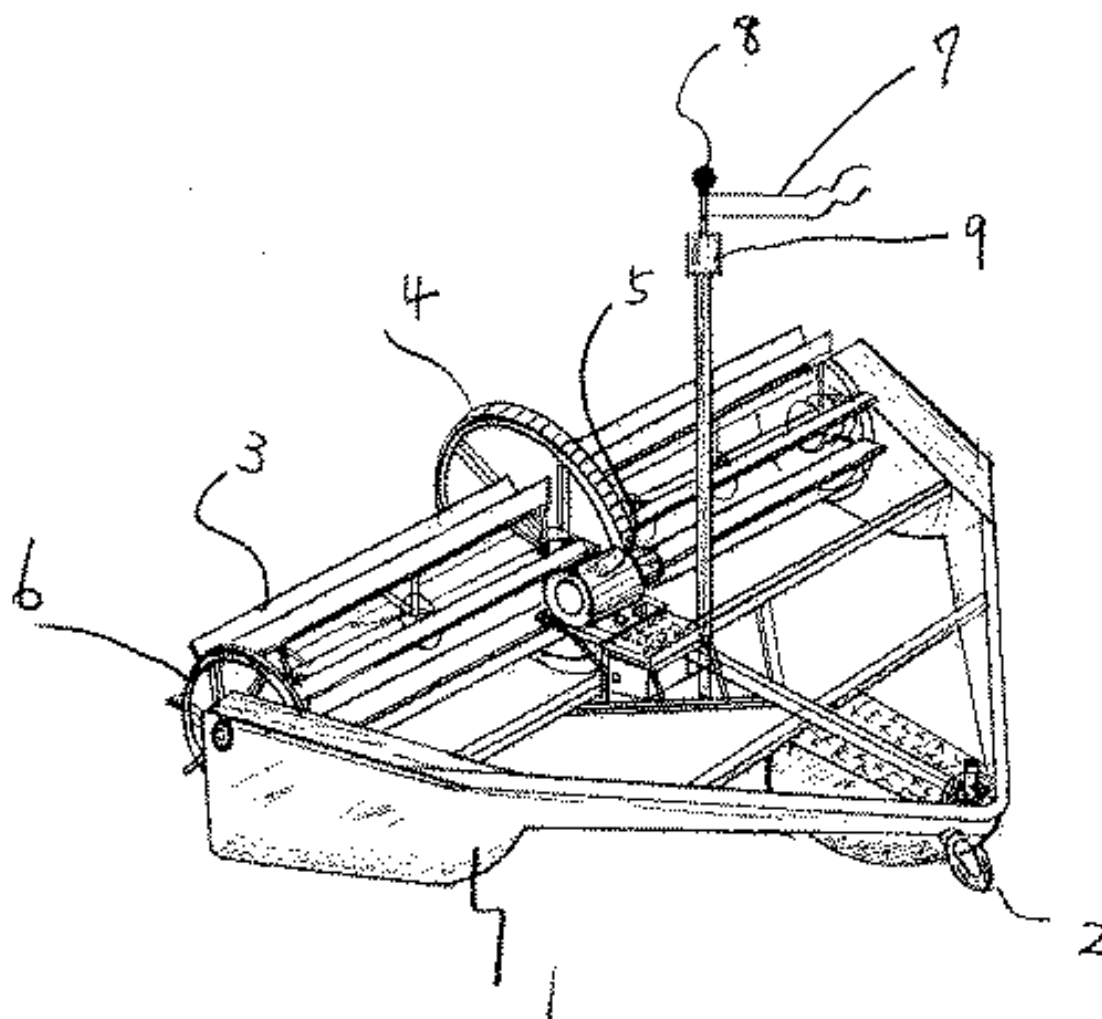
Family 97/200 - FAMPAT - ©Questel

Title

(JP2005351125)

Laterally long water turbine type water flow generator

Images



Publication data including kind & date

JP2005351125

A

2005-12-22

JP2005351125



Abstract

(JP2005351125)

PROBLEM TO BE SOLVED: To provide a small hydraulic power generator capable of load power generation in the sea on the earth and a river of land without selecting a place.

SOLUTION: Thin rectangular plates (hereinafter referred to as a water turbine blade) are circularly arranged in a plurality, to be formed as a rotatable laterally long water turbine. A large diameter wheel is juxtaposed in the middle of its circular laterally long water turbine. A rotating speed of the generator can be largely increased by using this large diameter wheel for increasing a speed. Thus, the problem can be solved by this laterally long water turbine type water flow generator having an installation place free structure for generating electric power by rotating the water turbine even in rapidity of a water flow in an ocean current and a river.

COPYRIGHT: (C)2006,JPO&NCIPI

Inventors

CHOSHIO YASUHISA

Latest standardized assignees - inventors removed

CHOSHIO YASUHISA

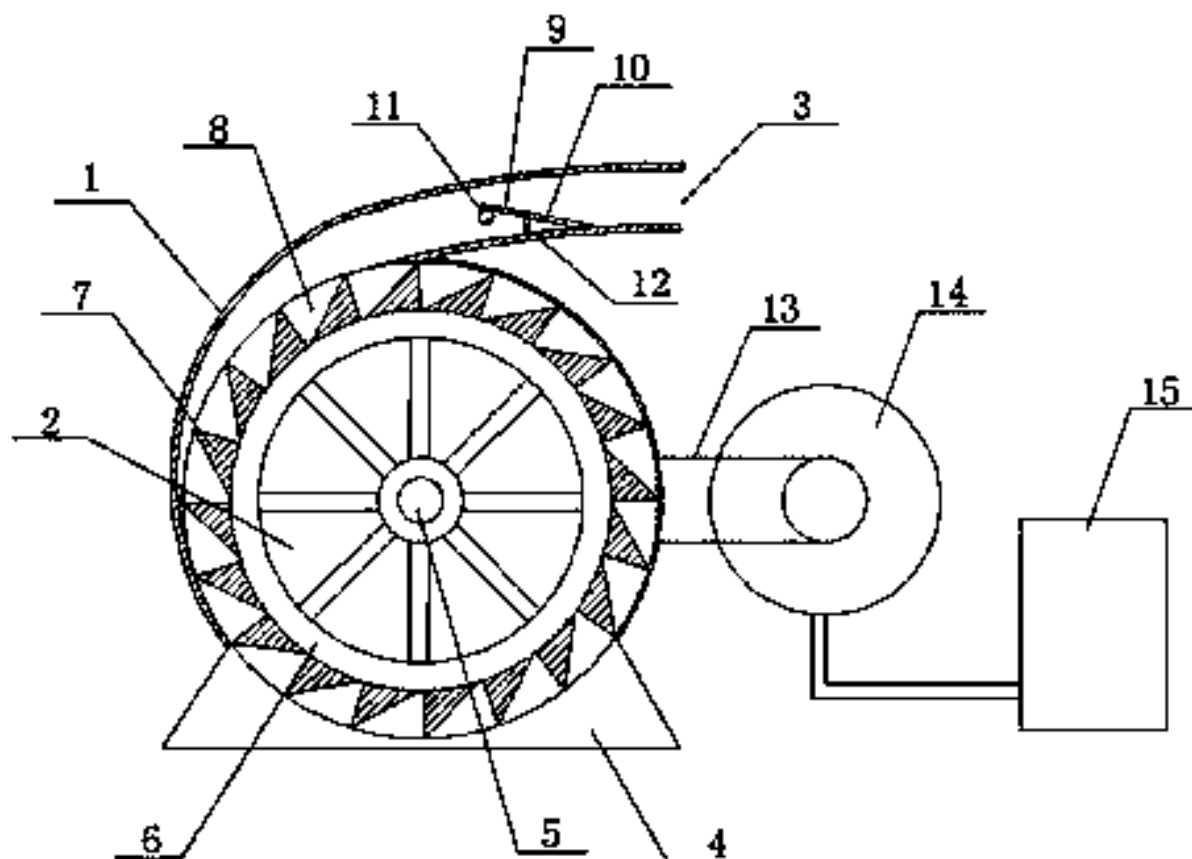
Family 98/200 - FAMPAT - ©Questel

Title

(CN204493063U)

Hydroelectric generator

Images



Publication data including kind & date

CN204493063

U 2015-07-22

CN204493063U



Abstract

(CN204493063U)

The utility model discloses a hydroelectric generator. The hydroelectric generator comprises a shell, a water wheel, a pressure adjustment device and an electric generator body. The water wheel is arranged inside the shell and comprises a rotating shaft and a drum. A plurality of tooth-shaped tanks are evenly distributed outside the drum. Water sealing plates are arranged at the two ends of each tooth-shaped tank. The pressure adjustment device is installed on a water outlet and comprises a water adjustment plate and an adjustment part. One end of the water adjustment plate is hinged to the side close to the outer end of the water outlet. The tail of the water adjustment plate is connected with the adjustment part. An elastic part is further arranged between the water adjustment plate and the side wall of the water outlet. One end of the elastic part is connected with the water adjustment plate, and the other end of the elastic part is connected with the side wall of the water outlet. The electric generator body is connected with the water wheel through a belt. A high-pressure air storage tank is connected to the electric generator body through an air delivery pipe. The hydroelectric generator is simple in structure and convenient to use; the hydroelectric generation requirement is reduced, the energy consumption is reduced, more energy is saved, and the hydroelectric generator is more environmentally friendly and particularly suitable for remote regions.

Inventors

XU JIAN

Latest standardized assignees - inventors removed

SHENYANG INSTITUTE OF ENGINEERING

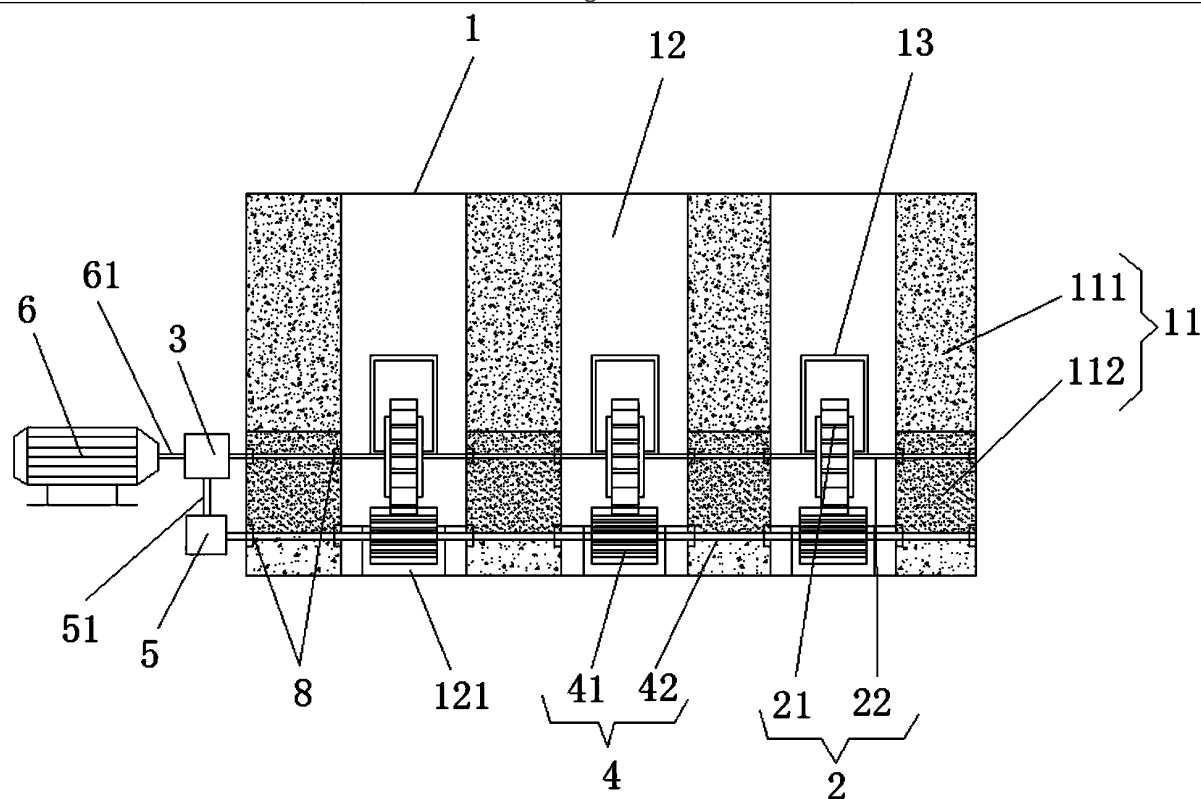
Family 99/200 - FAMPAT - ©Questel

Title

(CN204344366U)

Hydropower station device for secondary power generation with drainage flows

Images

**Publication data including kind & date**

CN204344366

U

2015-05-20

CN204344366U

**Abstract**

(CN204344366U)

The utility model discloses a hydropower station device for secondary power generation with drainage flows. The device comprises a dam, first-stage water turbine units, a main gearbox, second-stage water turbine units, an auxiliary gearbox and a power generator, wherein the dam comprises reinforcing bodies integrally poured on the back surface, a drainage surface is arranged between every two reinforcing bodies, a drainage hole is designed and reserved in each drainage surface, and a drainage groove is formed in the bottom of each drainage surface; each first-stage water turbine unit comprises a first-stage water turbine and a first-stage transmission spindle, and the first-stage water turbine units are rotationally mounted on the reinforcing bodies through the first-stage transmission spindles; each second-stage water turbine unit comprises a second-stage water turbine and a second-stage transmission spindle, and the second-stage water turbine units are rotationally mounted on the reinforcing bodies through the second-stage transmission spindles; the power generator is connected with the main gearbox through a transmission shaft. The hydropower station device for secondary power generation with the drainage flows can utilize the drainage flows effectively for power generation, so that the energy utilization rate is greatly increased.

Inventors

DENG ZHIHONG

ZHOU WEIWEI

SONG SIPING

FU XINHUA

PAN ZHENGYI

XIE ZHIYU

Latest standardized assignees - inventors removed

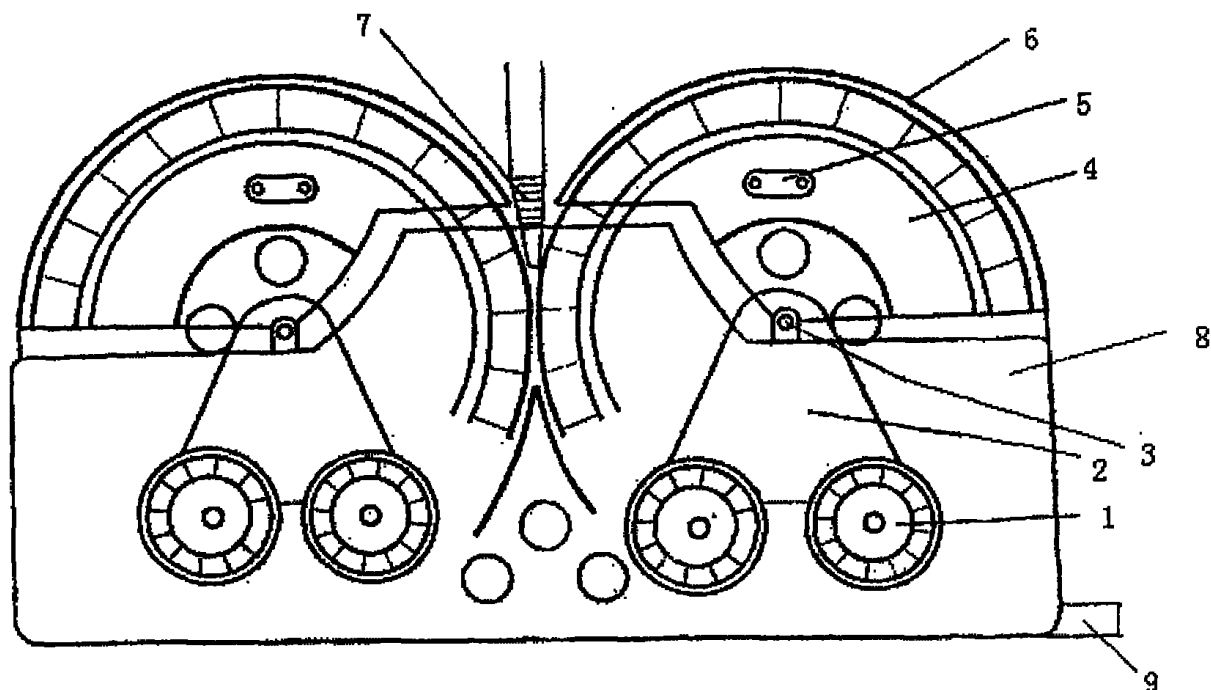
GUANGDONG MEIYAN JIXIANG HYDROPOWER

Family 100/200 - FAMPAT - ©Questel

Title

(CN202023681U)

Hydroelectric generator

Images**Publication data including kind & date**[CN202023681](#)

U

2011-11-02

CN202023681U

**Abstract**

(CN202023681U)

The utility model discloses a hydroelectric generator, which comprises a seat, water wheels, a speed controller and a generator. The two water wheels are installed on the seat in juxtaposition mode, each water wheel is connected with the speed controller, and the speed controller is connected with the generator. Electricity can be effectively generated by using the hydroelectric generator and appropriately damming in intermountain rivulets.

Inventors

ZHANG LIANFA

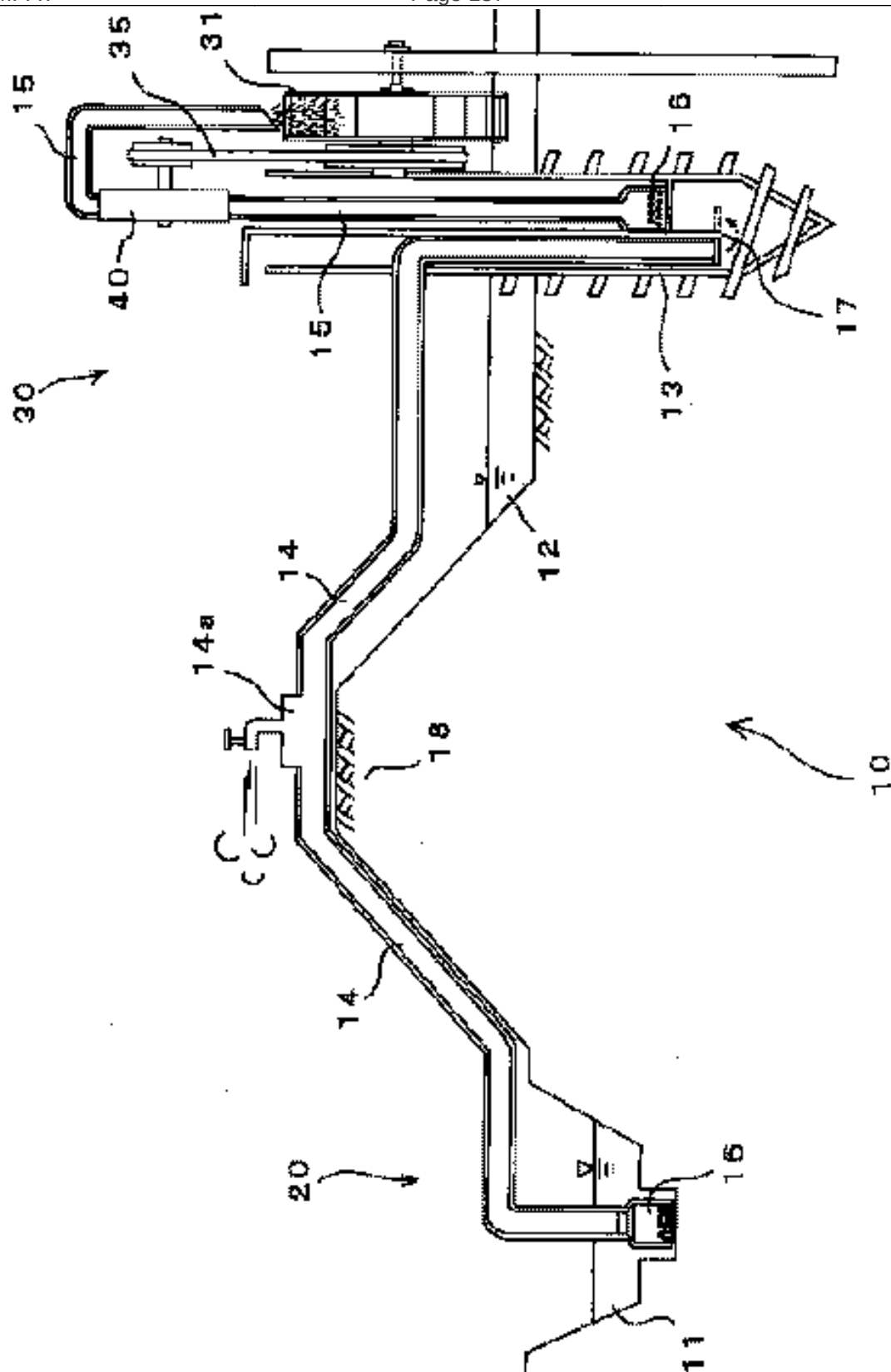
Family 101/200 - FAMPAT - ©Questel

Title

(JP2003322077)

Water supply device and method

Images



Publication data including kind & date

JP2003322077

A 2003-11-14 JP2003322077



Abstract

(JP2003322077)

PROBLEM TO BE SOLVED: To provide water supply device and method for saving operation cost and discharging water in a low water level region stored on a low water level side represented by the inside of a temporary closing of a construction etc., of a river and a reservoir etc., within a bank in a zone in a circular bank to the outside of the closing, a high water level region or a ceiling river located higher than the water by a simple device.

SOLUTION: This device comprises a water supply means 20 provided with a water supply pipe 14 (including the water supply pipe 14 provided with a deaeration device 14a for eliminating gas within the pipe 14) for linking water in the low

water level region 11 and water in a water storage tank 13 having a depth capable of securing a water level below the water surface of the low water level region 11 by a siphon action and a water pumping means 30 provided with a water pumping device for driving natural energy as a power source. In this method, the water in the low water level region is introduced into the water storage tank 13 by the water supply device 10 having the water pumping means 30 driven by natural energy and the water supply means 20, and the water of the water storage tank 13 is pumped up and supplied to the high water level region 12 by the water pumping means 30.

COPYRIGHT: (C)2004,JPO

Inventors

MABUCHI TAKESHI

MABUCHI KAZUMI

Ken Mabuchi

Yoko Mabuchi

Latest standardized assignees - inventors removed

YAMATATSUGUMI

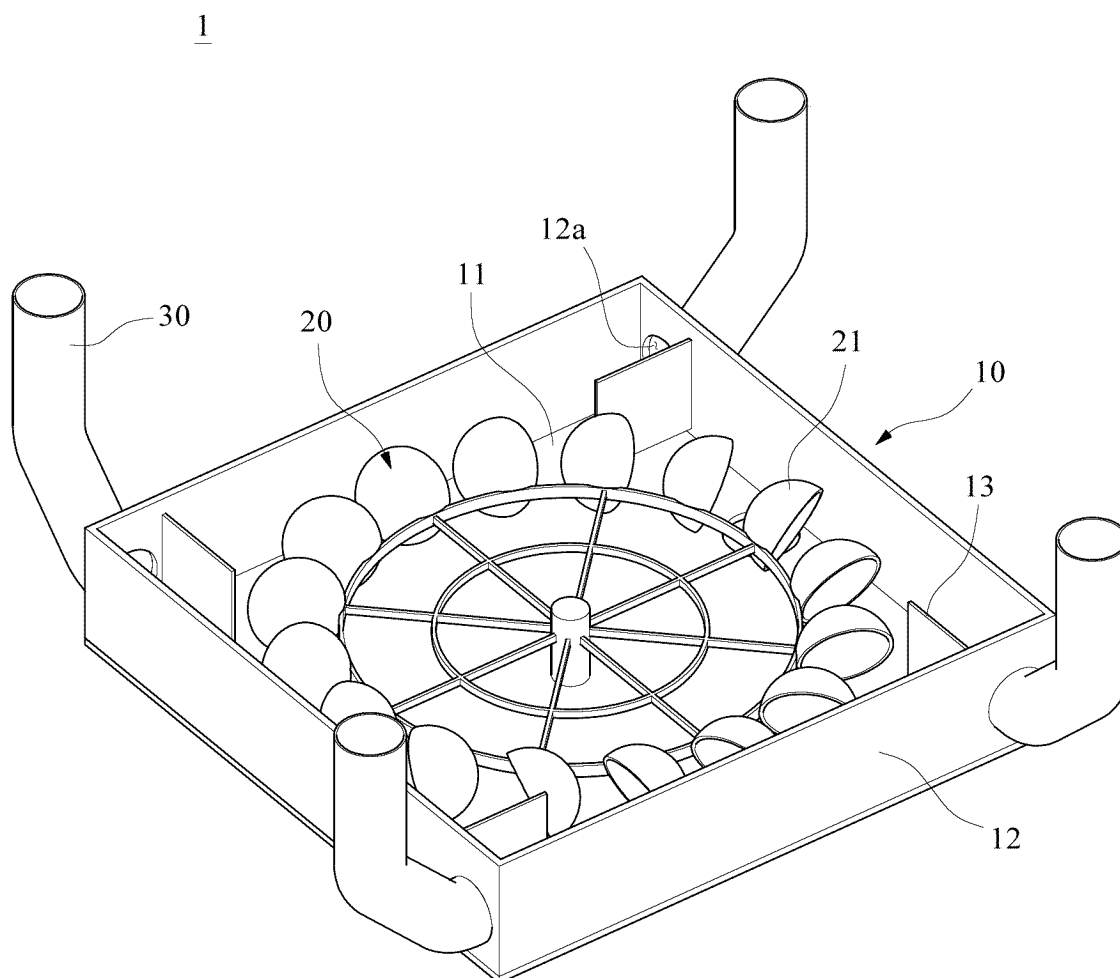
Family 102/200 - FAMPAT - ©Questel

Title

(KR20170081767)

Torque generator using water wheel

Images



Publication data including kind & date

[KR20170081767](#)

A

2017-07-13

KR20170081767



Abstract

(KR20170081767)

The present invention relates to an apparatus for generating a torque using a water turbine, capable of rotating the water turbine at a high speed by supplying water to a plurality of portions of the water turbine. The apparatus for generating torque using the water turbine includes: a chamber having a bottom surface and an outer wall formed along the periphery of the bottom surface, the chamber having two or more outlets on an outer wall and an outlet on a bottom; a water turbine disposed in an inner space of the chamber, the water turbine being rotated about a vertical axis and having a plurality of water receiving portions at a periphery thereof; and a water supply means for supplying water to each inlet of the chamber by receiving water at a higher level than the water turbine.

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Inventors

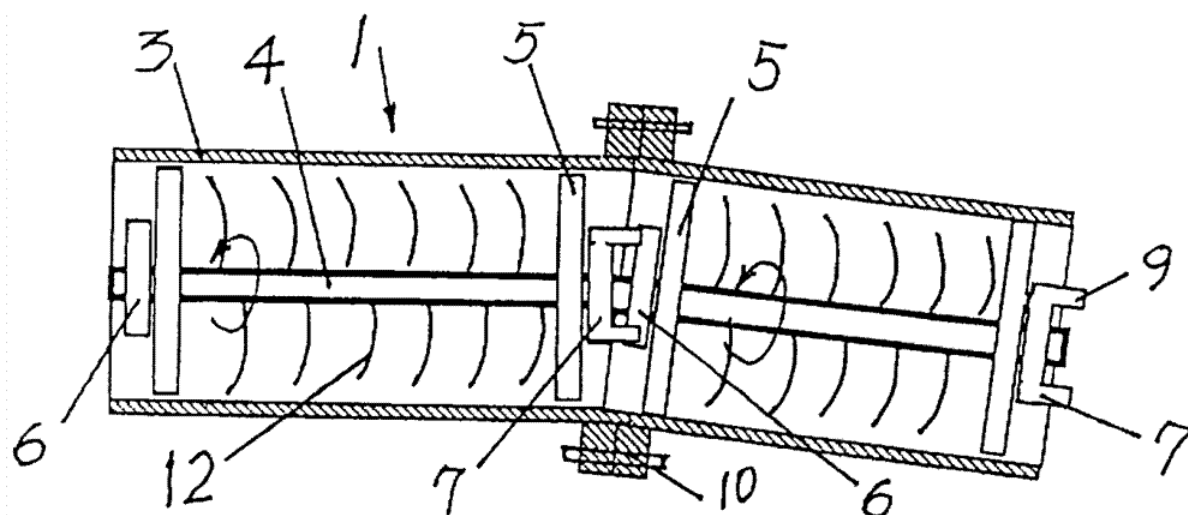
HUH. HEON

Family 103/200 - FAMPAT - ©Questel

Title

(CN106089550)

Hydroelectric generating set with multi-shaft snap-in connection in duct type water wheels

Images**Publication data including kind & date**

CN106089550	A	2016-11-09	CN106089550
CN106089550	B	2018-07-10	CN106089550B

**Abstract**

(CN106089550B)

The present invention provides a hydroelectric generating set with multi-shaft snap-in connection in duct type water wheels, and relates to a hydroelectric generating set having a water wheel part bendable to guide running water. A plurality of duct type water wheels are connected in series into a tandem type water wheel straight-through duct. A generator is disposed at a water outlet end of the tandem type water wheel straight-through duct. A Y-shaped female transmission part and a disc-like male transmission part claw are engaged with each other on each central rotating shaft connecting two adjacent duct type water wheels in series to allow for synchronous rotation to transfer and concentrate water flow energy to the last central rotating shaft for connection with the generator. The hydroelectric generating set has the following advantages: the hydroelectric generating set is provided with the tandem type bendable water wheel straight-through duct and thus is very suitable for siphonal hydroelectric generation; therefore, the tandem type straight-through duct formed by a plurality of water wheels is allowed to transfer the water flow energy in a bending manner; the water flow energy in each section of the straight-through duct is concentrated for delivery to one generator, such that investment and operation costs incurred by the demand of a plurality of generators are reduced.

Inventors

JIE XIUZHONG

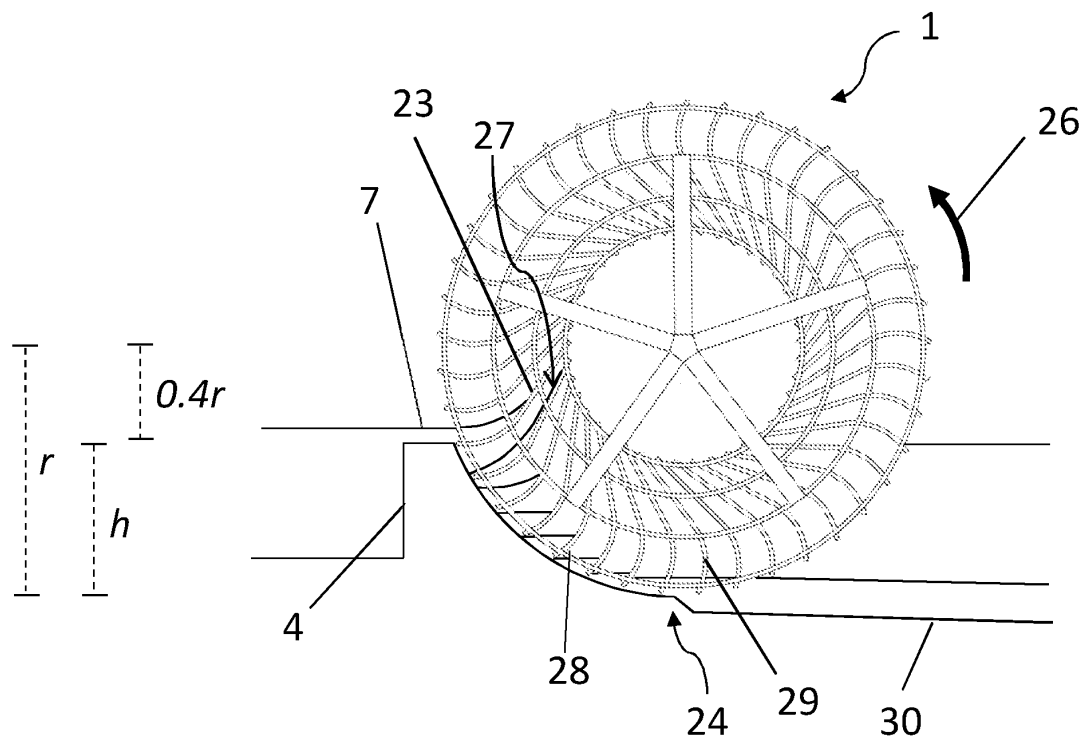
Family 104/200 - FAMPAT - ©Questel

Title

(EP3472454)

Waterwheel

Images



Publication data including kind & date

GB201610730	D0	2016-08-03	GB201610730
GB2551519	A	2017-12-27	GB2551519
WO2017/220995	A1	2017-12-28	WO2017220995
AU2017281835	A1	2019-01-31	AU2017281835
IN201917001494	A	2019-04-05	IN201917001494
EP3472454	A1	2019-04-24	EP3472454
US20190186457	A1	2019-06-20	US20190186457



Abstract

(EP3472454)

A breastshot waterwheel is configured to extract energy from an incoming water flow. The waterwheel is rotatable about an axis and comprises a plurality of paddles, each of the said paddles being in communication with the incoming water flow for a respective water receiving portion of a rotation cycle of the waterwheel about the axis. During the water receiving portion of the rotation cycle for a said paddle, the incoming water flow flows onto a water receiving surface of the paddle. The water receiving surface extends between first and second ends of the paddle. The first end is upstream of the second end and is configured such that, during at least a portion of said water receiving portion of the rotation cycle for said paddle, the incoming water flow flows in a substantially horizontal direction across said first end of the paddle onto an upstream portion of the water receiving surface. At least a portion of the incoming water flow received by the upstream portion of the water receiving surface flows from the upstream portion onto a downstream portion of said water receiving surface, thereby changing direction and exerting a force on the paddle causing the waterwheel to rotate about the said axis in a rotational direction. The waterwheel is configured to rotate about said axis in said rotational direction such that a magnitude of a tangential velocity of the first end of the said paddle is less than a speed of the incoming water flow flowing across the said first end of the paddle during the water receiving portion of the rotation cycle for the said paddle.

Inventors

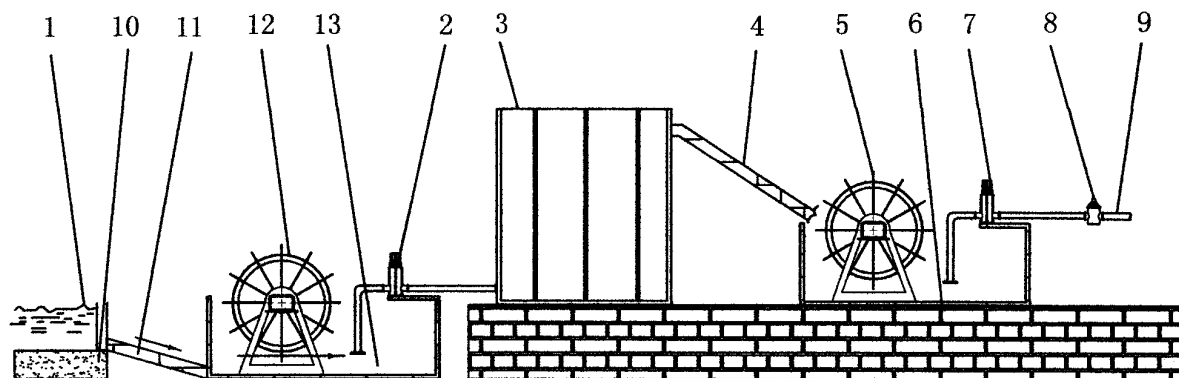
CARRUTHERS PENELOPE JANE

Family 105/200 - FAMPAT - ©Questel

Title

(CN201678466U)

Water treating and electric generating system for waterworks

Images**Publication data including kind & date**

CN201678466

U

2010-12-22

CN201678466U

**Abstract**

(CN201678466U)

The utility model discloses a water treating and electric generating system for waterworks, comprising a water source. The water source is communicated with a filtering pool through a first-stage water pump. The rear part of the filtering pool is provided with a water turbine generator I along a water channel or a water pipe I, and the water turbine generator I has drop with the filtering pool. A water storing pool I is arranged on the water turbine generator I. A second-stage water pump and a pressurizing pump are orderly arranged above the water storing pool I and communicated with a tap water network pipe. After the water source is coffered, the lower part is provided with a water turbine generator II along a water channel or a water pipe II, and the water turbine generator II has drop with the filtering pool. The first-stage water pump is arranged above the water storing pool II, and communicated with the filtering pool. The utility model can be improved on the traditional tap water supply system, the potential energy is formed by water head, and is converted into kinetic energy to generate electricity by the generator, a novel system which simultaneously generates electricity, treats sewage and supplies tap water is built, and the energy is sufficiently utilized and saved. When the tap water treating system with double-stage electric generation is adopted, the electric energy of the waterworks can be saved by more than 60%.

Inventors

HE PAIZHI

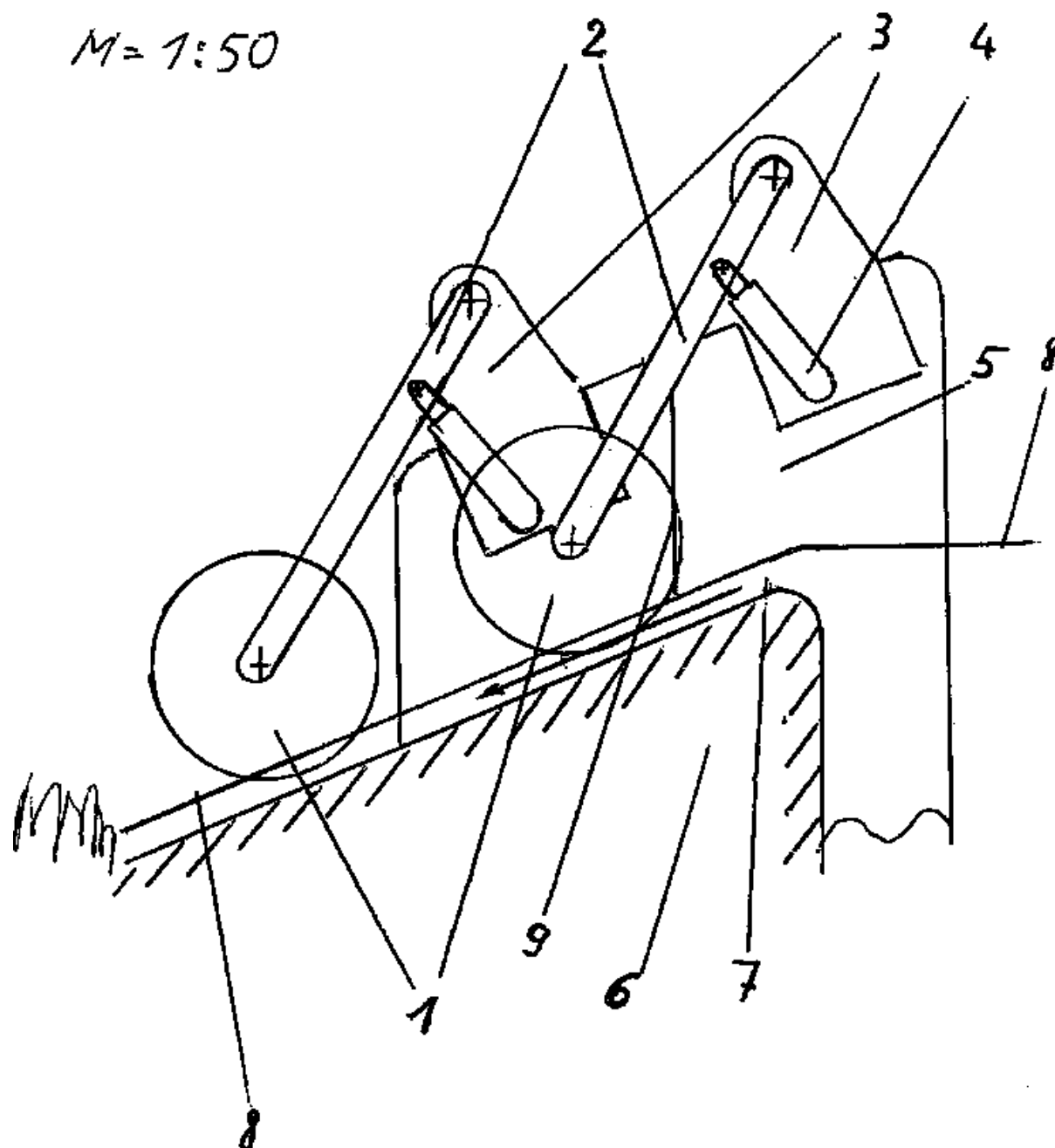
Family 106/200 - FAMPAT - ©Questel

Title

(DE202006014834)

Device for producing a current for weirs is made from rigid steel and is mounted on a concrete base

Images

**Publication data including kind & date**

DE202006001113	U1	2006-03-30	DE202006001113
DE202006014834	U1	2007-01-04	DE202006014834

**Abstract**

(DE202006014834)

Device for producing a current is made from rigid steel and is mounted on a concrete base (6). Preferred Features: A laterally closed water wheel (1) allows water to flow over a weir to drive the wheel. A number of water wheels are subsequently arranged and have an electronically controlled hydraulic unit (4). The wheels have an insulating cover.

Latest standardized assignees - inventors removed

HOFSAESS HARRY

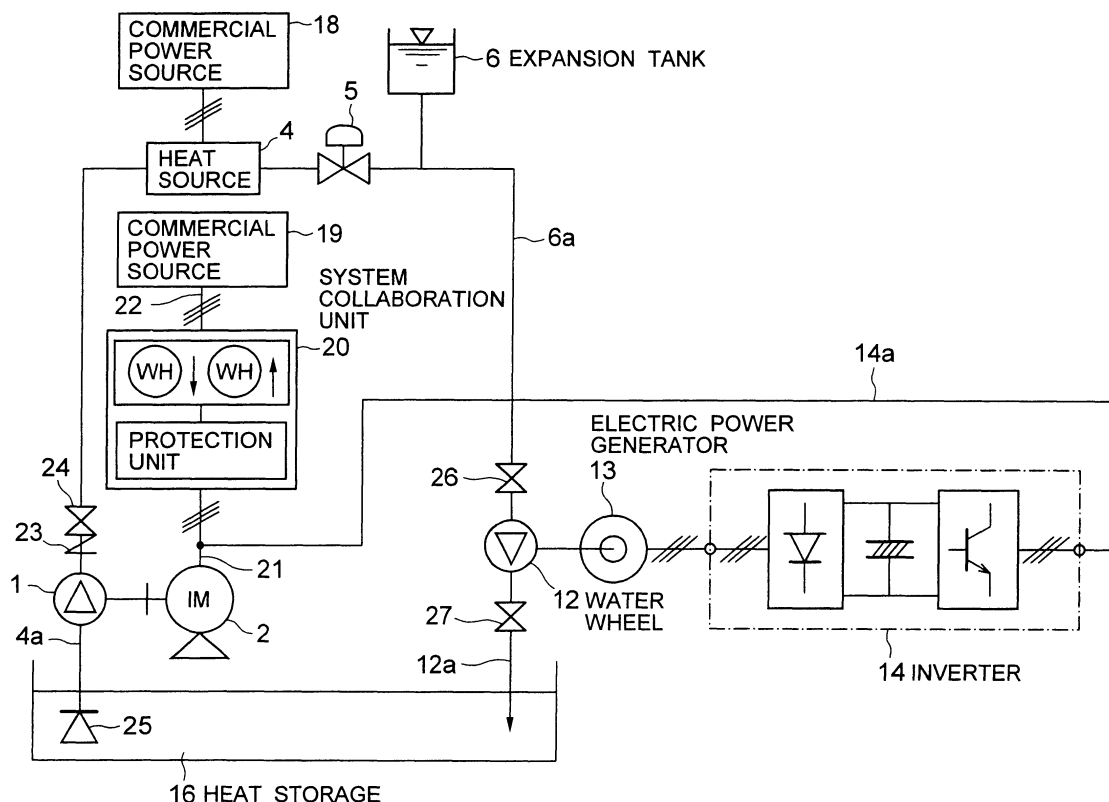
Family 107/200 - FAMPAT - ©Questel

Title

(EP1329672)

Energy collecting system and method of operating the same

Images



Publication data including kind & date

US20030131621	A1	2003-07-17	US20030131621
EP1329672	A2	2003-07-23	EP1329672
EP1329672	A3	2003-09-10	EP1329672
JP2004003414	A	2004-01-08	JP2004003414
US6698223	B2	2004-03-02	US6698223
TW587131	B	2004-05-11	TW-587131
US20040154325	A1	2004-08-12	US20040154325
US20040187497	A1	2004-09-30	US20040187497
EP1329672	B1	2006-10-11	EP1329672
DE60215293	D1	2006-11-23	DE60215293
DK1329672	T3	2007-02-05	DK1329672T
US7174735	B2	2007-02-13	US7174735
US7191610	B2	2007-03-20	US7191610
DE60215293	T2	2007-05-24	DE60215293
JP2009168037	A	2009-07-30	JP2009168037
JP4824097	B2	2011-09-16	JP4824097



Abstract

(EP1329672)

In the air-conditioning system, a primary side to generate heat includes a heat storage (16) and a heat source (4) and produces cool or warm water using an inexpensive commercial power source (19) such as a nighttime power source. A system collaboration unit (20) is disposed between a motor to drive a water pump and a power source. The unit is connected to the motor (2) via a cable (21). An output from the inverter is connected to the motor via a cable.

Inventors

SATO KOICHI

YANAGISAWA SEIJI

WATABE SHU

FUJITA YUKIHIRO

SHIMA AKIO

TANAKA YUJI

TAKAHASHI SHINICHI

KUNII HIROSHI

Latest standardized assignees - inventors removed

HITACHI

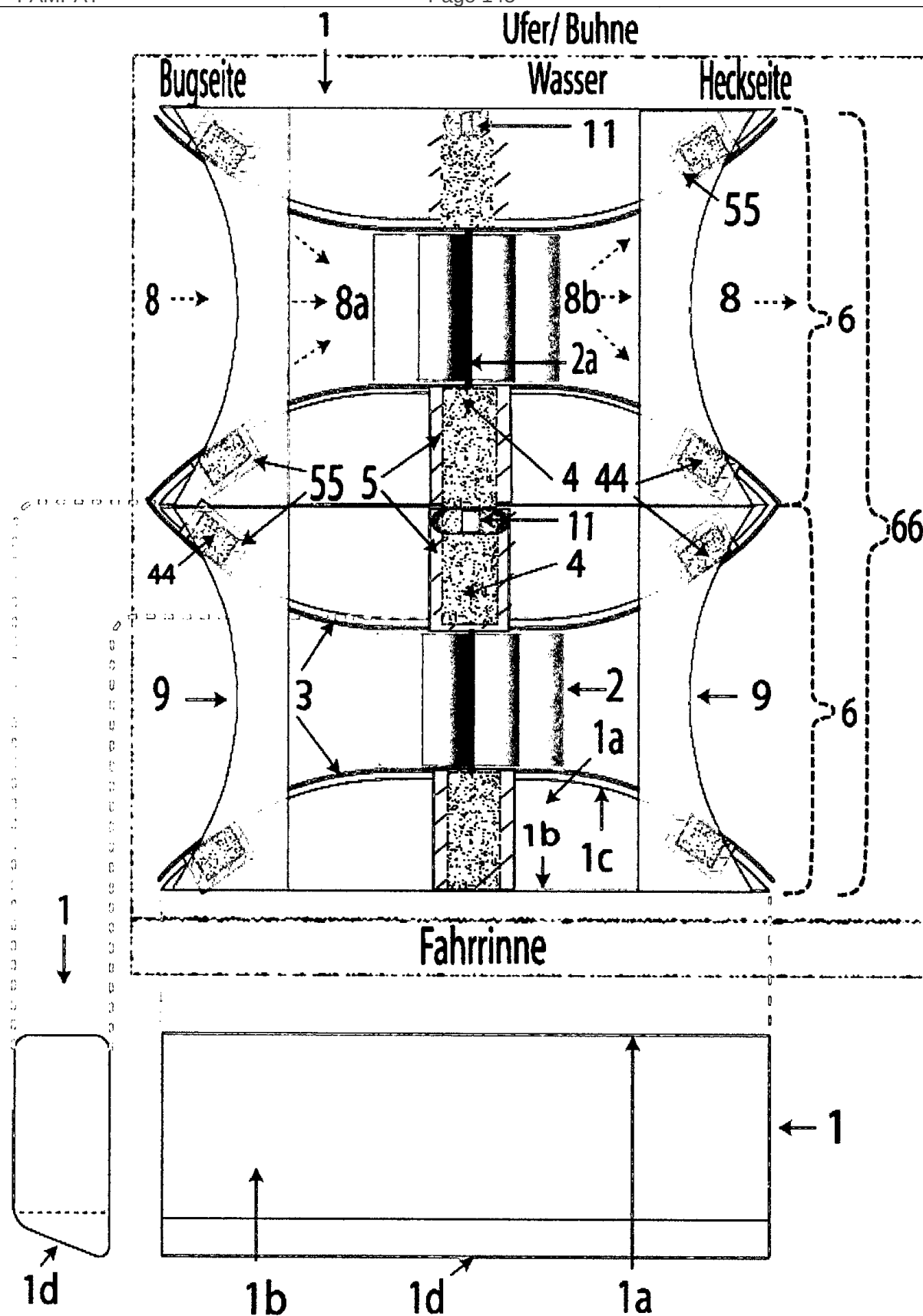
Family 108/200 - FAMPAT - ©Questel

Title

(DE202009011950)

Water wheel hydraulic power plant, floats, automatic level control, small turbines and photovoltaics

Images



Publication data including kind & date

[DE202008013954](#)

U1 2009-03-19

DE202008013954

[DE202009011950](#)

U1 2009-12-10

DE202009011950



Abstract

(DE202009011950)

The hydropower plant water wheels, floats, automatic level control, small turbines and photovoltaic "water station" hereinafter referred to as follows and claimed herein is required, the optional components are identified as such. •, one or more segments (6) •various anchoring components and accessories for the connection between the segments (6), and the

Segment lines (66) •optionally: spacer (24) Segment (6), and between Stage•wiring/cable (30), •optionally: bending (33), •optionally: small, wind turbine (32) •optionally: scum protector (36), •optionally: comparison with lifting lowering device (45), watertight gate•optionally: anti-scour, system (35) •optionally: storage space limiter (39), •optionally: central control system (51), •optionally: monitoring system (52), •optionally: drinking water supply port (56za), •optionally: waste port (57za). A Segment (6) is comprised of the following major components together :•, two buoys (1) •, a waterwheel (2) •two baffles...

Latest standardized assignees - inventors removed

PEICKERT ULRICH JOACHIM CHRIST

WEGENER KARLHEINZ JOACHIM

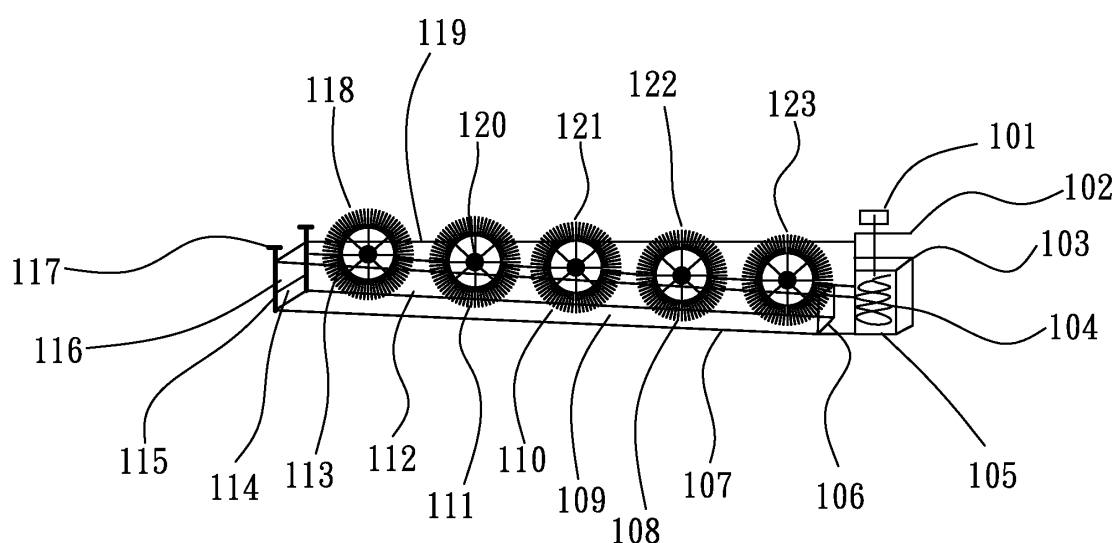
Family 109/200 - FAMPAT - ©Questel

Title

(WO2008145018)

Apparatus and method for keeping water stream energy utilized

Images



Publication data including kind & date

WO2008/145018	A1	2008-12-04	WO2008145018
CN101542113	A	2009-09-23	CN101542113
US20100207394	A1	2010-08-19	US20100207394



Abstract

(WO2008145018)

An apparatus for keeping the water stream energy utilized includes: a water pump (404) which continually provides sufficient water from a water source (401) to a flume head (405) so that the water stream flows from the high place to the lower end (410) to push several sets of water turbine generators (407,408,409) provided in the flume (406), a flume (406) whose length is longer than the distance between the lower water source (401) and the high flume head (405), and series-type water turbine generators (407,408,409) provided in the flume (406). Through supplying sufficient water from the lower water source (401) to the high flume head (405) by the pump (404), water stream flows from the high place to the lower place so as to push several sets of water turbine generators (407,408,409) provided in the flume (406), and finally water are delivered to the place required water (411,412) or sent back to the flume head (405) by a pump provided at the flume end.

Inventors

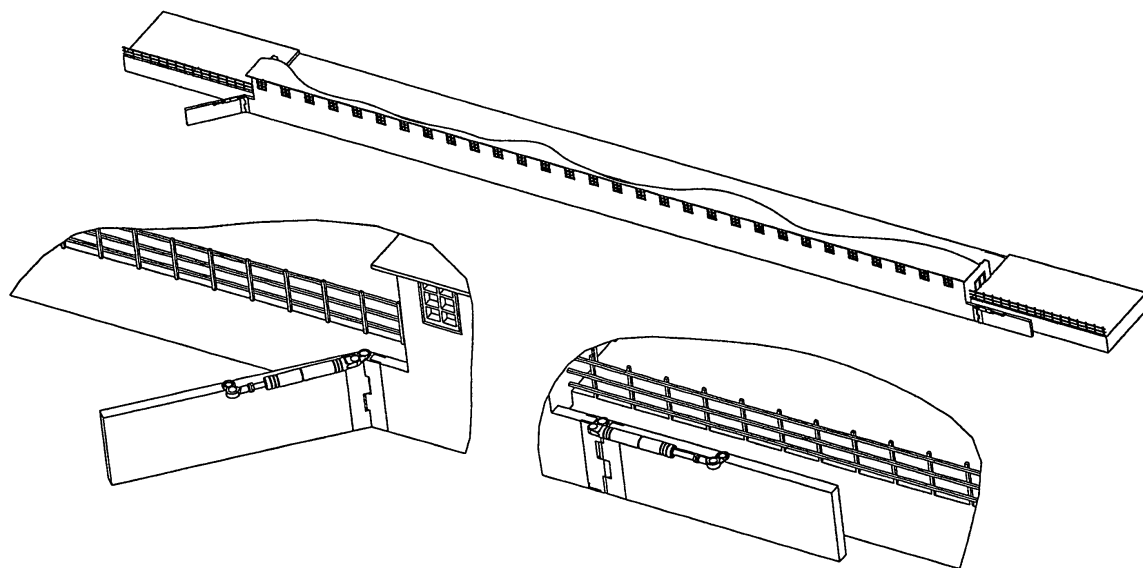
LEUNG KWONG KEUNG

Family 110/200 - FAMPAT - ©Questel

Title

(US7388302)

Hydro-electric power generating system with an adjustable water diversion system

Images**Publication data including kind & date**[US7388302](#)

B1 2008-06-17 US7388302

**Abstract**

(US7388302)

A hydroelectric power plant for use in flowing bodies of water is described which includes a new spillway canal constructed to enhance the flow of water by increasing the water pressure. Because the canal has the angled feature on both ends, the water flow can be enhanced when backflow conditions exist as well as when primary flow conditions are present. In addition the canal utilizes a unique combination of both traditional and Pelton type water wheels to convert the water pressure to electric power. The canal, the extensions and both types of water wheels are also adjustable in nature to maximize the amount of power obtainable from any given body of water. The adjustments include the ability to be moved relative to the spillway to create differing angles of input and/or output in the actual spillway structure.

Inventors

SRYBNIK SIMON

SRYBNIK LOUIS

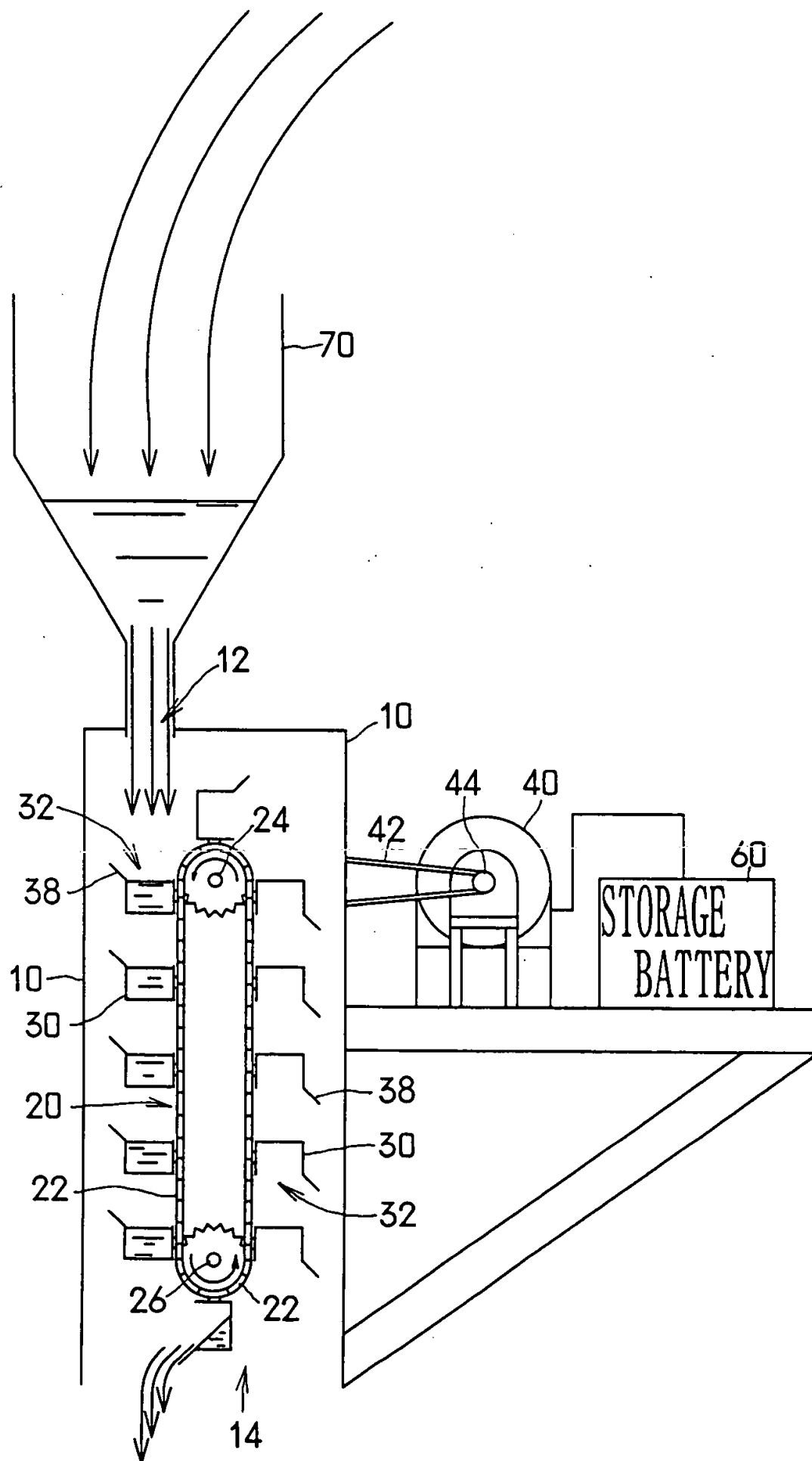
Family 111/200 - FAMPAT - ©Questel

Title

(EP1630414)

Power generation device utilizing falling water flow

Images



Publication data including kind & date

WO2005/068831	A1	2005-07-28	WO200568831				
JPWO2005068831	A1	2005-07-28	JP2005068831W				
CN1705821	A	2005-12-07	CN1705821				
EP1630414	A1	2006-03-01	EP1630414				
JP3891445	B2	2006-12-15	JP3891445				
US20060290139	A1	2006-12-28	US20060290139				
EP1630414	A4	2009-01-14	EP1630414				
EP1630414	B1	2010-10-20	EP1630414				
AT485445	T	2010-11-15	ATE485445				
DE602004029674	D1	2010-12-02	DE602004029674				

Abstract

(EP1630414)

Falling water flow entering from an introduction port (12) into the inside of a cylindrical frame (10) is introduced into each of a plurality of buckets (30), the openings (32) of which face in the upward direction, lined up on an outer surface of one side of a circulating portion (22) of a conveyor disposed inside the cylindrical frame (10) along a passage through which the falling water flow passes. Then, the circulating portion (22) of the conveyor on which the buckets (30) are provided is circulated by kinetic energy and potential energy of the falling water flow introduced into the buckets (30). As a result, a generator (40) connected to a rotary shaft (24) which circulatably supports the conveyer (20) and rotates with the circulation of the conveyer (20) is revolved, thereby generating electric power.

Inventors

TAKEUCHI AKIO

Latest standardized assignees - inventors removed

TAKEUCHI MANUFACTURING

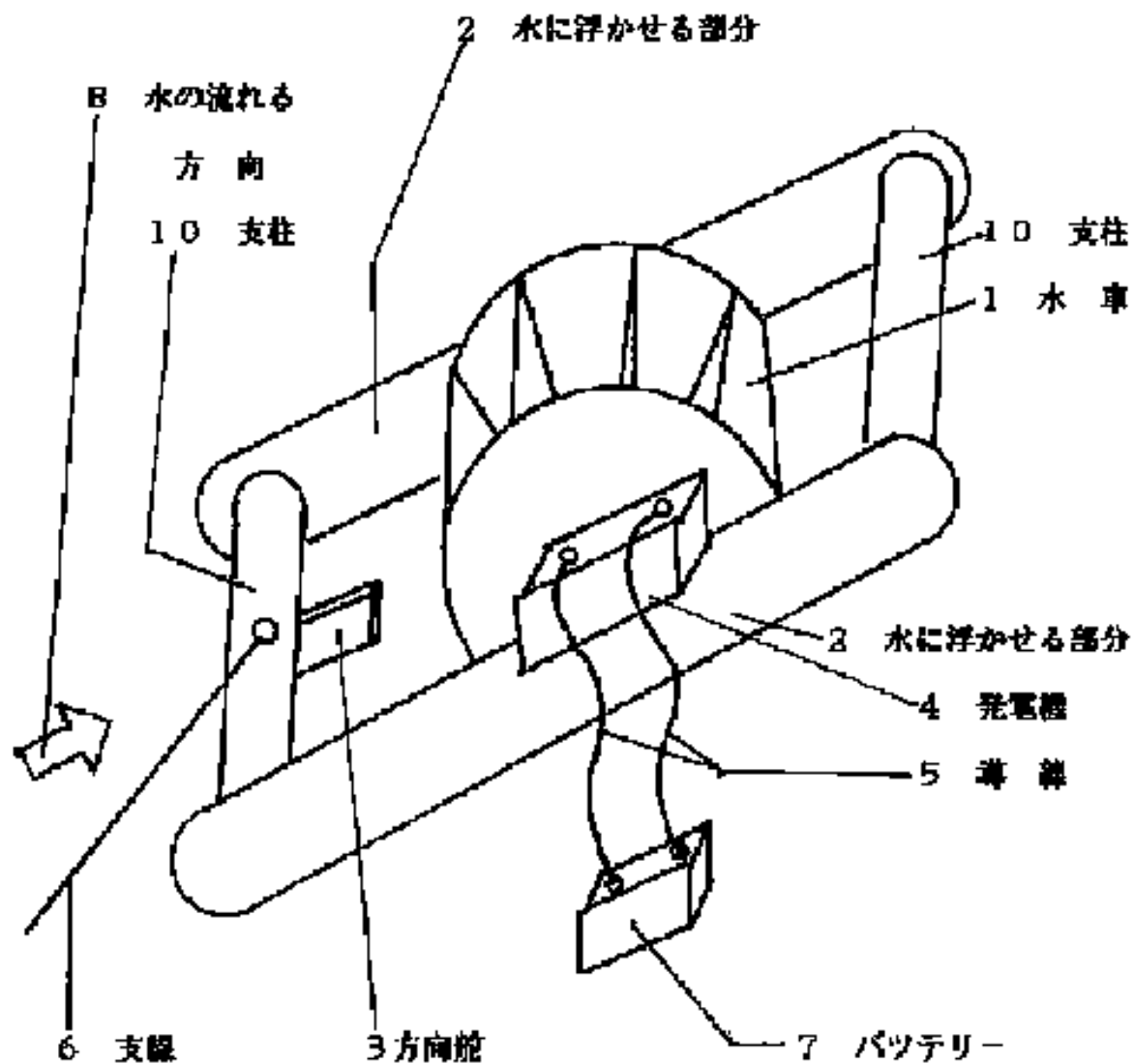
Family 112/200 - FAMPAT - ©Questel

Title

(JP08035478)

Power generating device using water flow

Images



Publication data including kind & date

JPH0835478

A 1996-02-06 JP08035478



Abstract

(JP08035478)

PURPOSE: To provide a device capable of generating electricity, using a running water force, while being kept afloat at a place having a water flow, when electricity is required at a place without any power supply, such as a dry river bed, a place between mountains and an island. **CONSTITUTION:** A body is kept afloat at a place having a water flow, using a rudder 3 and a branch line 6, and a turbine 1 is rotated with a running water force. Furthermore, a generator is interlocked with the rotary shaft of the turbine 1 to generate electricity. Then, electricity so generated is introduced to a place within reach via a conductor 5 for use.

Inventors

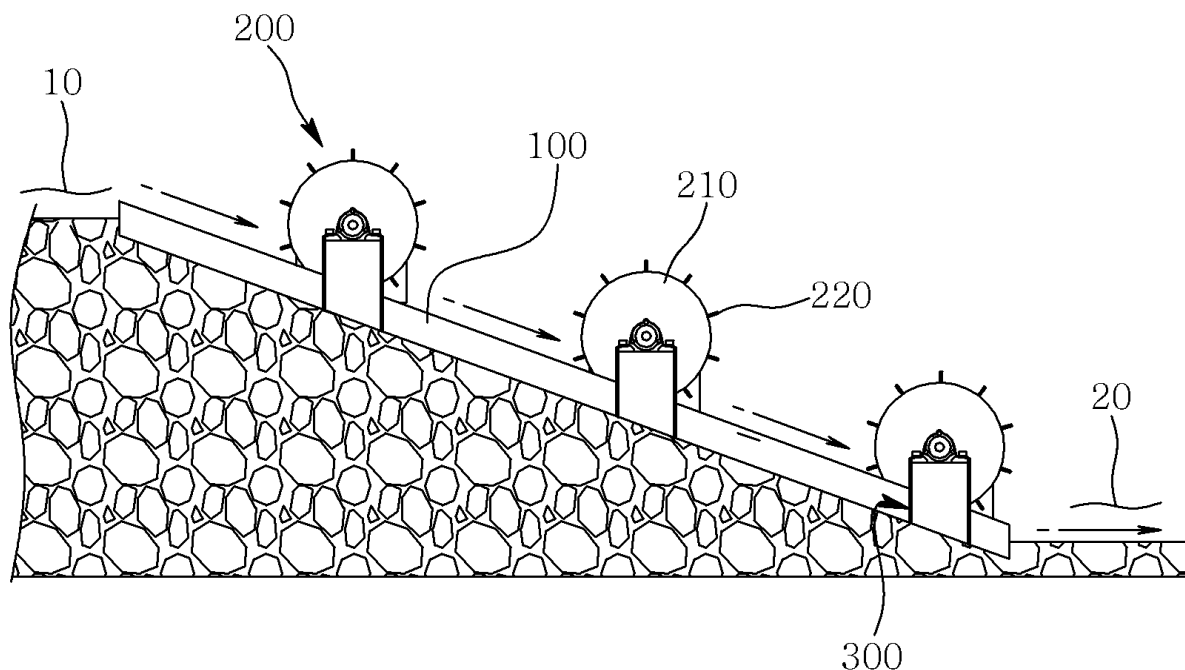
NISHI TAKASHI

Family 113/200 - FAMPAT - ©Questel

Title

(KR101940453)

Hydraulic power generation system using cross-flow turbine

Images**Publication data including kind & date**[KR10-1940453](#)

B1 2019-01-18

KR101940453

**Abstract**

(KR101940453)

The present invention relates to a hydraulic power generation system using a cross-flow turbine. With the present invention, the energy of water flowing along a channel can be efficiently transmitted to a turbine without the flow of the water flowing along the channel being artificially blocked. In addition, efficient power generation is possible even in a terrain with little water level difference, and high-efficiency power generation is possible as water backflow into the turbine can be prevented. The present invention includes a channel fixedly installed at an angle along a water flow direction between upper and lower flow paths having a height difference, having an arc shape on the inner peripheral surface where water flows, and releasing the water flowing from the upper flow path to the lower flow path, a plurality of rotary turbines separated in multiple stages along the length direction of the channel, each being rotatable about the left-right width direction of the channel and rotating by means of the water power caused by the water flowing in through the upper portion of the channel flowing downward in the channel, a plurality of rotation support members installed along the length direction of the channel so as to rotatably support each of the rotary turbines, and a generator generating power by receiving the rotational force of each rotary turbine.

Inventors

Woo Young-woo

Family 114/200 - FAMPAT - ©Questel

Title

(JP2001107835)

Stopping method of water-turbine-driven compressor and water-turbine-driven compressor for executing this method

Images

unit 50 is connected to a water turbine 40 through an electromagnetic clutch 68, when a compressor 1 is stopped, connection between the water turbine 40 and the compressor main unit 50 is separated, also a water pressure pipe line 3 connecting between a water source and the water turbine 40 is gradually closed by an electric motor valve MV, so as to close the water pressure pipe line 3.

Inventors

KANBAYASHI TORU

Kanbayashi Tetsu

Latest standardized assignees - inventors removed

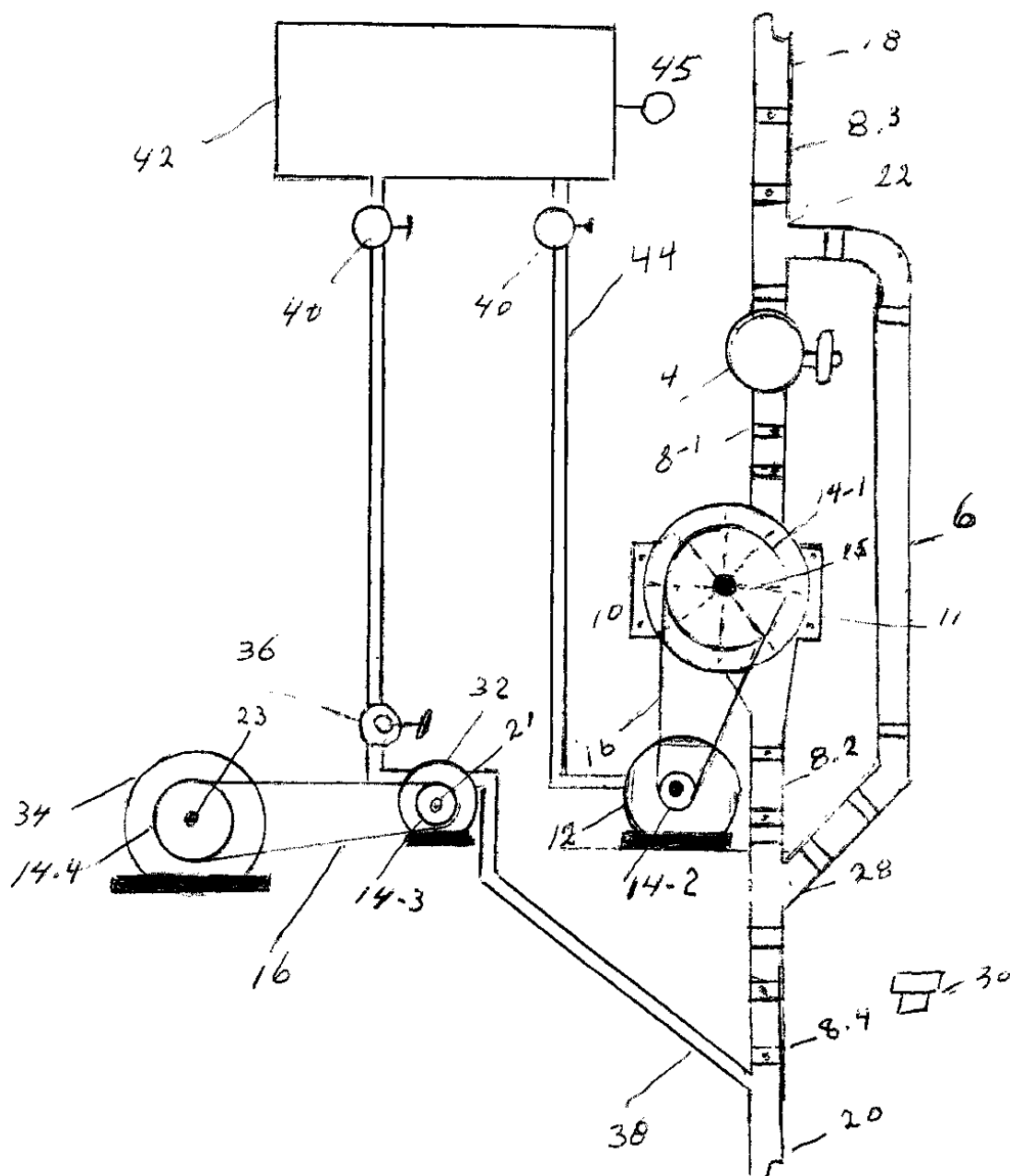
HOKUETSU KOGYO

Family 115/200 - FAMPAT - ©Questel

Title

(CA2820521)

Power generation system

Images

[CA2820521](#)

A1 2014-12-25 CA2820521

[CA2820521](#)

C 2015-12-22 CA2820521

**Abstract**

(CA2820521)

A power generation system includes a waterwheel that powers a compressor for producing compressed air. The compressed air is stored in a compressed air tank and used to power an air motor, which in turn powers an electrical power generator.

Inventors

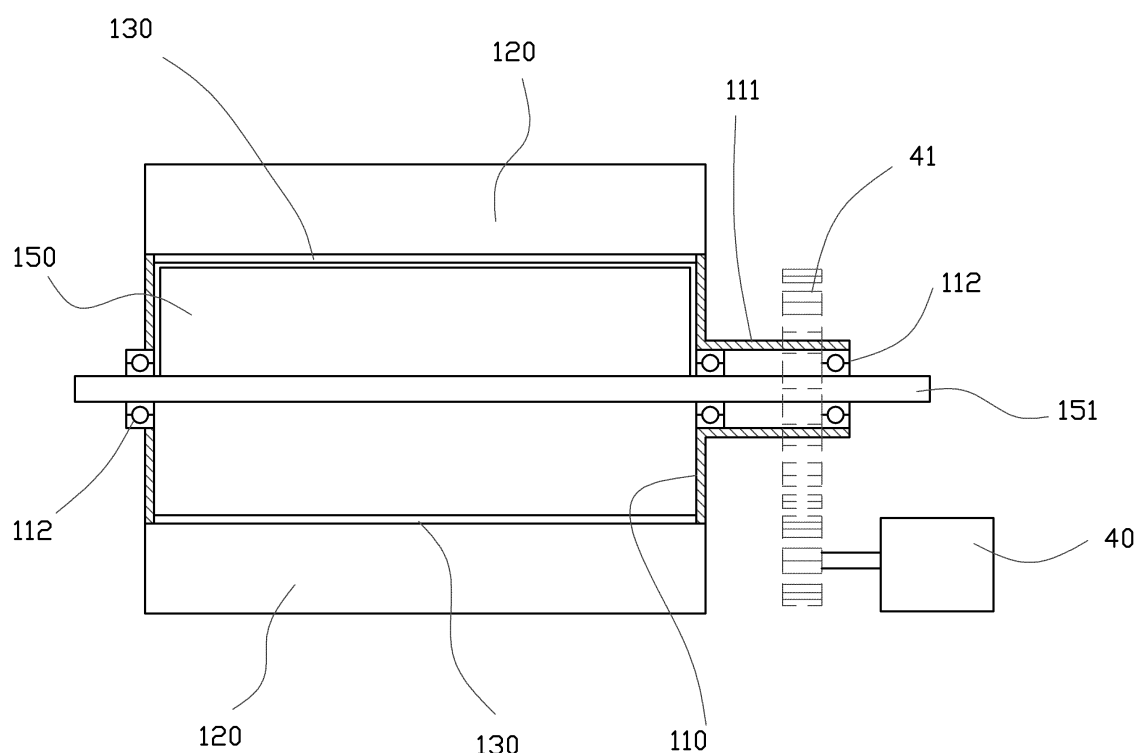
VANDERZWEEP BEREND

Family 116/200 - FAMPAT - ©Questel

Title

(KR101198303)

Small hydropower generation for water mill

Images**Publication data including kind & date**[KR20120013812](#)

A 2012-02-15 KR20120013812

[KR101198303](#)

B1 2012-11-07 KR101198303

**Abstract**

(KR101198303)

PURPOSE: A water turbine for small hydroelectric power generation is provided to prevent damage due to floating foreign materials after upper water falls to a water turbine. CONSTITUTION: A water turbine for small hydroelectric power generation comprises a drain pipe, an inlet pipe, a blade(120), a water-turbine drum(110), a space unit(130), and a support(150). The drain pie discharges water through the inlet pipe. The entrance of the inlet pipe is installed on a location lower than a discharge controlling water gate. A water turbine is formed on the lower part of the drain pipe and rotates with fall energy of water. A space is formed between the blinds of the water-turbine drum to which the blade is fixed. The support is installed in the water-turbine drum to close the space where the water-turbine rotates.

Inventors

KU, BON-HUL

Latest standardized assignees - inventors removed

KUM SUNG & & C

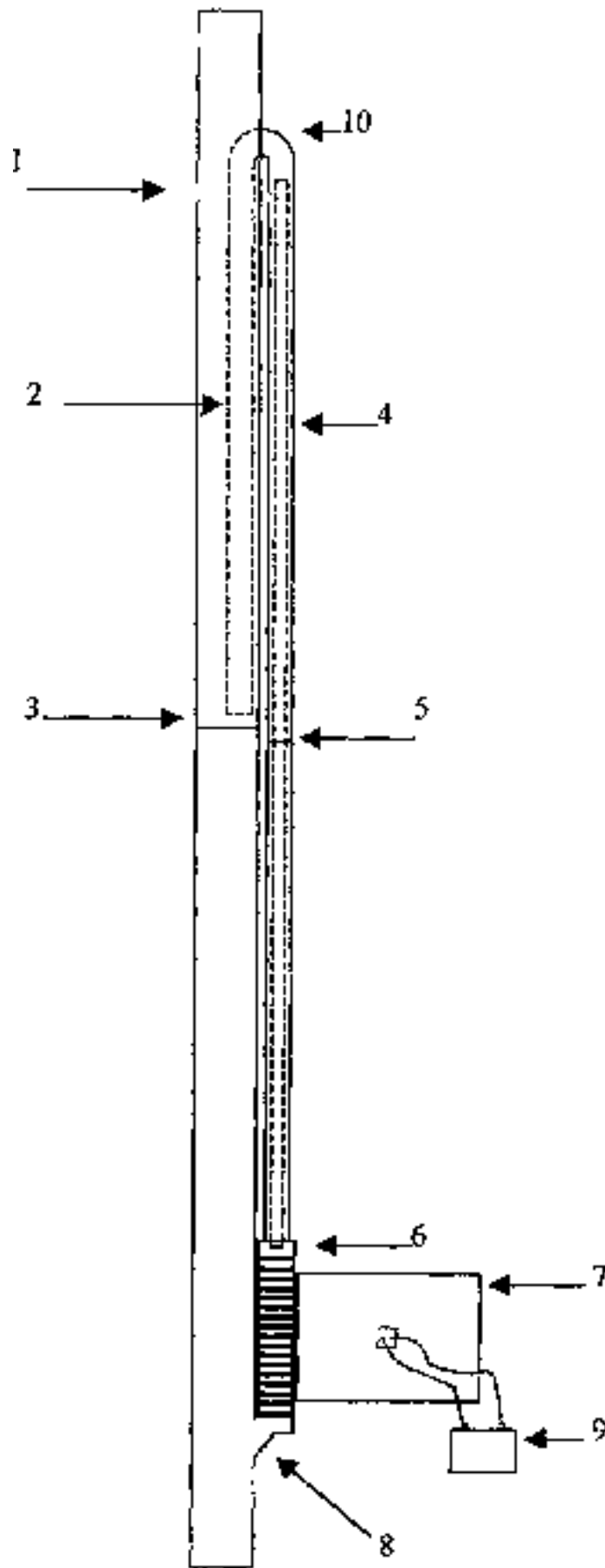
Family 117/200 - FAMPAT - ©Questel

Title

(DE10055548)

Power generation from rain water using suction method, involves collecting rainwater in drop tube to drive generator via tube and pipe arrangement and water wheel to produce energy

Images



Publication data including kind & date

[DE10055548](#)

A1 2002-03-07

DE10055548



Abstract

(DE10055548)

The method involves collecting rainwater in a drop tube (1) into which a small pipe (4) protrudes to a blockage (3) and that leads out and down at a higher point, e.g. at a bend (10). The pipe contains a seal (5) through which the pipe passes. The transparent pipe extends from above the seal to a water wheel (6) driving a generator (7) to produce energy.

Inventors

SCHEER FRANK

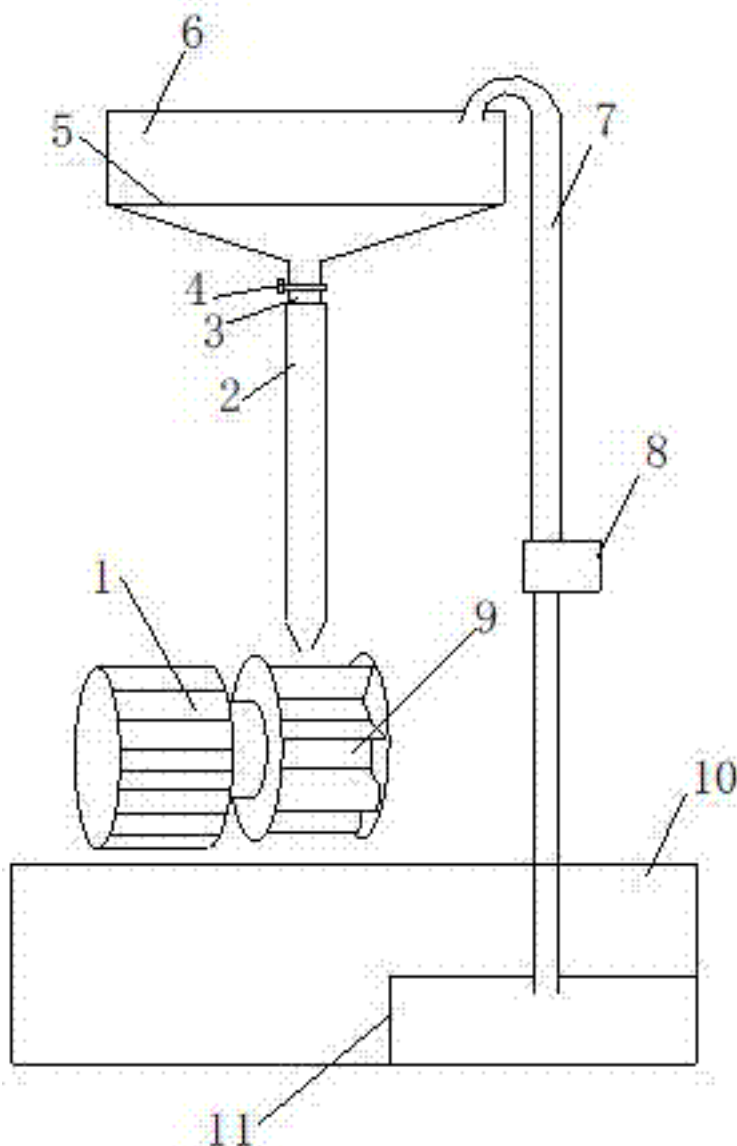
ROSSMANNEK WOLFGANG

Family 118/200 - FAMPAT - ©Questel

Title

(CN108730097)

Water current impacting force and lever force based independent power generation device

Images**Publication data including kind & date**[CN108730097](#)

A 2018-11-02 CN108730097

**Abstract**

(CN108730097)

The invention discloses a water current impacting force and lever force based independent power generation device, and belongs to the technical field of automobile power. The device comprises a power generator, a water flushing wheel, an underground water storing pool and an overhead water storing pool, wherein the water flushing wheel comprises a rotating shaft on which a plurality of paddles are arranged; a left sealing plate is arranged at the left end of each paddle, and a right sealing plate is arranged at the right end of each paddle; the left sealing plates and the right sealing plates fixedly sleeve the

wheel shaft; a rotor housing of the power generator is fixedly connected to the wheel shaft; a water feeding pipe is arranged between the underground water storing pool and the overhead water storing pool; a water pump is arranged on the water feeding pipe; a water outlet pipe port is formed in the lower part of the overhead water storing pool, and a valve is arranged on the water outlet pipe port; the water outlet pipe port is in sealing connection with a water draining pipe; and the water flushing wheel is arranged at the lower part of the water draining pipe. According to the device, the lever force which is produced by water in centrally downwards flushing, and the lever force which is provided by water in centrally downwards flushing while an outlet of the water draining pipe contracts are utilized to drive a rotor of the power generator to rotate, and thus the clean energy is utilized; the fuel coal is decreased; the resource is saved; and the environmental pollution is reduced.

Inventors

LI HUAMING

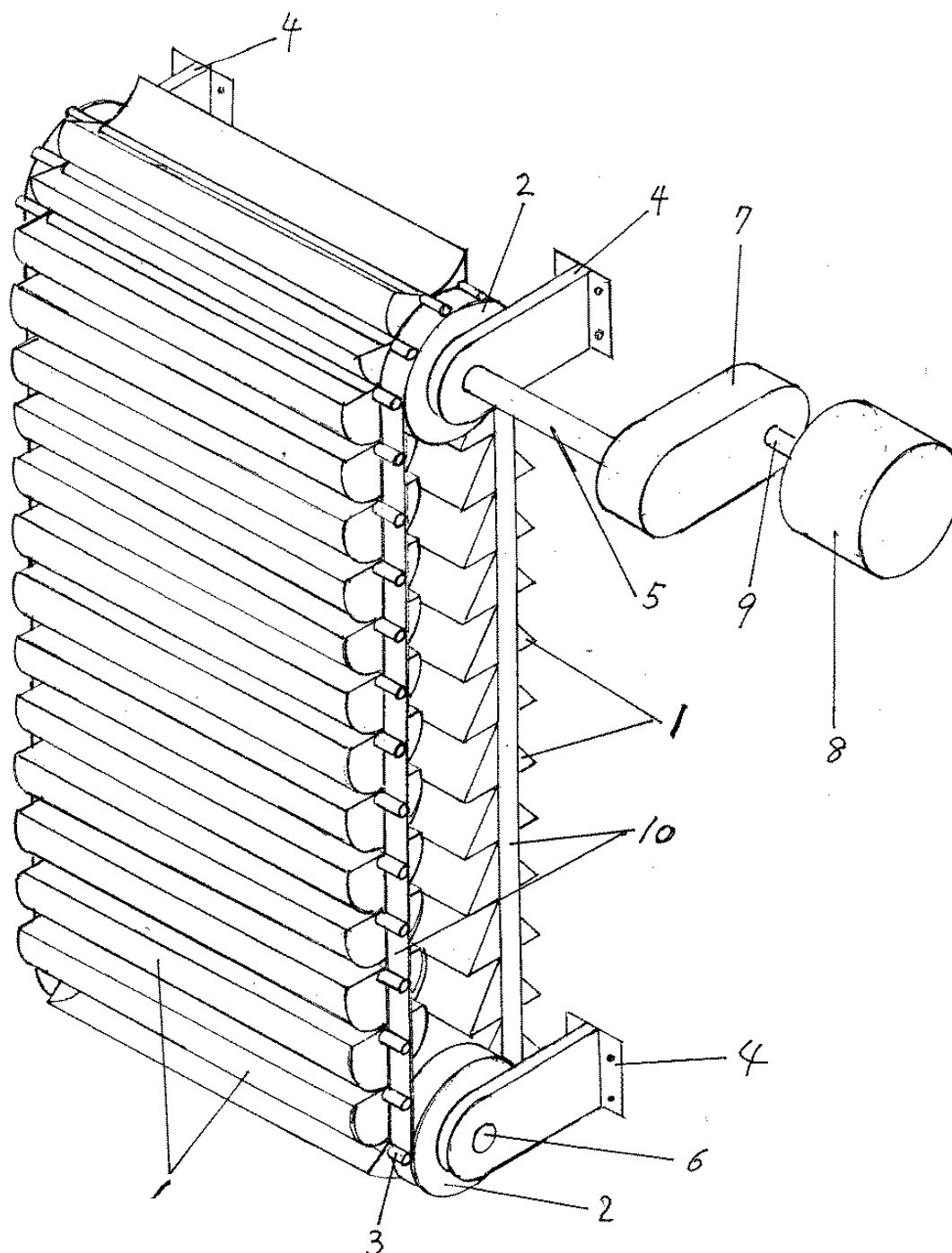
Family 119/200 - FAMPAT - ©Questel

Title

(JP2017180265)

Hydraulic generating equipment utilizing water gravity force

Images

**Publication data including kind & date**

JP2017180265

A 2017-10-05 JP2017180265

**Abstract**

(JP2017180265)

PROBLEM TO BE SOLVED: To generate electrical power by a cooperated power generator by an arrangement in which a belt attached with water tanks that are equally spaced-apart is wound around an upper water turbine and a lower water turbine, an elliptical-shaped water turbine with a head drop difference corresponding to a head drop of water flow is constructed and installed, flowing water is taken in sequence from an upper part to each of the water tanks at one side of the elliptical-shaped water turbine, the upper and lower water turbines are rotated due to motion of the belt under a water weight added with an amount corresponding to the head drop of the water weight in each of the water tanks. **SOLUTION:** A belt provided with engaging holes is wound around a gear-shaped water turbine supported at support shafts at a bank side in a vertical direction corresponding to a head drop distance, an elliptical-shaped water turbine is constructed and installed, water tanks partially made of sheet raw material are fixed in an equal-spaced apart relation at the belt part, flowing water is

taken into each of the water tanks in sequence at one side upper part of the elliptical-shaped water turbine, rotation of the elliptical-shaped water turbine is started through belt motion with the water weight added with the water weight corresponding to the head drop distance in the water tank partially formed by the sheet raw material, due to a shape deformation of the water tank made of partially sheet raw material at the time of rotation, a reverse rotation of the water tank becomes possible, the taking of the flowing water in each of the water tanks is facilitated and this state may also be related to an increased water storage amount in the water tank, resulting in that the water weight energy is utilized at the most as the power generating energy. SELECTED DRAWING: Figure 1

Inventors

YAMAZAKI HIROTO

Family 120/200 - FAMPAT - ©Questel

Title

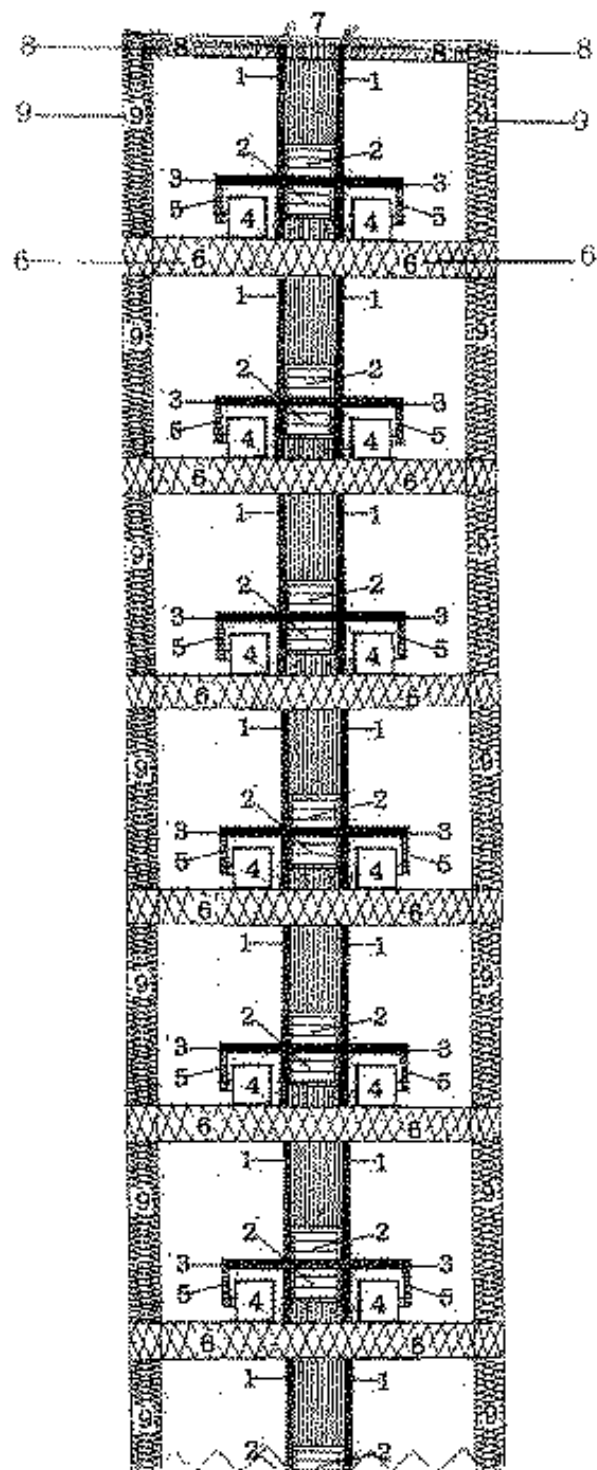
(JP2015113830)

Vertical water channel cylindrical multiple water turbine type hydraulic power generation

Images

断面図

- 符号1 水路筒
 符号2 水車羽根
 符号3 水車中心回転軸
 符号4 発電装置
 符号5 伝道ベルト
 符号6 構築物フロアー
 符号7 注水口
 符号8 構築物最上部
 符号9 構築物側壁



Publication data including kind & date

JP2015113830

A 2015-06-22 JP2015113830



Abstract

(JP2015113830)

PROBLEM TO BE SOLVED: To generate electricity at a clean and safe energy source. SOLUTION: In this invention, a straight line vertical water channel cylinder is formed at a slant land or from the upper-most part of the highest floor to the lower-most part of the lowest floor of a three-dimensional building, a water turbine is installed at every floor of the water channel cylinder, sea water or normal water is continuously supplied from the upper-most part of the water channel cylinder, dropping force of the same water in the water channel cylinder is used for rotating the water turbine installed at

each of the floors, the power generator is cooperatively operated with the rotating shaft of the water turbine to generate electricity. In order to increase an amount of generated electricity, the width of the water channel cylinder can be widened to increase an amount of water and to increase a scale of the water turbine and the power generator, and further the water channel cylinder is elongated and the number of mounted water turbine in the water channel cylinder is increased, thereby the amount of production of electricity can be increased.

Inventors

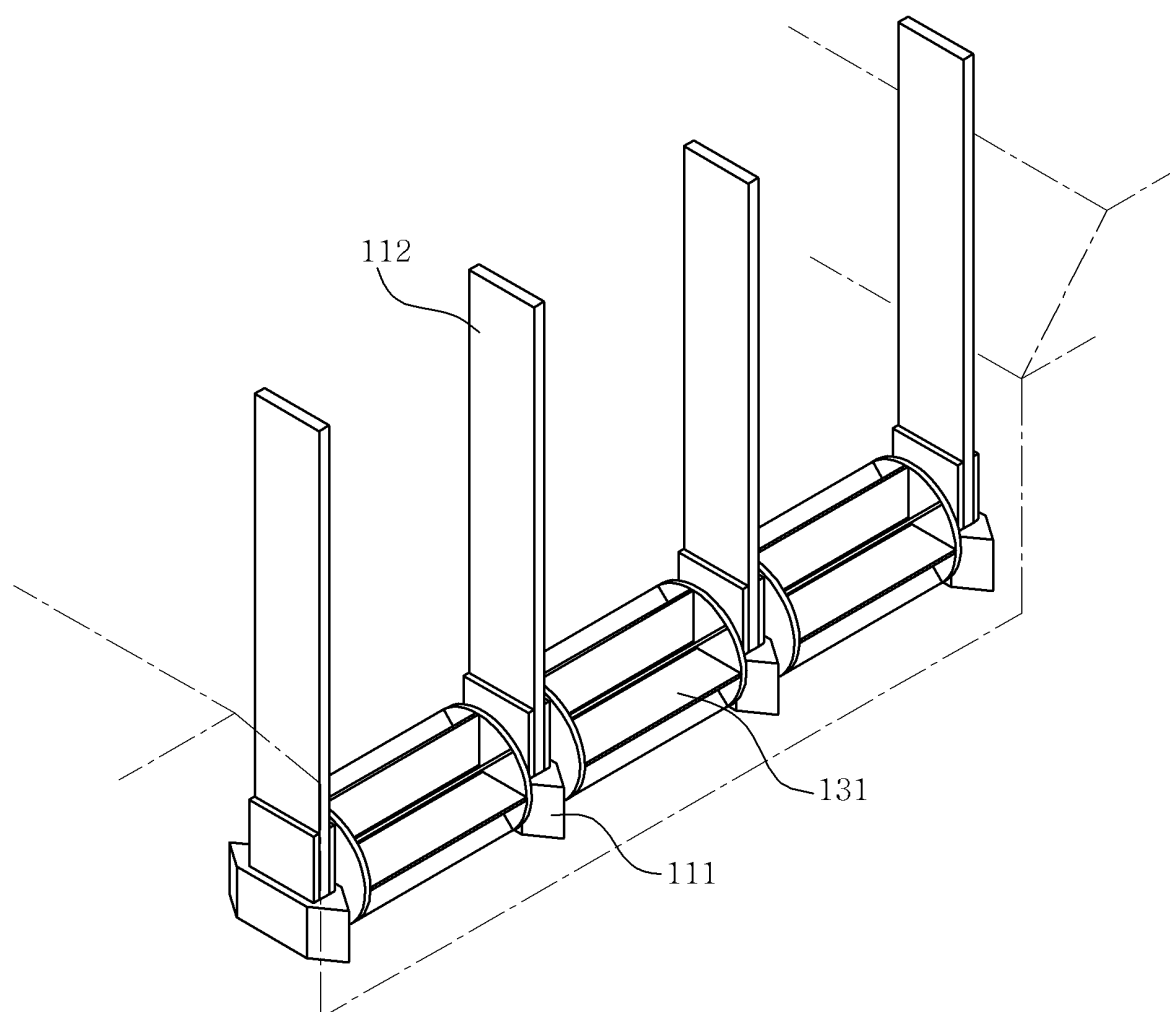
SHIMONO EIICHI

Family 121/200 - FAMPAT - ©Questel

Title

(WO201576603)

Load elevating derivative

Images**Publication data including kind & date**[WO2015/076603](#)

A1 2015-05-28

WO201576603

**Abstract**

(WO201576603)

The present invention relates to a load buoyancy elevating derivative which is capable of generating electric power while maintaining the original function of a natural river and the original function of a natural sea. That is, the present invention comprises a buoyancy elevating derivative consisting of an electric power generation means which is elevated by a load buoyant member and disposed in an appropriate position for generating electric power. Accordingly, the present invention can convert the potential energy of a river and the flow energy of a sea into electric energy by comprising a load buoyancy elevating derivative consisting of an electric power generation means which is elevated by a buoyant member and disposed in an appropriate position for generating electric power.

Inventors

NA SUNG-MIN

Latest standardized assignees - inventors removed

G & G

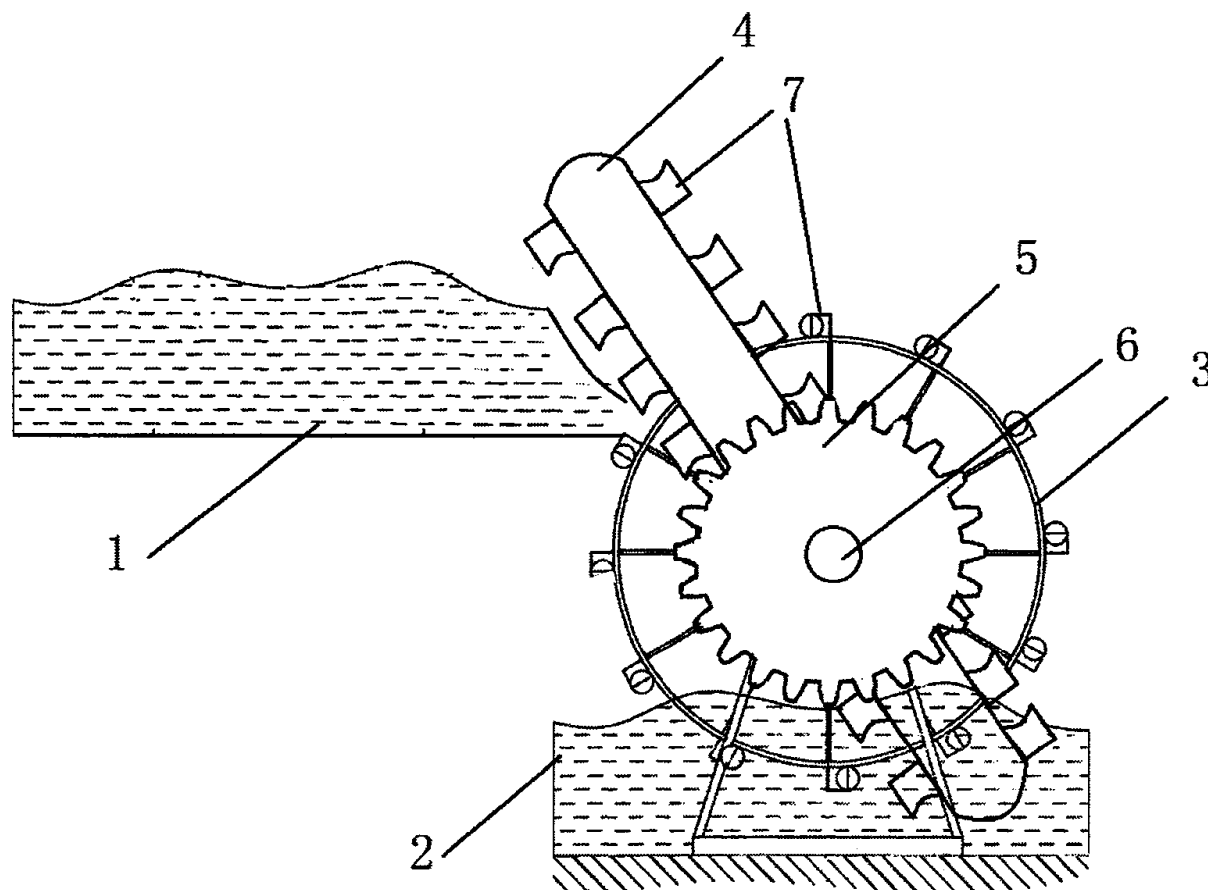
SUNG MIN

Family 122/200 - FAMPAT - ©Questel

Title

(CN203515930U)

Fluid circulation generator

Images**Publication data including kind & date**[CN203515930](#)

U

2014-04-02

CN203515930U

**Abstract**

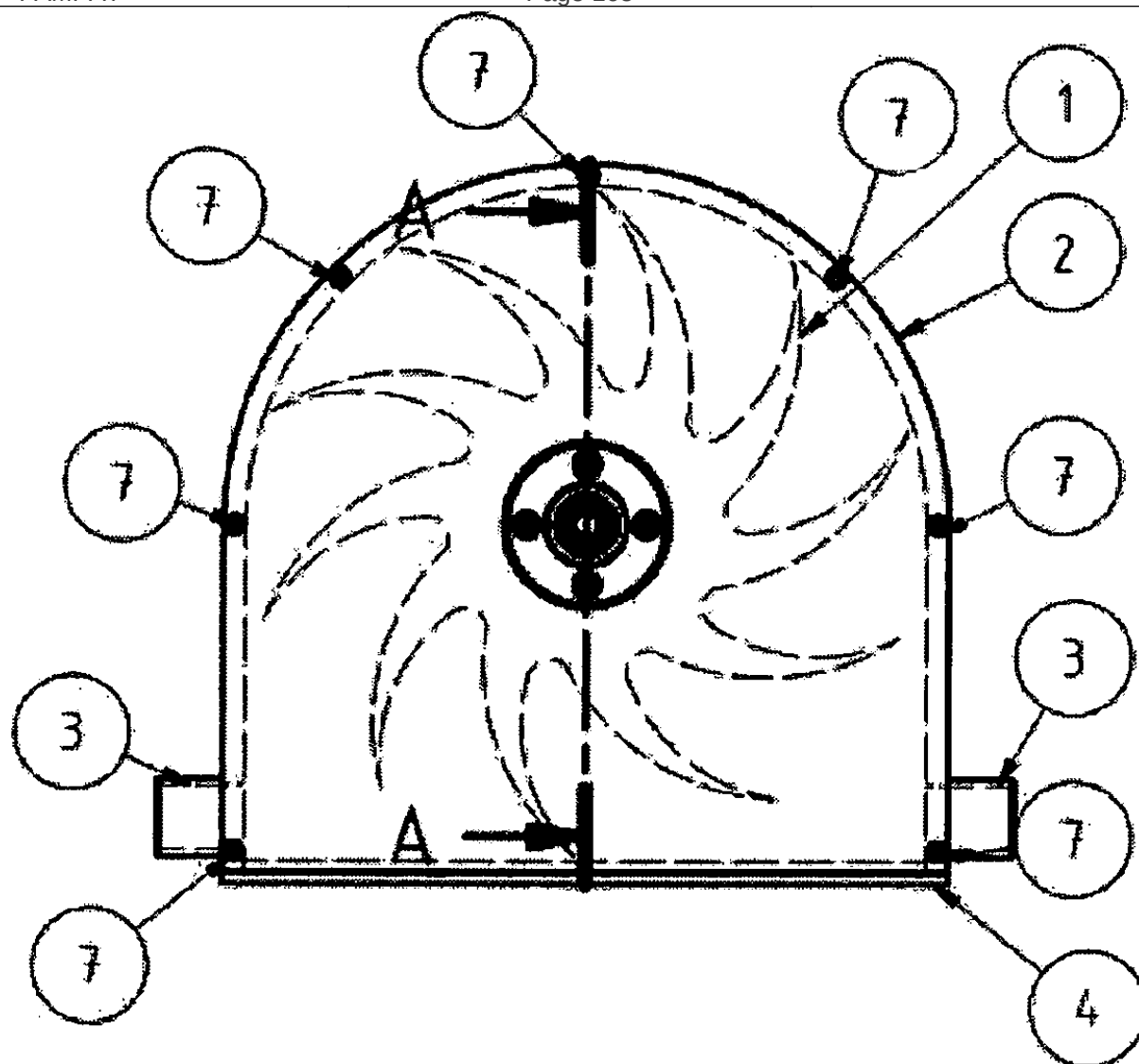
(CN203515930U)

The utility model discloses a fluid circulation generator comprising two water storing pools arranged up and down, a water wheel, a water bucket conveying belt and a generator. A water outlet of the water storing pool in an upper position is opened; water buckets are flushed via water current flow energy or water gravitational potential energy; water can be stored in the water buckets and the water wheel begins to rotate due to water gravity and inertia; an overdrive gear drives the water bucket conveying belt to work; when water in the water storing pool in the upper position continuously falls into the water wheel and the water buckets, water in the water storing pool in a lower position is moved by the water bucket conveying belt to the water storing pool in the upper position; and gear on two sides of a main shaft is driven by the main shaft to rotate, so the generator engaged with the gear starts to work.

Inventors

ZHENG YULAI

Family 123/200 - FAMPAT - ©Questel



Publication data including kind & date

DE202011105407	U1	2012-01-19	DE202011105407
DE102012017448	A1	2013-03-14	DE102012017448



Abstract

(DE102012017448)

Device for reducing pressure in the pipes and power generation, characterized in, that a water wheel (1) in a housing tubing of or building or the resulting suction is inserted into and system of the motor is driven to rotate the water flow, the resistance of the water pressure within the wheel (2) -line downstream of the plant and the desired pressure at the output of the generator power output apparatus for determining settings, produced by means of a rotating shaft mounted (5) watertightly-generator to generate power is transmitted to the, incorporated directly into the pipeline that the system, so that the water wheel (1) be either completely or partially under water.

Inventors

Erfinder wird später genannt werden

Latest standardized assignees - inventors removed

REUTER DANIEL

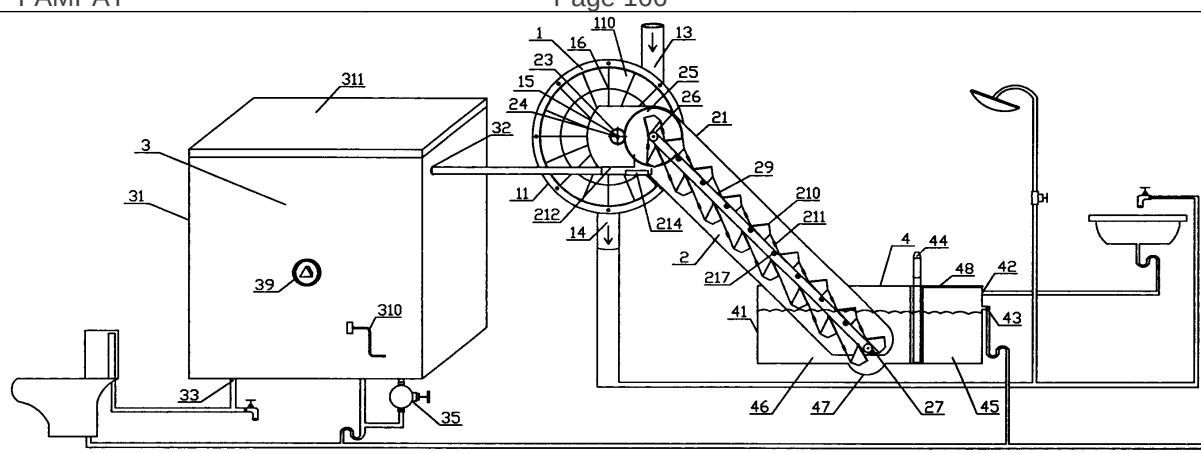
Family 125/200 - FAMPAT - ©Questel

Title

(CN102296671)

Water-saving device using pressure of tap water to collect domestic wastewater for secondary use

Images

**Publication data including kind & date**

CN102296671

A

2011-12-28

CN102296671

**Abstract**

(CN102296671)

The invention relates to a water-saving device using the pressure of tap water to collect domestic wastewater for secondary use, a water turbine of the water-saving device is connected with a waterwheel through a transmission shaft, a water outlet connecting groove of the waterwheel is connected with a water inlet pipe orifice of a water storage tank, the waterwheel is immersed in a wastewater filtering tank, the water turbine is provided with a water inlet and a water outlet, and the water turbine is constituted by arranging trapezoidal boxes along the outer diameter of the water turbine; the waterwheel is provided with a transmission gear and a speed-changing gear, a driving wheel and a driven wheel are mounted on a bottom box, a water lifting bucket is mounted on a transmission belt, and the transmission belt is arranged on the driving wheel and the driven wheel; a limit pipe is arranged in the water storage tank, a pollution discharge valve is arranged at the bottom of the water storage tank and a cleaning paddle is arranged on the inner wall of the water storage tank; and an aerial drainage pipe orifice communicated with a sewer, an arc-shaped groove and a conveniently inserted filter screen are arranged at the lower part of the water inlet pipe orifice of the wastewater filtering tank. By adopting the water-saving device, the domestic wastewater can be utilized.

Inventors

ZHANG JIANGUO

Latest standardized assignees - inventors removed

NANNING SHUMANTE LIGHTING ELECTRICAL APPLIANCE MANUFACTURING

Family 126/200 - FAMPAT - ©Questel

Title

(KR20180100282)

A technique to produce electricity continuously using a water drop power plant designed to nal acceleration actions

Images

angle drop of the water.

Inventors

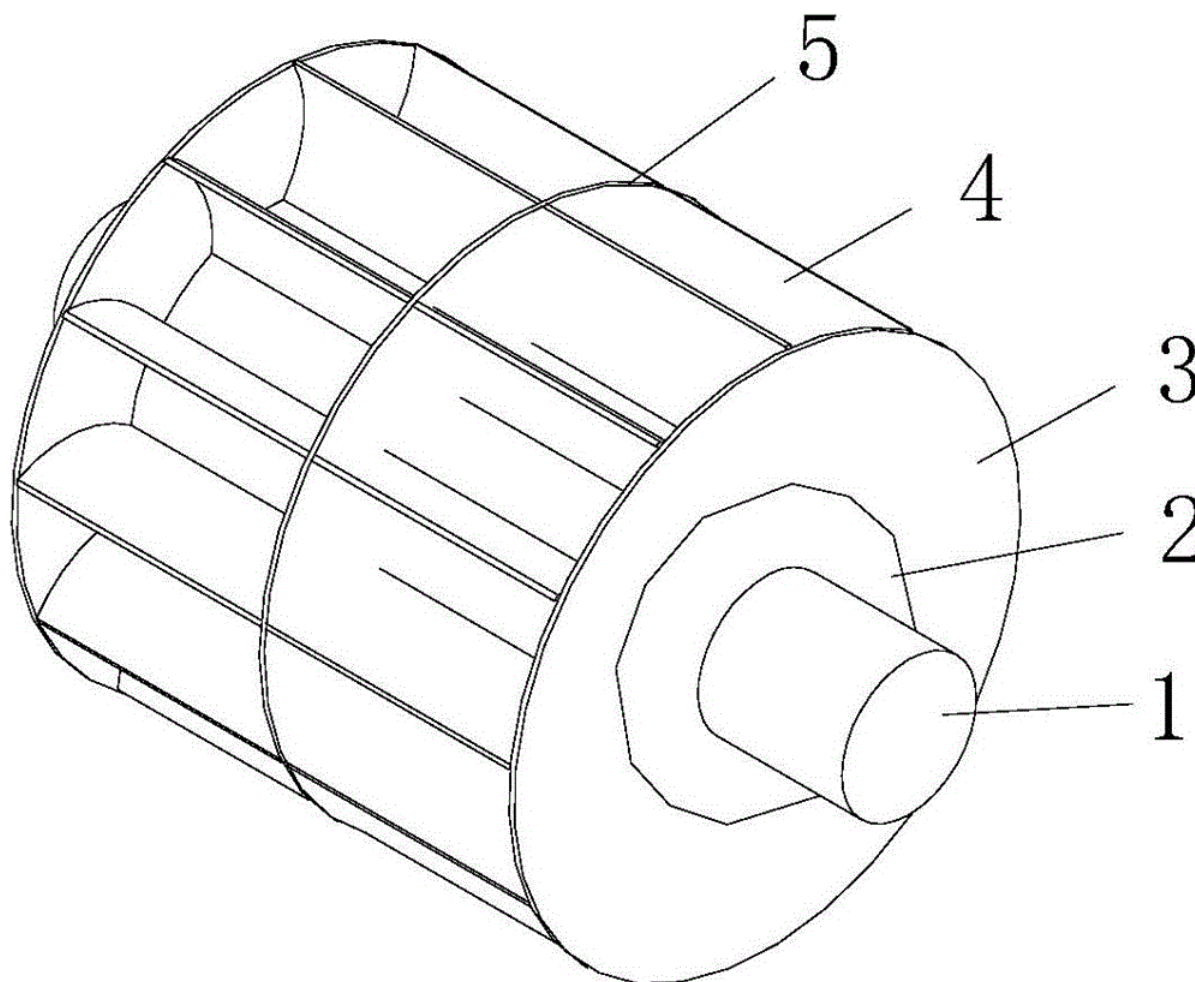
HAN, SANG-KWAN

Family 127/200 - FAMPAT - ©Questel

Title

(CN105804920)

Power generation device with running water as power

Images**Publication data including kind & date**

[CN105804920](#)

A 2016-07-27 CN105804920

**Abstract**

(CN105804920)

The invention provides a power generation device with running water as power. The power generation device is characterized by comprising a center shaft, a waterwheel, a transmission wheel and a transmission motor assembled on a dam; the center shaft is matched and mounted with the waterwheel; the waterwheel consists of a fixed middle base disc, a blade fixed disc, a blade middle positioning plate and waterwheel blades; the transmission wheel is mounted on the center shaft; and the transmission motor is mounted on a prefabricated column of the dam, and is in matched transmission with the transmission wheel through a belt. The waterwheel power generation mainly uses high race water volume, ultrawide running water waterwheel and multi-section connecting waterwheel, and uses water energy for pushing the waterwheel to operate at high speed to transmit to a generator for generating electricity, so that the purposes of power generation not limited by height difference and good power generation effect are achieved.

Inventors

ZHANG YUHUA

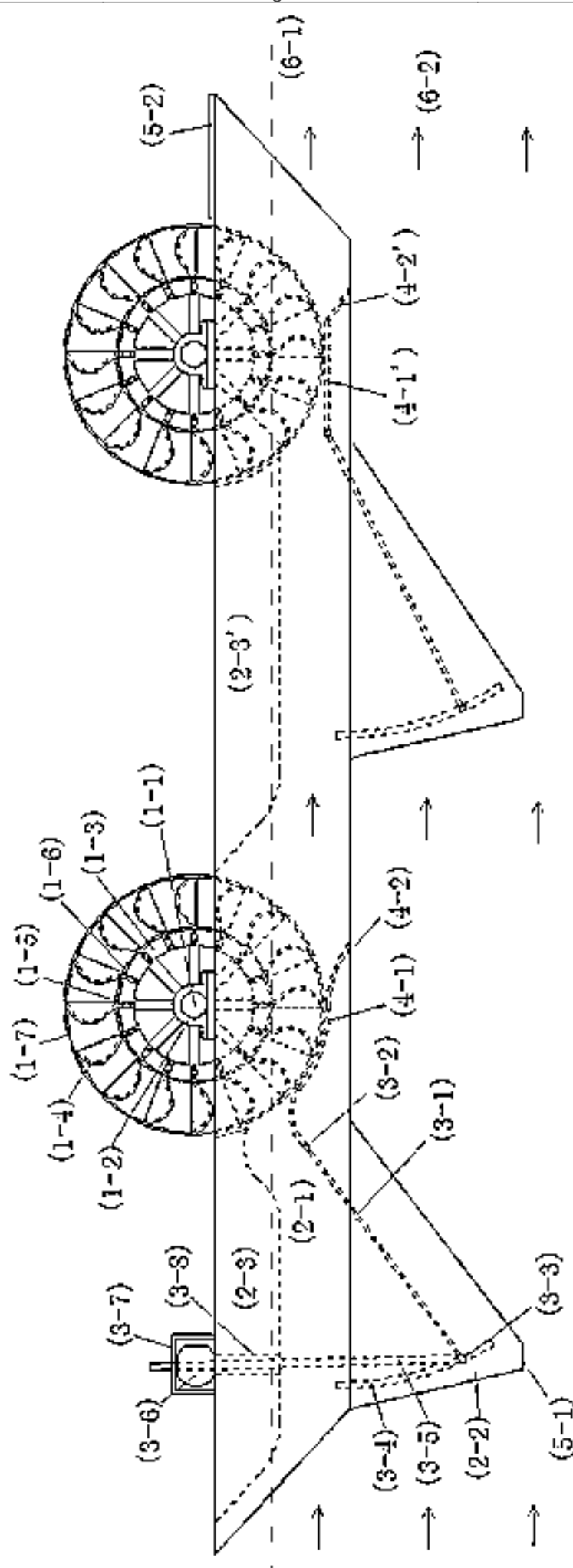
Family 128/200 - FAMPAT - ©Questel

Title

(CN103031826)

Technical scheme for hydraulic driving device with convergence and flood discharge functions

Images



Publication data including kind & date

CN103031826 A 2013-04-10 CN103031826
 CN103161646 A 2013-06-19 CN103161646

**Abstract**

(CN103031826)

The invention relates to a technical scheme for a hydraulic driving device with convergence and flood discharge functions, which can be arranged in arrays, has the convergence and energy collection and flood discharge and pressure relieving functions, and utilizes riverway flowing water to push water wheel blades to act. The technical scheme for the hydraulic driving device mainly consists of a water wheel and a water flow channel which synchronously contains a convergence energy collecting water flow channel (section) and an energy converting water flow channel (section) and a flood discharge port; the main driven objects of the device are a generator and a water pump which respectively constitute a hydraulic generating device and a hydraulic automatic water pumping device with convergence and flood discharge functions; the device is suitable for utilizing natural water power to generate power and pump water in large or small rivers, and belongs to a high efficiently used, clean and environment-friendly device capable of regenerating hydro power. When the device is used in the environment where the riverway is wider and the deep water area or the depth of the water is changed, the hydraulic driving device provided by the invention is needed to be installed in a matched and specially shaped floating body to generate power and pump water, and a traction rope is adopted to fix the hydraulic driving device in a certain area of the riverway to work, otherwise, the hydraulic driving device can be installed at proper positions at two banks of the riverway or on a matched and fixed bracket to generate power and pump water.

Inventors

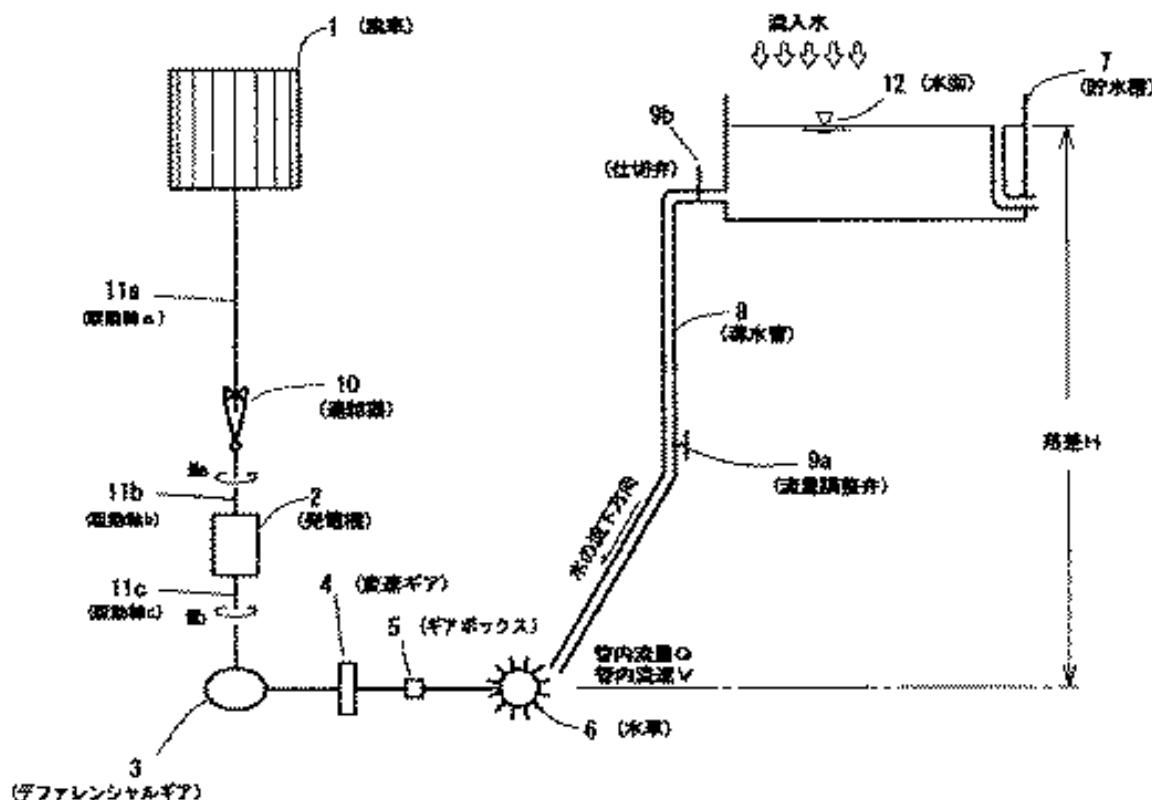
ZHOU YAOYU

Family 129/200 - FAMPAT - ©Questel

Title

(JP2010174878)

Wind and water power generation installation

Images**Publication data including kind & date**

[JP2010174878](#)

A 2010-08-12 JP2010174878

Abstract

(JP2010174878)

PROBLEM TO BE SOLVED: To generate power in spite of a low wind speed while generating power with water energy even in a calm condition by improving the starting characteristics of a wind power generation device.

SOLUTION: This power generation installation using both wind energy and water energy includes a water turbine 6 to be rotated with water energy so that its driving force is transmitted to a generator driving shaft 11c of a wind power generator via a plurality of gears including a differential gear 3. Thus, even in such a light wind condition that a wind speed is not higher than a generation starting wind speed, the driving shaft 11c of the generator 2 is rotated with both the wind energy rotating force of a wind turbine 1 and the water energy rotating force of the water turbine 6 to generate power. In a calm condition, a connector 10 is released to generate power only with the water energy rotating force of the water turbine 6.

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Inventors

HAMADA NAOTAKA

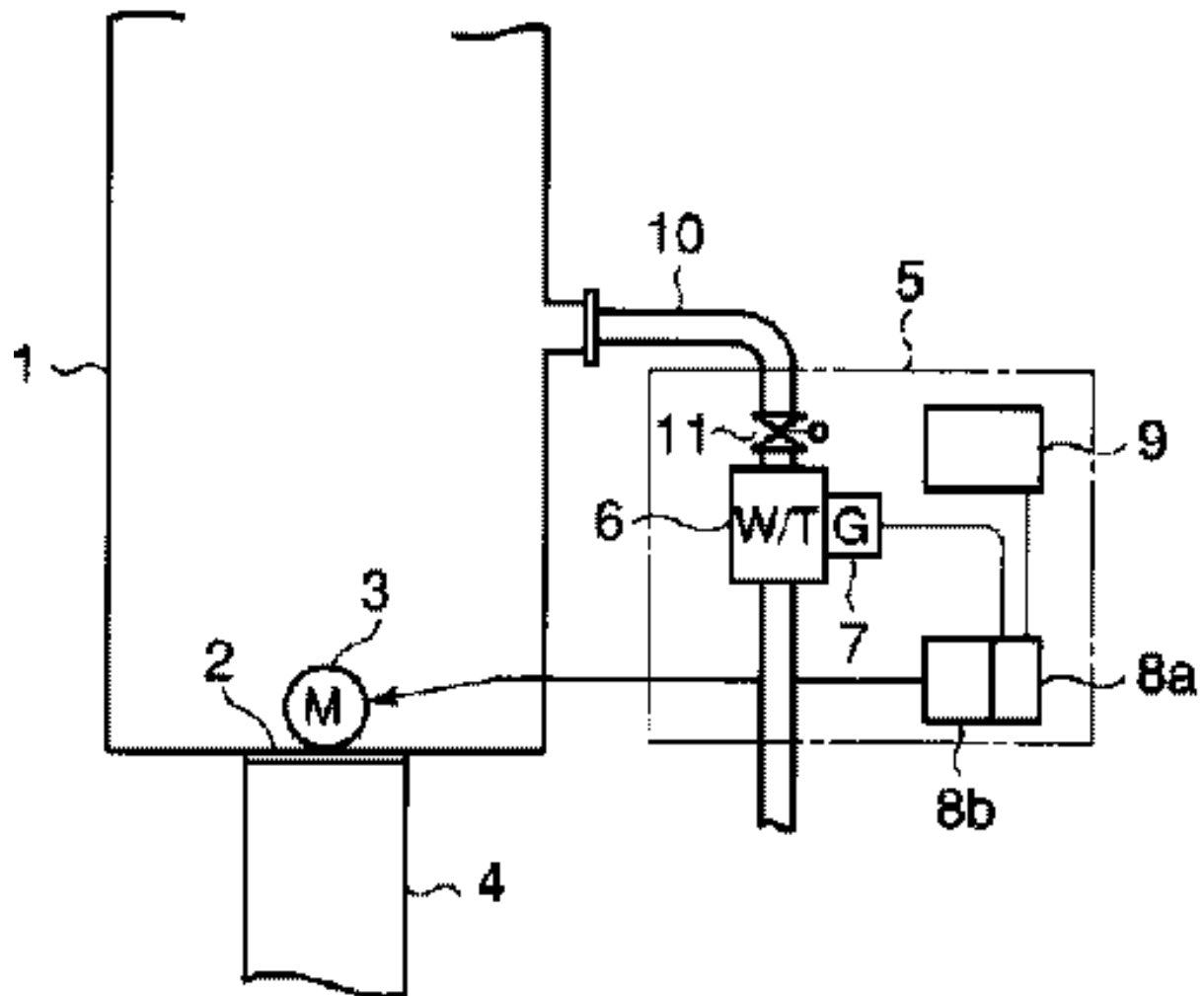
Family 130/200 - FAMPAT - ©Questel

Title

(JP2002354695)

Conduit type power generating system

Images



Publication data including kind & date

JP2002354695

A 2002-12-06 JP2002354695



Abstract

(JP2002354695)

PROBLEM TO BE SOLVED: To supply power to a load including a motor to openably drive a gate of a head tank steadily in a stable condition, unaffected by snow damage and falling of thunderbolts, or the like. **SOLUTION:** In a conduit type power generating system, for which water is made to flow in from the source such as a mountain stream, a brook, or the like; and is collected in the head tank 1 having a gate 2 which is opened and closed by a motor 3; the water is dropped to a hydropower plant installed in a lower land side, by passing it from the gate 2 through a conduit 4; and generates electric power by driving a water wheel by the potential energy of the water, a small scaled power generating plant 5 is installed in

the proximity of the head tank 1. The power plant 5 comprises a propeller type water wheel 6, which is driven by the potential energy of the water dropped and introduced from the head tank 1; a synchronous generator 7, which is operated by the propeller type water wheel to obtain generated electric power output; and a battery 8b, which is charged via a battery charger 8a with the generated power output of the generator 7 and drives the load including the motor 3 to open and close the gate 2.

Inventors

HINO TAIICHI

OTAKE NORIO

Latest standardized assignees - inventors removed

TOSHIBA ENGINEERING

TOSHIBA

Family 131/200 - FAMPAT - ©Questel

Title

(KR20180088603)

Environmentally friendly power generating method continuously producing electricity by installing vertical water drop power plant between upper stream and lower stream of valley or river

Images

produced.

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Inventors

HAN, SANG-KWAN

HAN, KOOK HEE

HAN, SANG HOO

Gosangku

YEO UnEog

PARK, SANG-JUN

HAN, JI YUN

HAN, MIN SUP

WOO, MI HWA

KIM, HO-SUNG

Lim Young-ju

JO, KYU CHUN

SHINECO CO., LTD.

KWAK, KWANG SHIN

SN-TEK

HONG, JONG YEL

KIM, KI-SUNG

LEE, YANG-WON

LEE, HO KYUNG

LEE, INN-HO

KIM, SOO-ILL

LEE, YOUNG-HO

HAN, SANG-YOUN

PARK, SUN GI

LEE, BOK SOON

PARK, JONG KWON

HWANG, KYU CHUL

WOO, YOUNG HO

HAN, YOUNG JIN

HAN, SONG HEE

Shin smile

SON, SANG CHUL

KIM, YONG GUEN

semunja

KIM, MI-SUN

YU, KWANG SU

HONG, KYONG-PYO

LeeGibu

IM, GYE HYUN

HAN WON-SOO

HWANG, YOUNG IL

YUN, JOO-SUNG

HAN, SANG YUN

YOU, JIN O

YOO, SEOG JOON

HAN, SUNG-SOO

KIM, JONG DAE
JANG, GAB SUE
uaerisub
HAN, YEONG CHAN
PARK, SU JIN
KWON, SOON HO
HAN, KYUNG HWA
LEE, IN-WOO
KIM, YONG-KWAN
HWANG YoungHwa
KIM, KI-BONG
PARK, BOK - RYE
SUNG, JI HYUN
HAN, JUNG EUN

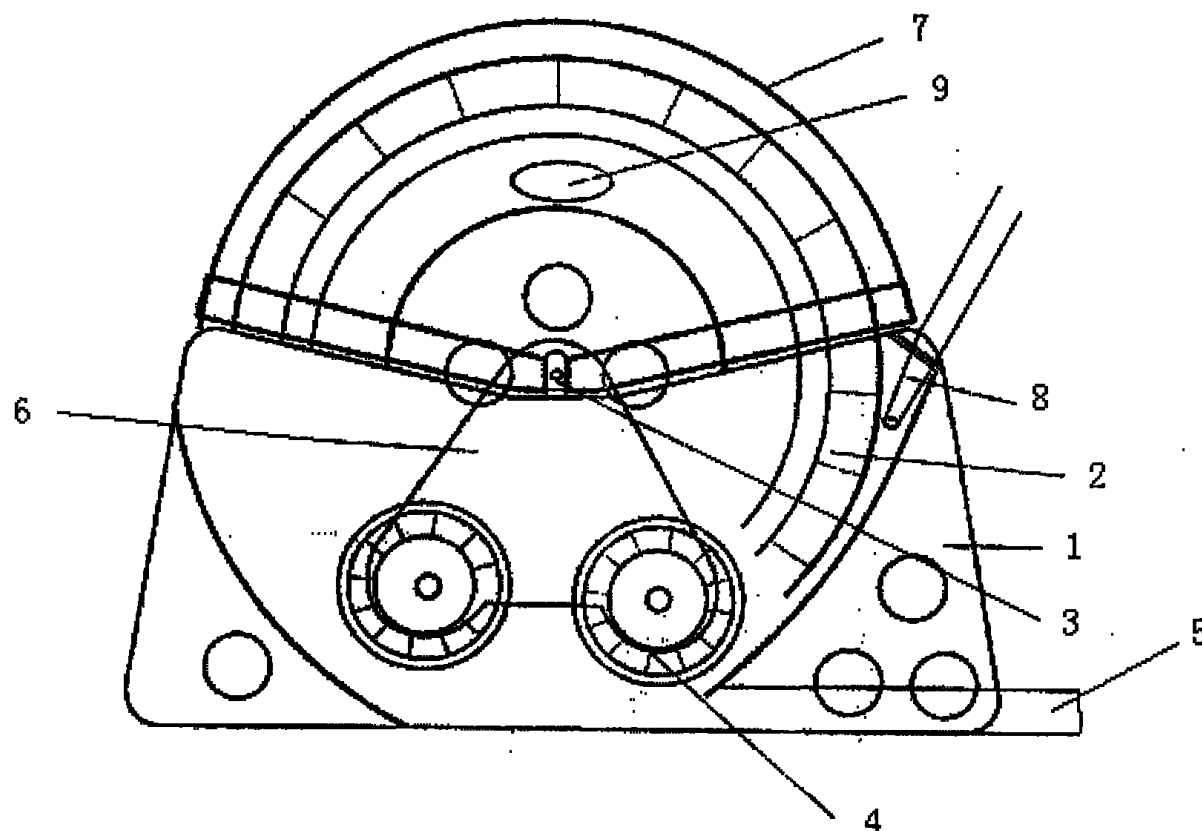
Family 132/200 - FAMPAT - ©Questel

Title

(CN202023683U)

Hydroelectric generator

Images



Publication data including kind & date

[CN202023683](#)

U

2011-11-02

CN202023683U



Abstract

(CN202023683U)

The utility model discloses a hydroelectric generator, which comprises a base, a water wheel, a speed regulator and generators, wherein the water wheel is arranged on the base; the water wheel is connected with the speed regulator; the speed regulator is connected with the generators; and the base is provided with a water spray pipe and a water outlet pipe. By utilizing the hydroelectric generator, electricity can be effectively generated by properly building a dam in an

intermountain creek.

Inventors

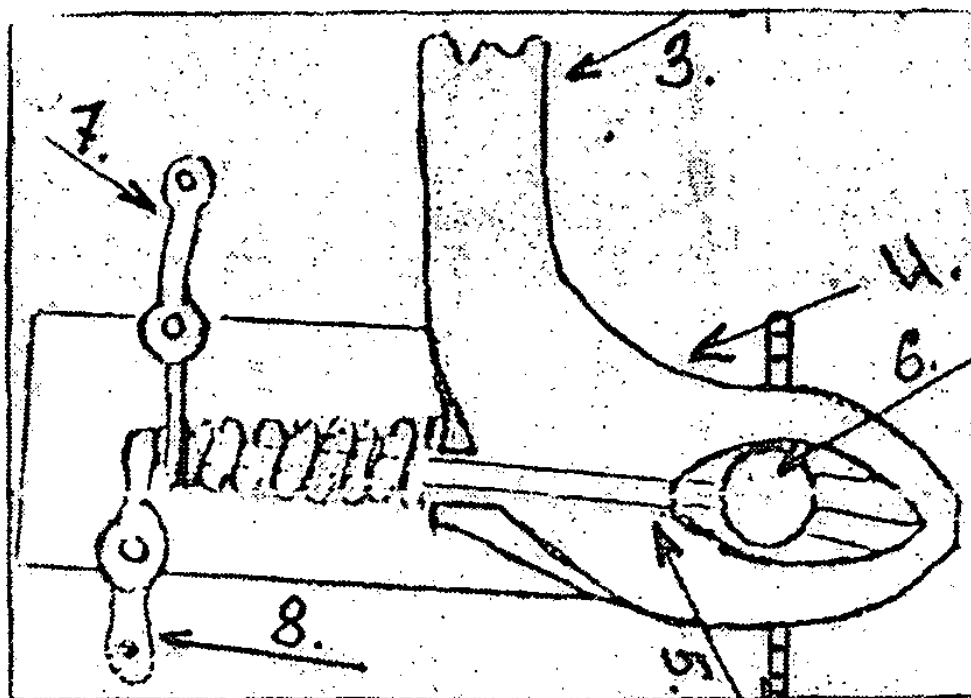
ZHANG LIANFA

Family 133/200 - FAMPAT - ©Questel

Title

(WO201119302)

Method and device for converting hydraulic impact energy

Images

Фиг. 1. Импульсный механизм
(собственная колебательная
система).

Impulse mechanism (dedicated oscillatory system)

Publication data including kind & date

WO2011/019302	A1	2011-02-17	WO201119302
RU2009131102	A	2011-02-20	RU2009131102

**Abstract**

(WO201119302)

The invention relates to the field of power engineering and is based on an individually established postulate that presupposes the presence of a dedicated oscillatory system, a dedicated regulating device, and a dedicated store/source of energy. Together, the above-mentioned elements should make up a unified system with regulating feedback. Furthermore, the whole system should operate under the effect of a periodic impulsive force. In order to implement the

method, a device comprises a body and, arranged therein, an energy store, an impulse mechanism with a valve, a regulating flywheel with a projection thereon, and a feedback mechanism comprising a hydraulic impact pump, a return pump, and a turbine with a shaft.

Inventors

TARELKIN ALEKSANDR IVANOVICH

CHERVONOV DMITRIJ NIKOLAEVICH

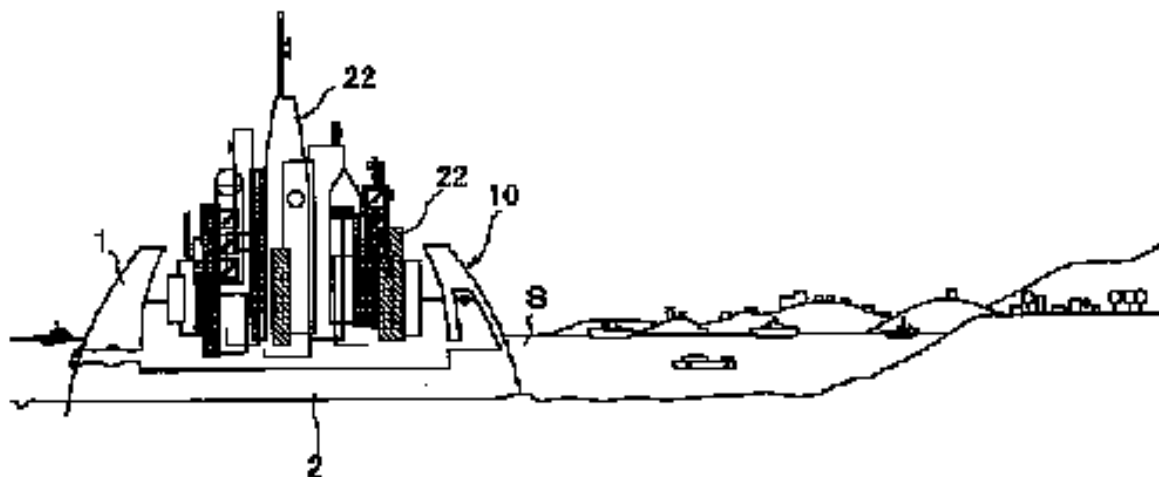
Family 134/200 - FAMPAT - ©Questel

Title

(JP10331141)

Urban type marine structure and power generating method

Images

**Publication data including kind & date**[JPH10331141](#)

A 1998-12-15 JP10331141

**Abstract**

(JP10331141)

PROBLEM TO BE SOLVED: To establish a high efficiency power generating method using a marine structure which can make use of the sea water energy such a tidal force, buoyancy, etc., with extremely high effectiveness and which thereby allows constructing a marine surface city equipped with a balance of higher order. **SOLUTION:** An urban type marine structure is equipped with a ring-shaped embankment 1 having such a height over the sea ground as protruding over the sea surface. The configuration includes a marine dam 10 to store sea water internally and a buoyant structure put afloat in the internal sea water area of the dam 10, wherein the dam 10 is furnished with a tidal force power- generating facility

which makes power generation through utilization of the water level difference between inside the dam 10 and the external sea area S, and the buoyant structure is structured so as to serve as at least either of a building 22 and artificial foundation ground.

Inventors

IWASAKA TERUYUKI

Latest standardized assignees - inventors removed

MAEDA

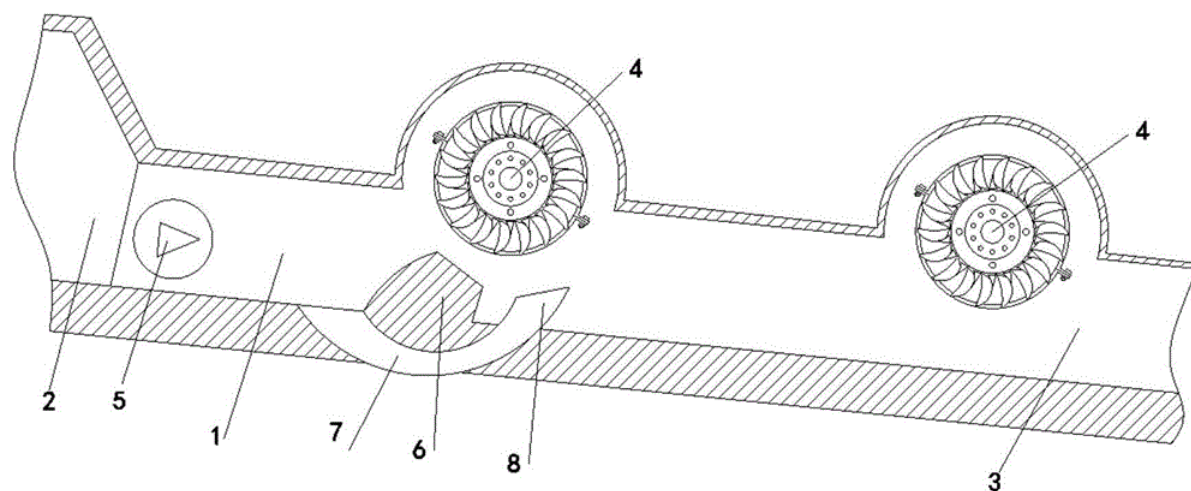
ZENITAKA

Family 135/200 - FAMPAT - ©Questel

Title

(CN205315199U)

Inclined jet turbine

Images**Publication data including kind & date**

[CN205315199](#)

U

2016-06-15

CN205315199U

**Abstract**

(CN205315199U)

The utility model provides an inclined jet turbine, the pipeline that sets up including the slope with set up the runner on the pipeline, the pipeline upper end is provided with the water inlet, the lower extreme is provided with the delivery port, it is provided with protruding bank near the oral -lateral of intaking to lie in the runner in the pipeline, be provided with dark water course between protruding bank and the water inlet, the dark water course other end extends to the runner and is provided with jet orifice or injection pipe near the delivery port side, the utility model discloses a be provided with on the pipeline of slope protruding bank and dark water course and with the jet orifice or the injection pipe of dark water course intercommunication, adopt to become certain angle and diversified the impact to runner and pipeline incline direction, make that rivers are direct to be striked the runner, under the condition of the working efficiency that does not reduce inclined jet turbine, improve inclined jet turbine's ground firmness, avoid inclined jet turbine to organize and is washed away.

Inventors

WANG JIAN

ZHANG YAN

ZHAN ZHIYONG

WANG LANYING

ZHAN ZHIPAN

HU YONGJIAN

GU LIJUN

Latest standardized assignees - inventors removed

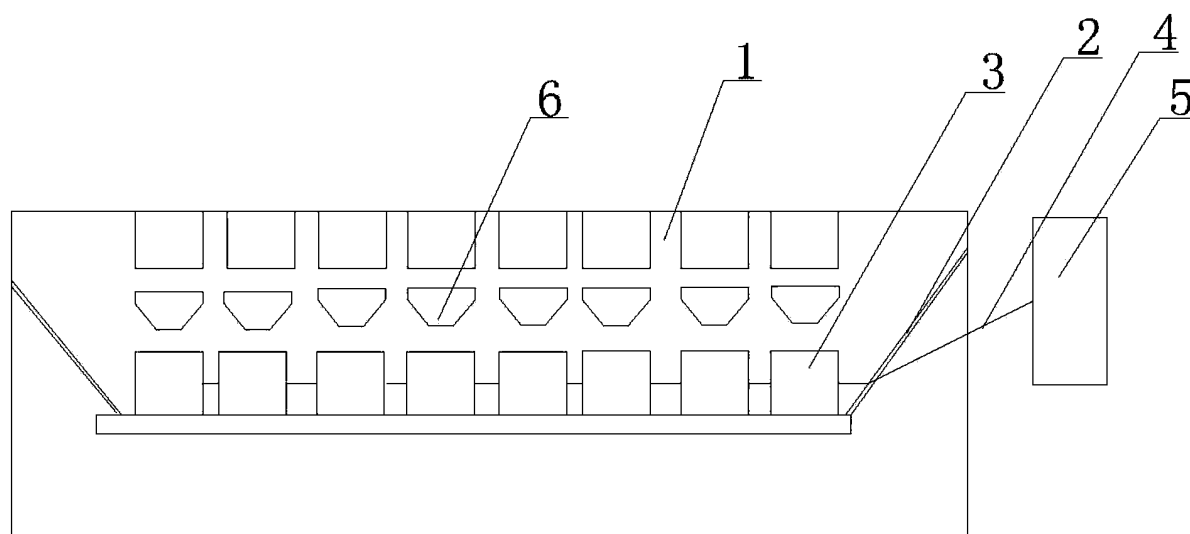
ZHONGXIAN SANXIA HYDROPOWER EQUIPMENT MANUFACTURING

Family 136/200 - FAMPAT - ©Questel

Title

(CN104632513)

Residual water power generation system of hydroelectric power station

Images**Publication data including kind & date**

[CN104632513](#)

A

2015-05-20

CN104632513

**Abstract**

(CN104632513)

The invention relates to the field of electric systems, in particular to a residual water power generation system of a hydroelectric power station, wherein the residual water of the hydroelectric power station can be utilized to conduct power generation, and a dam body (1) is included. The dam body (1) is provided with a drainage opening and the residual water power generation system for converting the kinetic energy of the water flow at the drainage opening into electric energy. The residual water power generation system comprises a fixing device (2), a plurality of water wheel power generation devices (3) and a cable (4). The fixing device (2) is arranged on the dam body (1). The water wheel power generation devices (3) are arranged on the fixing device (2) and are connected with one another through the cable (4) in series.

Inventors

WU GUOCHUN

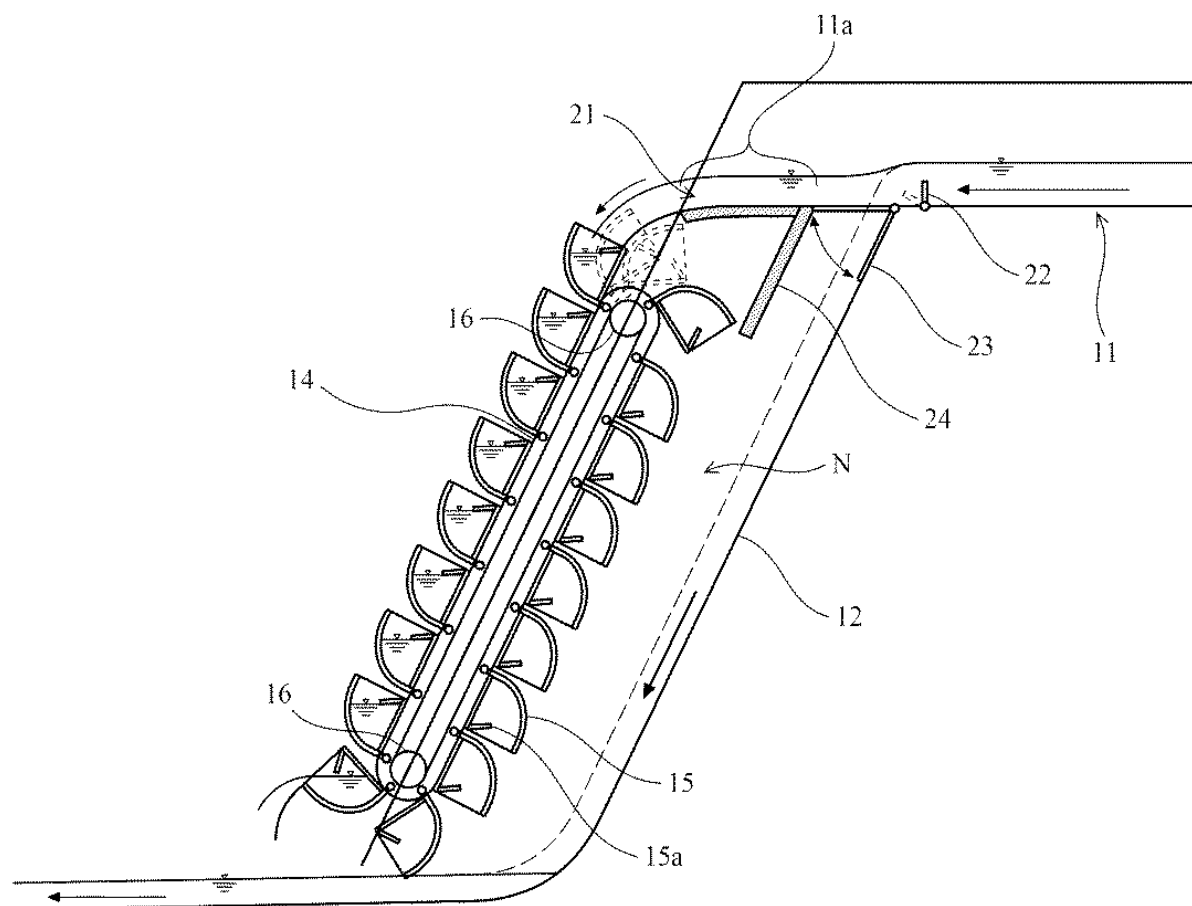
Family 137/200 - FAMPAT - ©Questel

Title

(JP2016040462)

Biaxial overshoot water wheel

Images



Publication data including kind & date

JP5671769	B1	2015-01-09	JP5671769
JP2016040462	A	2016-03-24	JP2016040462



Abstract

(JP2016040462)

PROBLEM TO BE SOLVED: To provide a biaxial overshoot water wheel capable of receiving water flow immediately after discharging in a horizontal direction. **SOLUTION:** A biaxial overshoot water wheel includes a pair of endless rotors 14 hung between two shafts 16 along a slope 12 of a water channel 11, a plurality of buckets 15 fixed to the rotors, means composed of a fixed or movable weir 22 disposed just at the upstream of a discharge portion for controlling direction/flow rate and water surface shape just before discharging while properly inclining a water channel bottom 11a of the water discharge portion 21 of the water channel, a bottom plate 23 openably disposed on the water channel bottom at the downstream of the weir, and a water shield plate 24 vertically disposed at a rotor side at the downstream of the bottom plate. When power is generated, discharged water flow is introduced to the buckets while controlling the direction/flow rate of the water flow by using the inclination of the water channel and the weir, and when the power is not generated, reverse rotation of the rotors is prevented by the water shield plate vertically disposed at the rotor side while controlling the water surface shape of the water flow by using the weir, and the water flow is introduced to a narrow space between the rotors and the slope from an opened bottom plate part. **SELECTED DRAWING:** Figure 1

Inventors

NAKAGOME HIDEKI

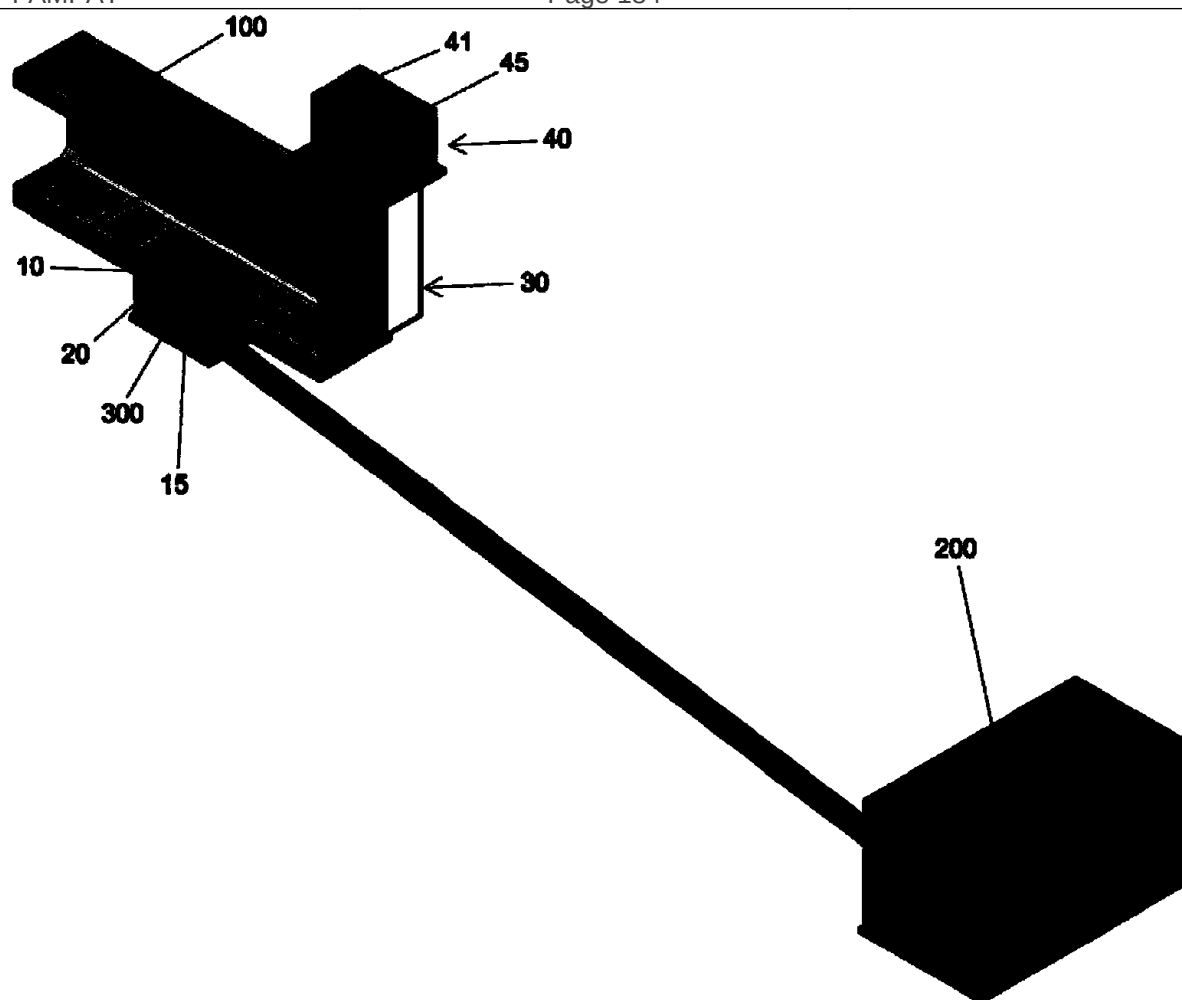
Family 138/200 - FAMPAT - ©Questel

Title

(CN104612886)

Small hydroelectric generator utilizing strom overflow diverging tank

Images

**Publication data including kind & date**

KR101352382	B1	2014-01-17	KR101352382
CN104612886	A	2015-05-13	CN104612886

**Abstract**

(CN104612886)

The present invention relates to a small hydro power device by using a soil inflow preventing device for producing electricity by using rain water or wastewater flowing from the end of a drainpipe while a hydraulic turbine generator is installed inside an opening/closing plate formed at the top of a rain water soil chamber. The small hydro power device by using the soil inflow preventing device according to the present invention in order to solve problems comprises: an opening/closing unit including a fixed frame fixed at an opening unit formed at the top of the rain water soil chamber, a fixed plate fixed at the top of the fixed frame and in which a sewage inlet is formed at one side, an assembly unit in which both ends are fixed at the fixed frame, and an opening/closing plate for opening/closing the sewage inlet while being integrally fixed to the assembly unit; a hydraulic turbine generator unit including a shaft in which both ends are fixed to the lateral wall of the rain water soil chamber while being arranged in the sewage inlet, a bearing unit installed at both ends of the shaft, and the hydraulic turbine generator fixed to be rotatable to the shaft; a power transmission unit including a spring accommodating pipe made of soluble materials and a power transmission spring built in the spring accommodating pipe and in which the driven side of the power transmission spring is fixed to one end of the shaft; and a power unit including a power chamber installed at the top of the end of the drainpipe and a generator installed at the power chamber and connected to the driving side of the power transmission spring to be fixed.

Inventors

HUANG DONGYAN

Latest standardized assignees - inventors removed

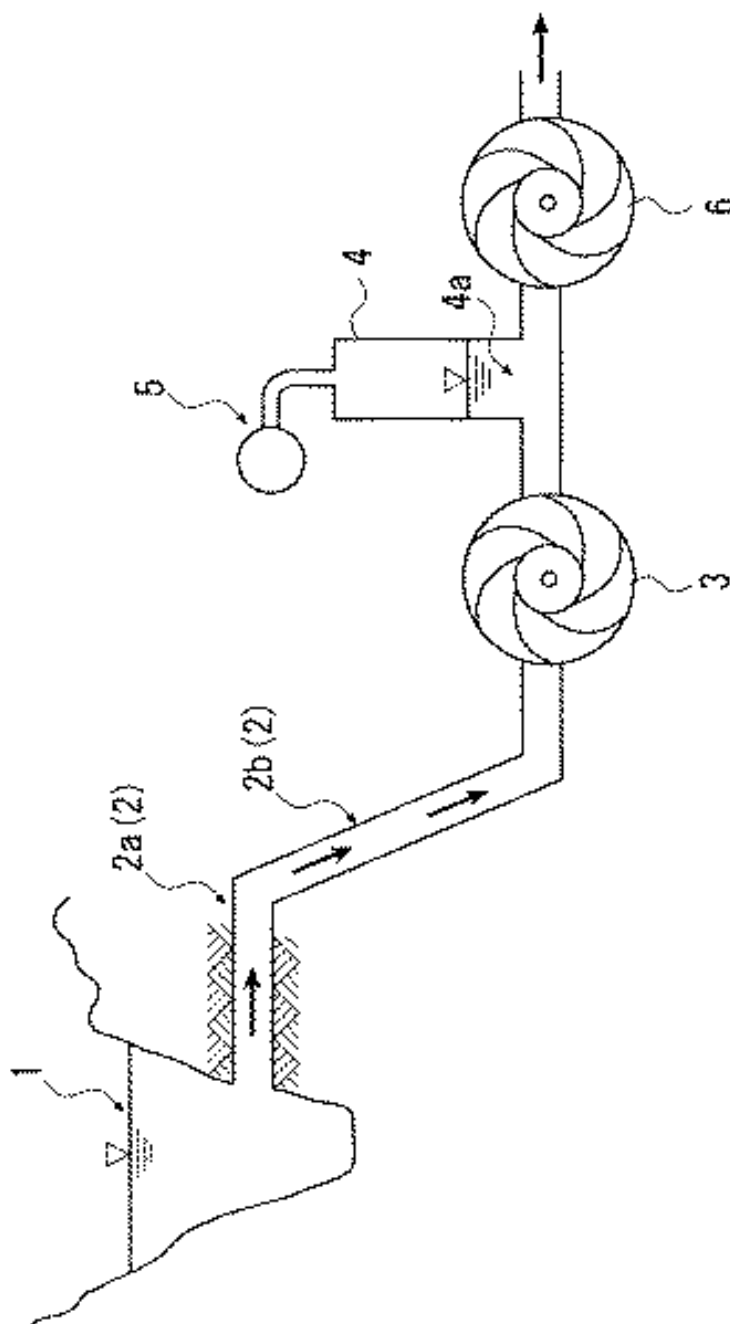
SE YOUNG ENGINEERING

Family 139/200 - FAMPAT - ©Questel

Title

(JP2009063003)

Hydraulic power generating device

Images**Publication data including kind & date**

JP2004176705	A	2004-06-24	JP2004176705
JP2009063003	A	2009-03-26	JP2009063003
JP4287172			



JP4863228 B2 2009-04-03 JP4287172
B2 2011-11-18 JP4863228



Abstract

(JP4863228)

PROBLEM TO BE SOLVED: To provide a hydraulic power generating device capable of increasing the electricity generated with a conventional hydraulic power plant facility.

SOLUTION: In this hydraulic power generating device for generating power by leading water through a pipeline 2, which is provided with a head difference so as to prevent contamination with air, and rotating a turbine 3 so as to drive a generator (not shown in the figure), a vacuum suction pump 5 is provided to rotate the turbine 3 with acceleration by applying vacuum suction force to water inside of the pipeline 2 from a downstream side of the turbine 3. A vacuum chamber 4 communicating with the inside of the pipeline 2 is provided downstream of the turbine 3, and the vacuum suction pump 5 is connected to the vacuum chamber 4. Further, a drain pump 6 for draining is provided inside of the vacuum chamber 4 so as to secure an almost vacuum region inside of the vacuum chamber 4. A communication pipe 4c for discharging water drained from the drain pump 6 into the pipeline 2 is provided between the pipeline 2 and the drain pump 6 downstream of a communication position of the communication pipe 4b with the pipeline 2.

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Inventors

TAKAHASHI MOKICHI

Latest standardized assignees - inventors removed

ASAHI TECHNO

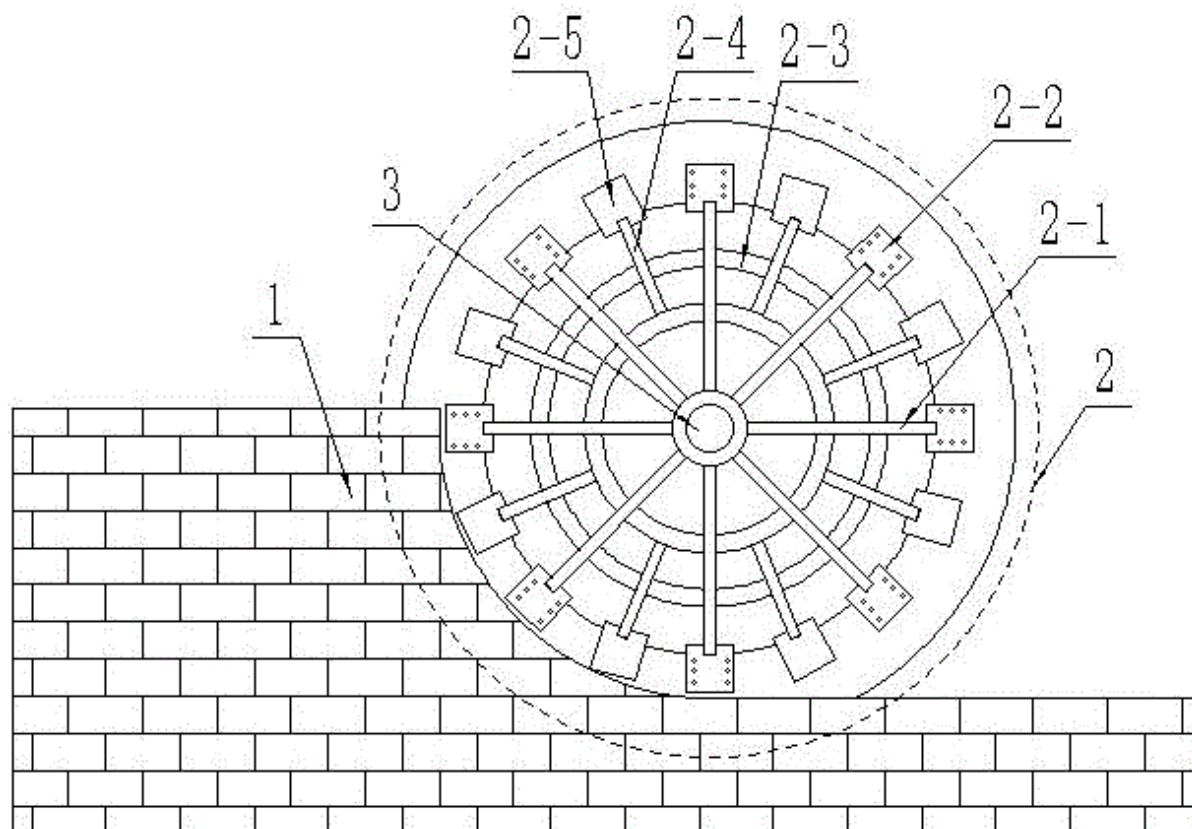
Family 140/200 - FAMPAT - ©Questel

Title

(CN206144700U)

Miniature hydro -power generation system

Images



Publication data including kind & date

CN206144700 U 2017-05-03 CN206144700U



Abstract

(CN206144700U)

The utility model relates to a miniature hydro -power generation system belongs to power generating equipment technical field. The waterwheel 2 that it includes ditch 1, is connected through pivot 3 and shaft coupling 5 and generator 6, the ditch is " Z " font structure, and 2 lower parts of waterwheel tangent or have less clearance with 1 bottom surface in the ditch, and 2 width of waterwheel slightly are less than the ditch width, waterwheel 2 two waterwheel sides 2 around by 9 and base 2 10 the annular structure that constitutes, install a plurality of " V " the font bucket 2 in this annular structure 7, the radiation sets up outer and pass through connecting block 2 in pivot 3 2 connect respectively at two waterwheel sides 2 of front and back 9 on support rack 2 1 constitute. The utility model discloses simple structure is compact, area is little, with low costs, need not retain water, just can generate electricity under less discharge, and water resource requirement is less, and this system just can implement on less irrigation canals and ditches limit not strict demand of site selection, has fine market prospect.

Inventors

WANG CHENGJIN

Latest standardized assignees - inventors removed

GUIZHOU RURAL HYDROPOWER NEW ENERGY DEVELOPMENT

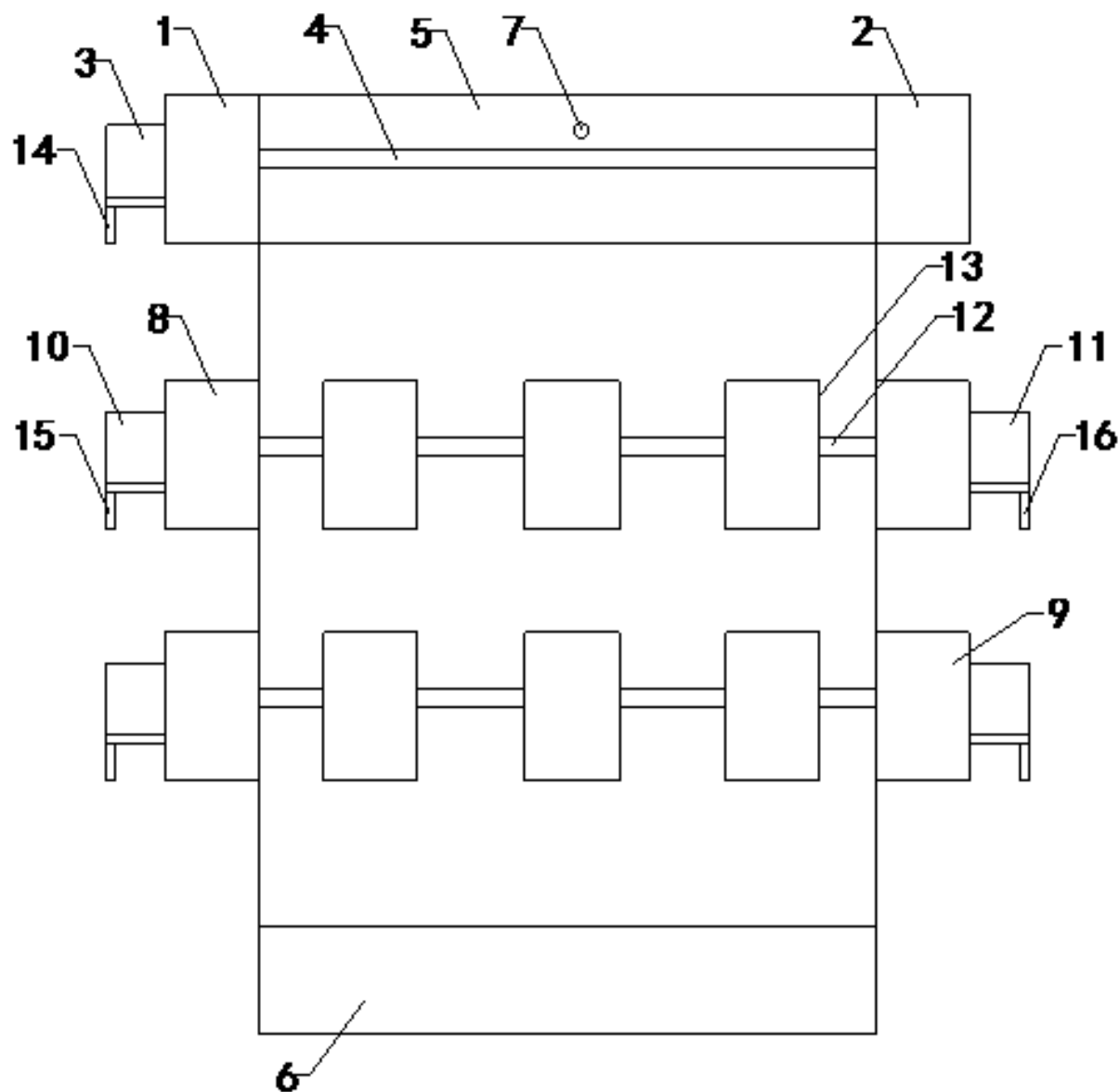
Family 141/200 - FAMPAT - ©Questel

Title

(CN204511757U)

Novel water power plant

Images

**Publication data including kind & date**

CN204511757

U

2015-07-29

CN204511757U

**Abstract**

(CN204511757U)

The utility model relates to an environment-friendly power generation facility's technical field especially relates to a novel water power plant, the utility model discloses an effectual water conservancy that has reduced of novel water power plant is wasted to the dam body inversion of control can carry out automatically, including check dam and power generation facility, the check dam is provided with driving motor including being provided the left main part and the youzhu body on river bank both sides in the left main part, and driving motor's output is provided with the universal driving shaft, is provided with the dam body on the universal driving shaft, power generation facility is including catchmenting the chamber, and the top in the chamber of catchmenting is provided with first generator, and the outside in the chamber of catchmenting is provided with the water inlet, and the inside in the chamber of catchmenting is provided with water wheels, and the front side of dam body is provided with the water level detector, is provided with drive switch in the left main part, is provided with multiunit left branch strut and multiunit right branch strut between check dam and the power generation facility, is provided with the second generator on the left branch strut, is provided with the third generator on the right branch strut, also including driving the axle, drives the epaxial multiunit that is provided with and drives water wheels.

Inventors

WANG XIAOJUAN

SONG JUNWEN

YU CHUKE

ZHANG HAIPENG

GAO JIA

ZHANG ZHIZHONG

Latest standardized assignees - inventors removed

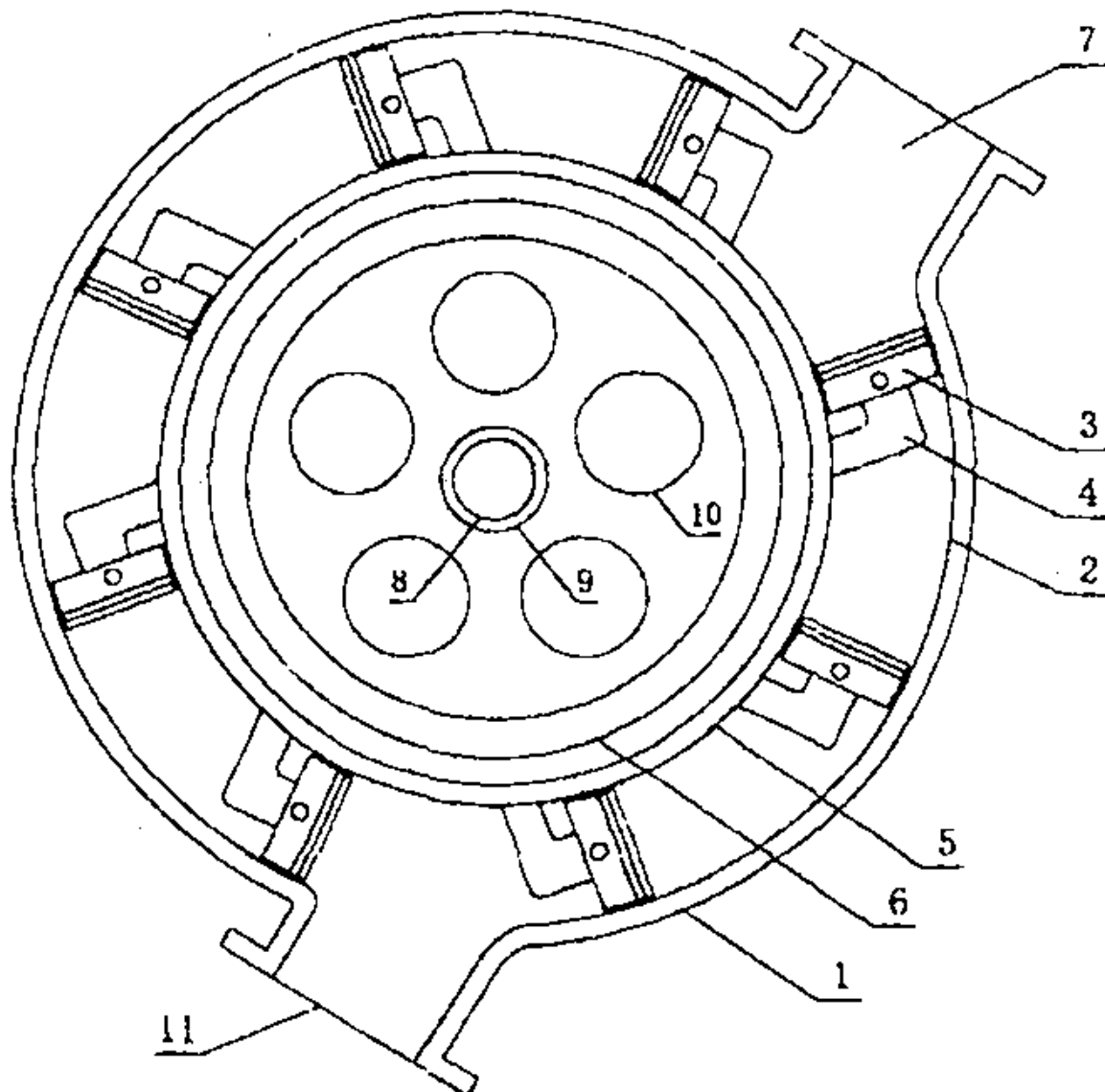
GUANGDONG MEIYAN JIXIANG HYDROPOWER

Family 142/200 - FAMPAT - ©Questel

Title

(CN103291525)

Laborsaving hydrogenerator

Images**Publication data including kind & date**

CN103291525	A	2013-09-11	CN103291525
CN103291525	B	2016-04-13	CN103291525B

**Abstract**

(CN103291525B)

The invention relates to a (piston type) laborsaving hydrogenerator comprising a housing, holes, a shaft, a bearing, a cylinder, a piston, a lever, a seal ring, a flywheel, a water inlet, a water outlet, a ring gear, lever gears, a connecting gear, a stator, a coil, a rotor, a fan and the like. Before power generation, a valve is opened, water enters from the water inlet to press the piston, the piston pushes the lever, the lever pulls the flywheel to rotate, the flywheel rotates to drive a spindle, the ring gear, the lever gears, the connecting gear and a generator spindle to rotate together at high speed, and tail water

is discharged from the water outlet and is pumped into the water inlet by a water pump. The laborsaving hydrogenerator needs no fuel, consumes no energy, and is pollution-free, zero-emission, environment-friendly, insusceptible to weather, free of draught period, available for factory production, capable of cyclically using water for permanent power generation, and beneficial to human. The laborsaving hydrogenerator is simpler and more scientific in structure, more labor-saving, higher in power, higher in speed, higher in efficiency, simpler to maintain and operate, durable, low in cost, widely applicable and greatly worthy of commercial development, and is a high-speed laborsaving hydrogenerator unique in the present world.

Inventors

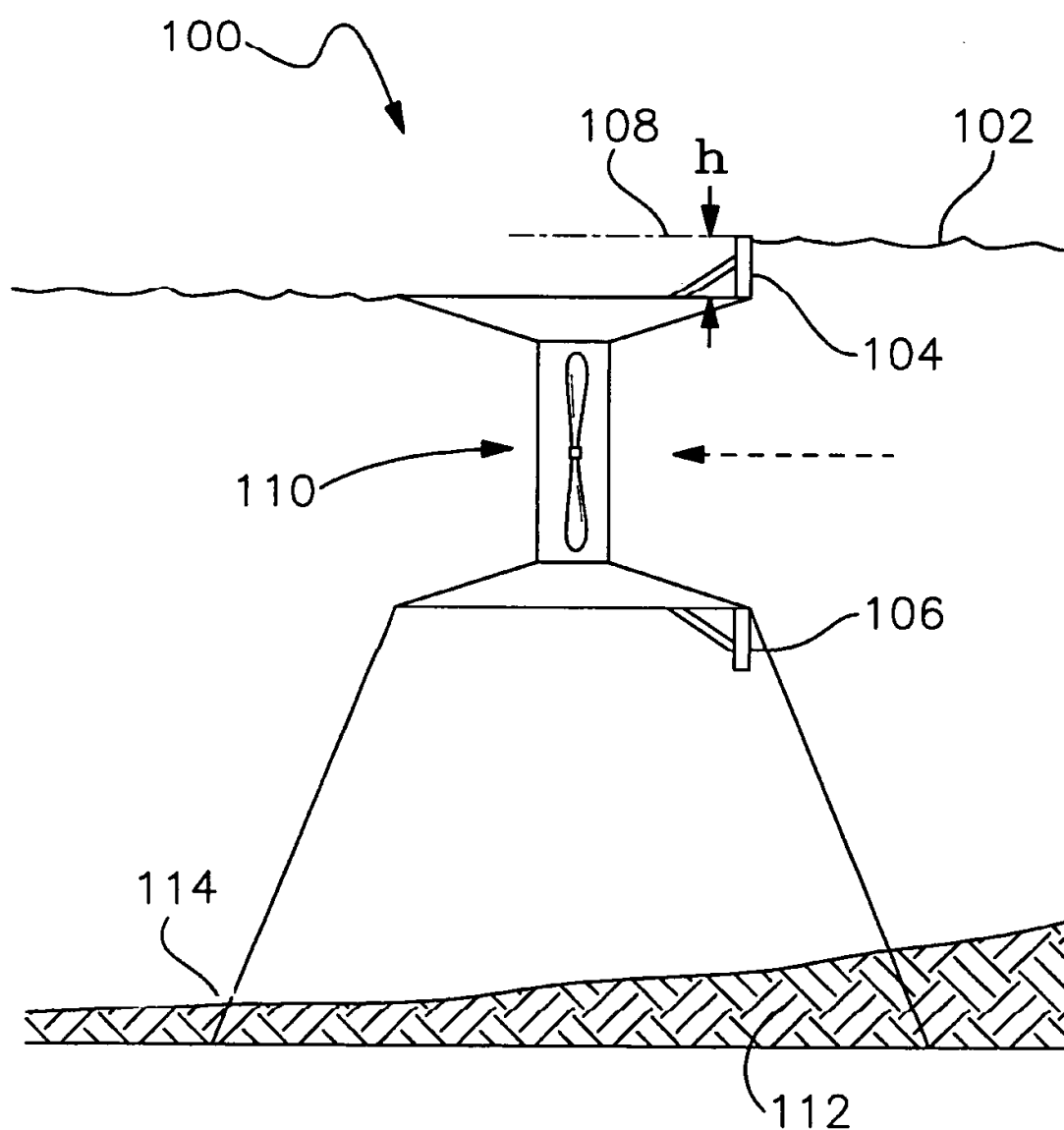
XIA JIANGUO

Family 143/200 - FAMPAT - ©Questel

Title

(US8123457)

System and apparatus for improved turbine pressure and pressure drop control using turbine head potential

Images**Publication data including kind & date**[US20080277940](#)

A1 2008-11-13

US20080277940

[US8123457](#)

B2 2012-02-28

US8123457

**Abstract**

(US8123457)

A system for improved power generation through movement of water having a turbine positioned in a moving body of water to receive kinetic energy, a blocking fitting, attachment or wall on the upper surface of the turbine to creates head potential in a moving body of water; an energy producing cell that is driven by said head potential. The energy producing cells are positioned to receive potential energy in addition to the kinetic energy from the head effect converting said energy combination or contribution by the movement of water through the cell. The system turbine may be fitted with a member positioned circumferentially about the housing for inducing a pressure drop across the turbine. The member may be a rotating blade, cantilevered duct, circumferential flange, radial eductor, and air tube for injection of ambient air into said water source.

Inventors

KROUSE WAYNE F

Latest standardized assignees - inventors removed

HYDROGREEN ENERGY

HYDRO GREEN ENERGY

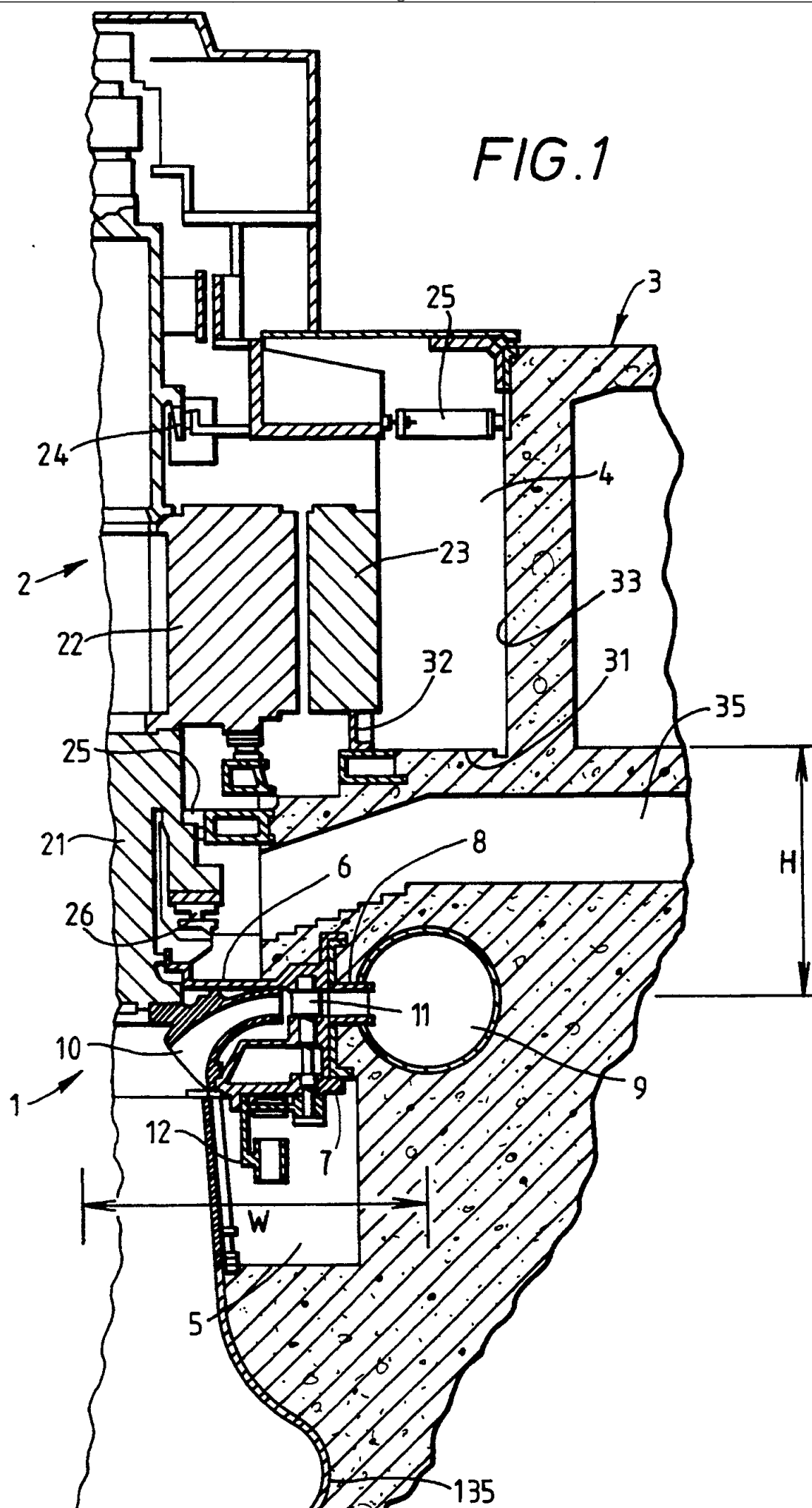
Family 144/200 - FAMPAT - ©Questel

Title

(EP-561619)

Hydroelectric machines and their installation

Images



Publication data including kind & date

EP0561619	A1	1993-09-22	EP-561619
JPH05263750	A	1993-10-12	JP05263750
JPH0681760	A	1994-03-22	JP06081760
US5364229	A	1994-11-15	US5364229
EP0561619	B1	1996-06-12	EP-561619
DE69303085	D1	1996-07-18	DE69303085
DE69303085	T2	1997-01-23	DE69303085
EP0561619	B2	2003-02-05	EP-561619
DE69303085	T3	2003-06-12	DE69303085

**Abstract**

(EP-561619)

A hydroelectric installation comprises a hydraulic machine (1) connected vertically below an electric machine (2) by a shaft (21), in a concrete installation pit (3). A guide vane assembly (11) of the hydraulic machine is operated by a motor-driven operating unit (12) which projects below the hydraulic machine (1) in a lower working space (5) of the pit. The shaft (21) has a thrust bearing (26) which bears down against the upper cover (6) of the hydraulic machine and thereby substantially cancels upward hydraulic force exerted on that upper cover (6). In the installation procedure, the outer casing (9), speed ring (8) and upper cover (6) of the hydraulic machine are installed first, so that the hydraulic machine can be assembled downwardly in the lower working space (5) concurrently with upward assembly of the electric machine (2) in an upper working space (4) of the pit. This shortens installation time.

Inventors

FUJIHARA TETUO

ITO TAKASHI

IWAKI FUMINORI

ICHIKAWA HITOSHI

Latest standardized assignees - inventors removed

HITACHI

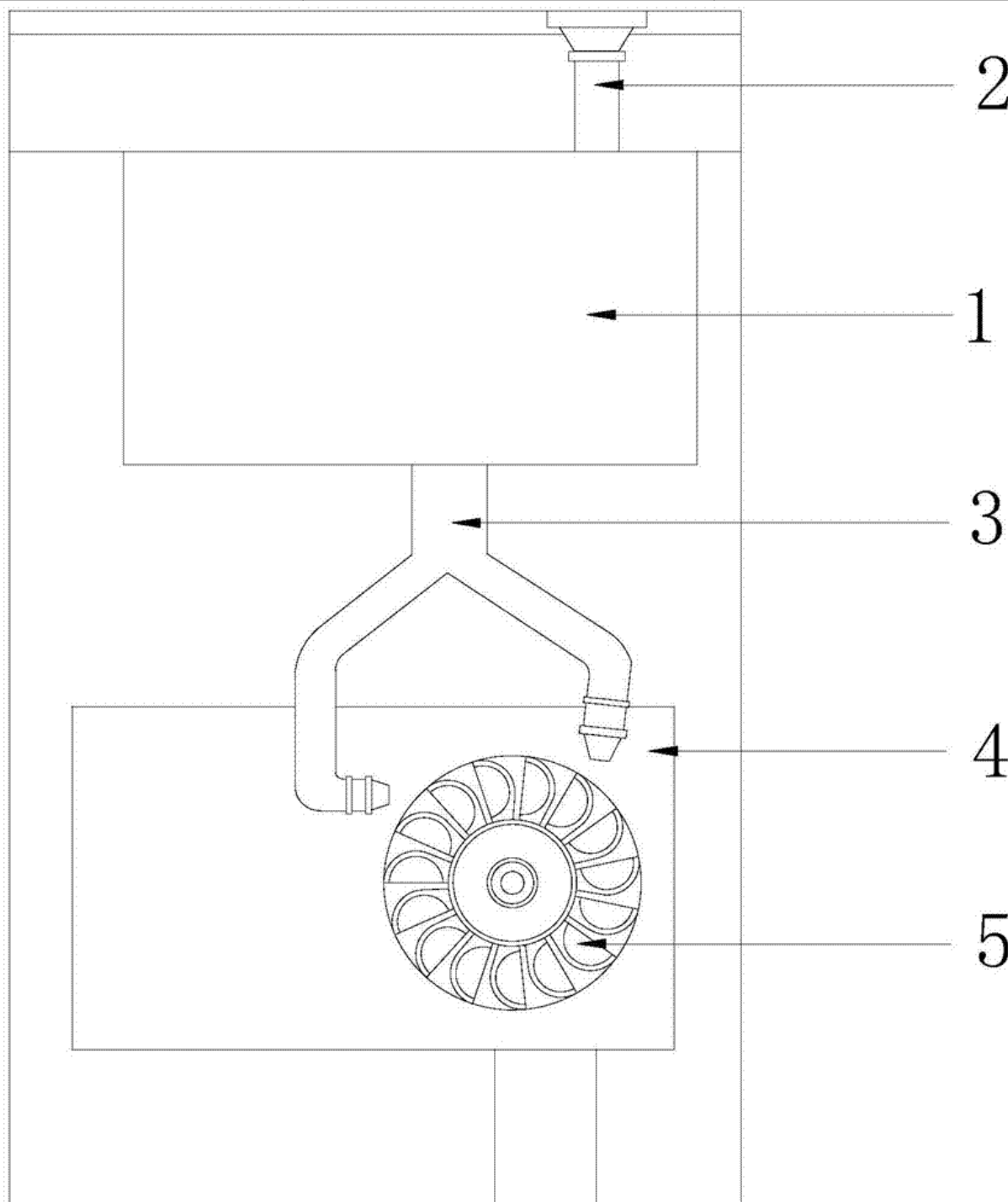
Family 145/200 - FAMPAT - ©Questel

Title

(CN109404207)

High-rise building paid windmill-type electric generation system flow of rainwater

Images



Publication data including kind & date

[CN109404207](#)

A

2019-03-01

CN109404207



Abstract

(CN109404207)

The present invention discloses a power generation system of the high-rise building paidu rainwater flowing windmill-type, its structure includes a reservoir, water bucket, shunt, electrical boxes water, fat, water wheel motor. Advantages: through a tilted plate is a magnetic board, with a very small electrical charge to dust having a certain absorption, fly into the inside of the pipe is avoided, affecting the water flow, it is 20° angle inclined at the same time, accelerates the water flow rate, so that it does not take place too fast to water flow through a hydraulic pressure creation is hardly blocked, through a distribution structure thorn-axis stick surface, will vary with the water of the inflow tube for catching debris is achieved, avoiding a pipeline causing blockages, which eases cleaning personnel clean, which cooperate with each other through a spring ring and the restriction plate, realization of high resistance to rain reaches a certain level of autonomous flow, the amount of rainwater and the water wheel is avoided under circulation of the motor in a non-continuous small, frequent starts operation, thereby causing the water wheel motors the internal components become worn, the device is

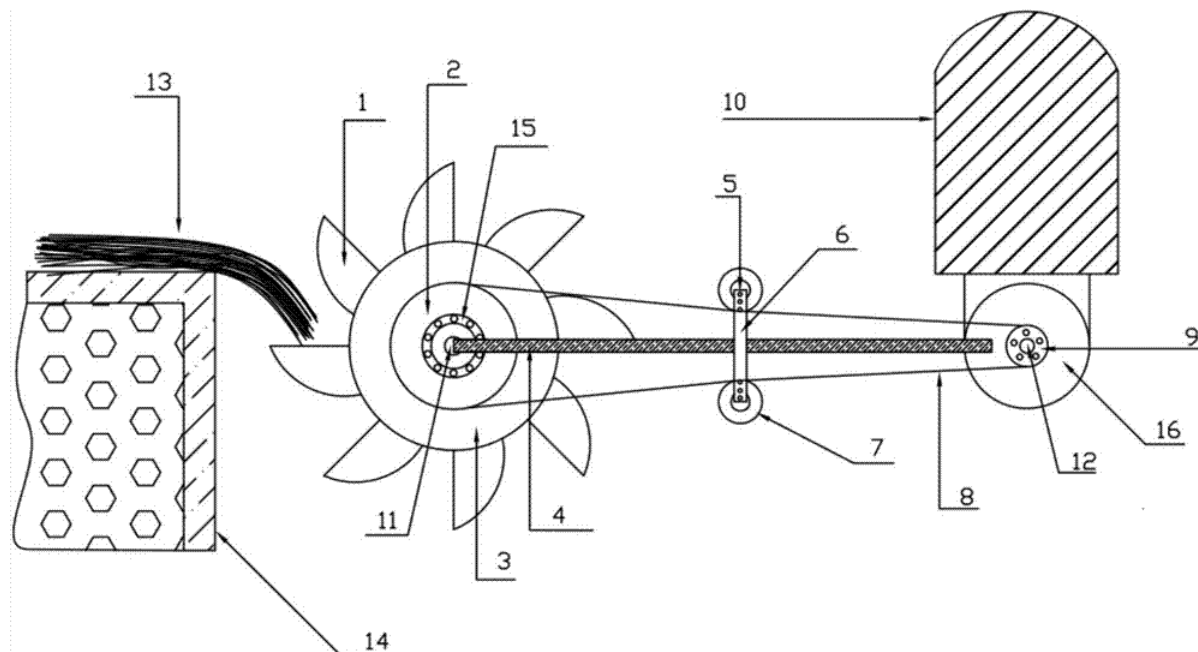
ZHOU MANYANG

Family 147/200 - FAMPAT - ©Questel

Title

(CN206681904U)

Nucket -wheel formula rivers generator

Images**Publication data including kind & date**[CN206681904](#)

U

2017-11-28

CN206681904U

**Abstract**

(CN206681904U)

The utility model relates to a hydroelectric power generation field, concretely relates to nucket -wheel formula rivers generator. This nucket -wheel formula rivers generator sets up in the riverbed low reaches, is equipped with the dam of being intercepted by cement wall on the riverbed, and this nucket -wheel formula rivers generator includes generator and water wheels, be equipped with motor shaft and chassis on the generator, the water wheels center is equipped with bucket wheel shaft, and is equipped with antifriction bearing on the bucket wheel shaft, the last fixed plate of being connected with the chassis that still is equipped with of bucket wheel shaft, fixed plate middle section part is equipped with limit structure, and this limit structure includes a vertical connecting plate and sets up the spacing guide pulley at both ends about the connecting plate. The utility model discloses the structure is more reasonable, and this spacing guide pulley makes the tense -lax nature of belt more controllable on can installing the mounting hole that corresponds according to the interval about the belt, and two inboard transmissions of spacing guide pulley had promoted the steadiness of belt in spacing guide pulley about aforementioned belt was hugged closely, can not fall and drop because of long -time operation is slack.

Inventors

YU CHUNHUA

Family 148/200 - FAMPAT - ©Questel

Title

(CN105134461)

Circulating power generating system

Images

part and a first transverse part, the second water inlet pipeline comprises a second vertical part and a second transverse part, the first vertical part and the second vertical part are oppositely arranged on the two sides of the vertical shaft, and hydraulic generators are arranged on both the first transverse part and the second transverse part; and a third water inlet pipeline and a fourth water inlet pipeline are further arranged outside the shaft wall of the vertical shaft. The energy of river running water can be converted to electricity without building a dam to change the flow direction of the river running water, the ecological environment is prevented from being damaged, construction is easy to carry out, and the cost is low.

Inventors

GUAN QUNXIANG

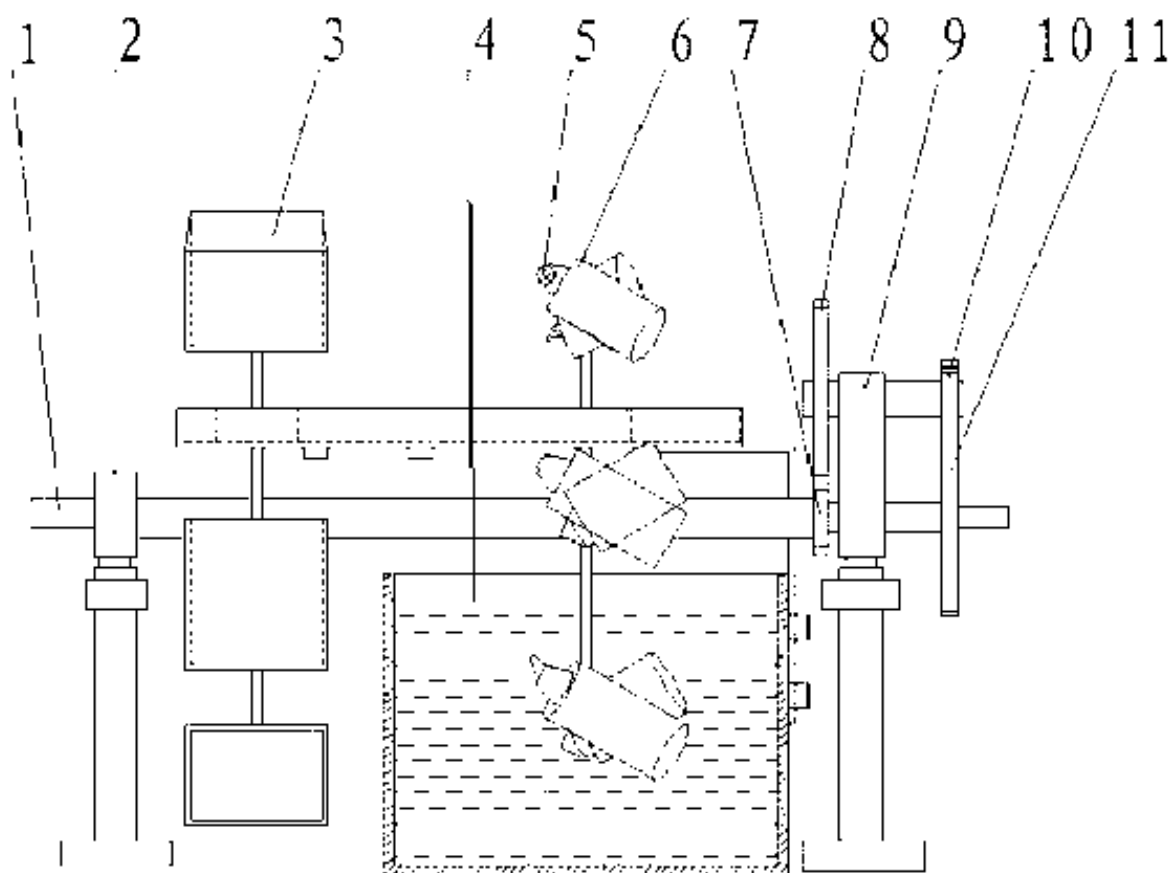
Family 149/200 - FAMPAT - ©Questel

Title

(CN202628371U)

Double-linkage water turbine

Images



Publication data including kind & date

[CN202628371](#)

U

2012-12-26

CN202628371U



Abstract

(CN202628371U)

The utility model relates to a double-linkage water turbine. The water turbine comprises a middle shaft, an upper water wheel, a heavy water wheel and a water passing groove, wherein the middle shaft is fixed on a bearing seat and a bearing seat; the upper water wheel, a heavy water wheel and a water passing groove are arranged on the middle shafts; a plurality of large water buckets are uniformly distributed on the heavy water wheel; a part of the upper water wheel is arranged in a water storage tank; a plurality of upper water barrels are uniformly distributed on the upper water wheel; exhaustion valves are uniformly arranged on the upper water barrels; a support column is arranged in the middle of the water passing groove; a support is arranged on one side of the water passing groove; the tail end of the support is connected with the outer wall on one side of the water storage tank by a fixed plate; a gear is arranged on the middle shaft which is arranged on the bearing seat opposite to a gear and is engaged with a gear; and the gear and another gear are connected by a shaft arranged on the bearing seat. By the double-linkage water turbine, the water wheel is rotated to act

by utilizing the lever principle and the dynamic water flow distribution unbalanced principle; and the water turbine has a simple structure, is easy to implement and can be applied to fields of power generation, surface grinding, irrigation and landscape engineering.

Inventors

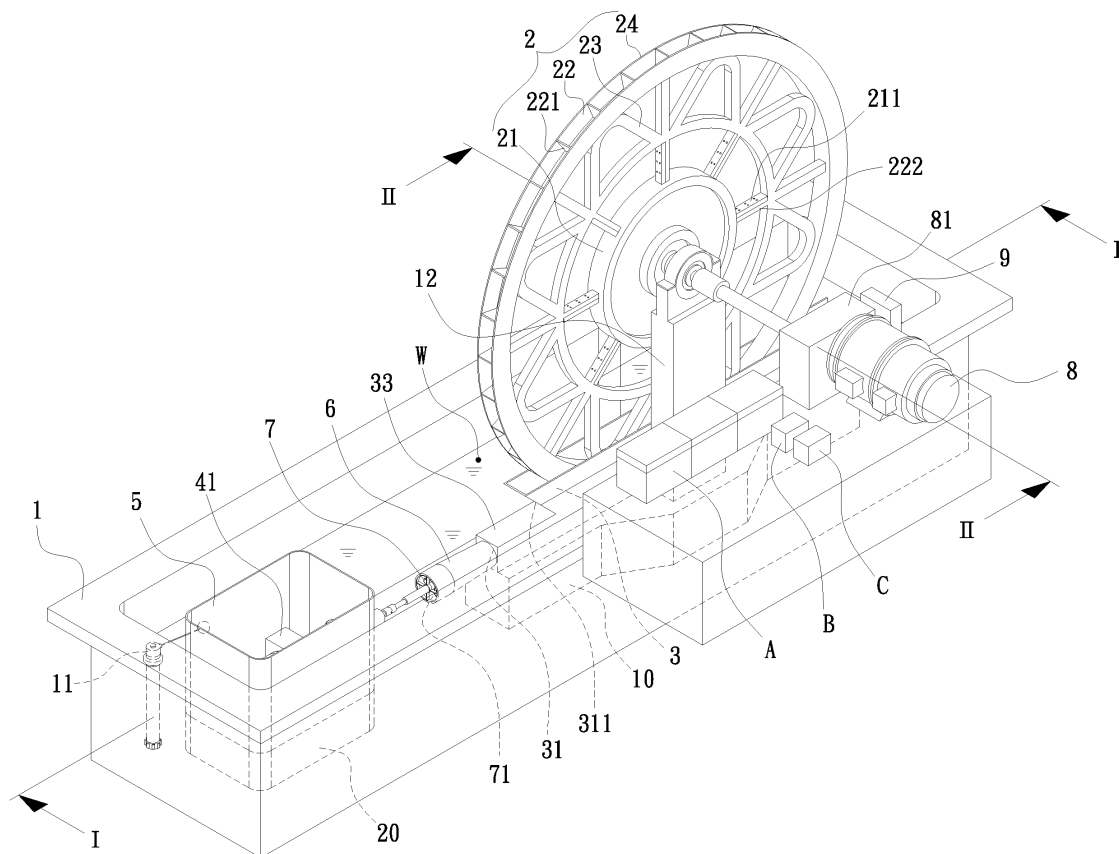
CHENG XIANGQIAN

Family 150/200 - FAMPAT - ©Questel

Title

(US20130221673)

Power generating unit

Images**Publication data including kind & date**

[US20130221673](#)

A1 2013-08-29

US20130221673

**Abstract**

(US20130221673)

A power generating unit based on self-generating energy sources, which is implemented by combination of the pool, water wheel, water guide channel, motor, waterproofing motor housing, water compression tube, water propeller and power generator as well as electrical control box; with this power generating unit, a small portion of self-generating energy could be applied to power generation, without need of additional fuel or energy sources; hence this is a weatherproof, most cost-effective and environmental-friendly power generating unit with longer service life and smaller space as well as minimum cost of protection, maintenance and management.

Inventors

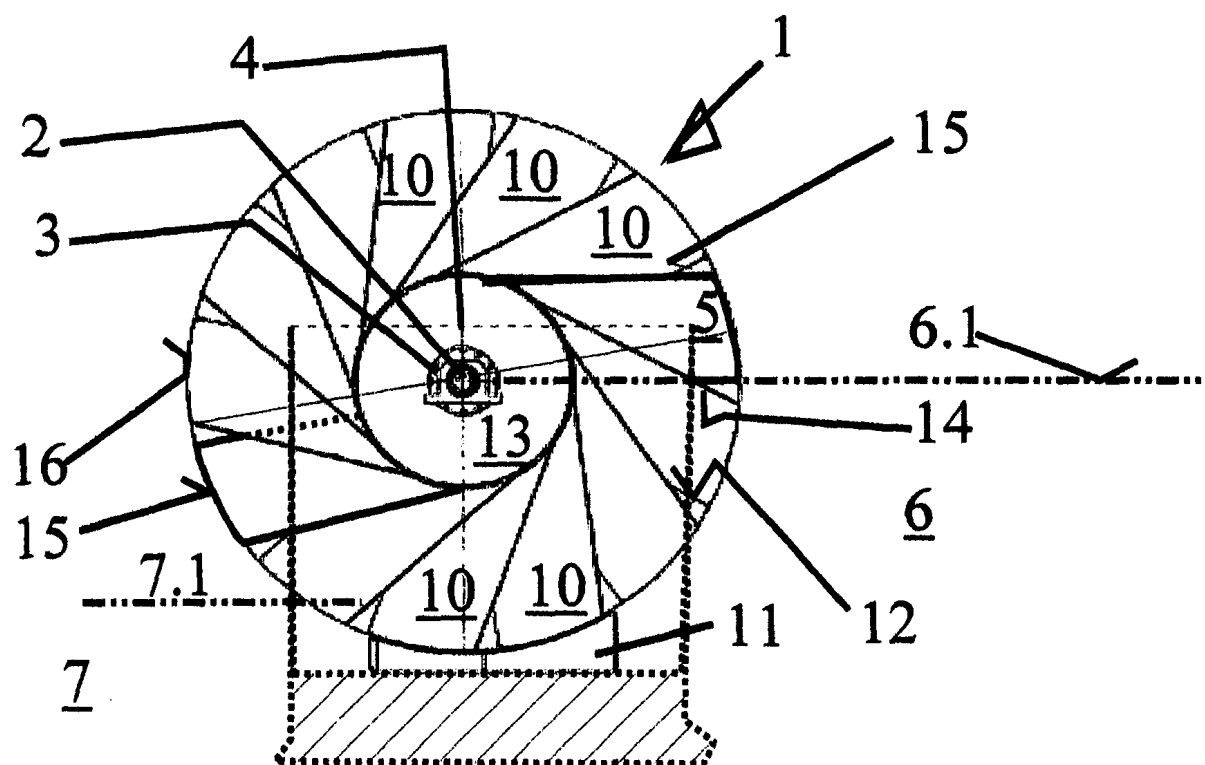
LIU PING-CHIH

Family 151/200 - FAMPAT - ©Questel

Title

(DE102009029794)

Water wheel for producing potential energy between back water and under water in retaining dam, has locking shoe protruding with sweep-angle in direction of motion of paddles in arrow shaped manner

Images**Publication data including kind & date**[DE102009029794](#)

A1 2010-01-14

DE102009029794

**Abstract**

(DE102009029794)

The water wheel (1) has chambers (10), and paddles (5) inclined under a certain angle of incidence to a surface line of a hub (4). The paddles are arranged in arrow shape such that each chamber is split into two arrow shaped partial chambers. The partial chambers communicate with one another in an unhindered and unrestricted manner. Two side walls in an area of under water (7) are recessed such that each partial chamber laterally opens when reaching a lower angular point. A locking shoe (11) protrudes with a sweep-angle in a direction of motion of the paddles in an arrow shaped manner.

Inventors

HERMESMEIER CHRISTOPH

PRESENTIN DIETER

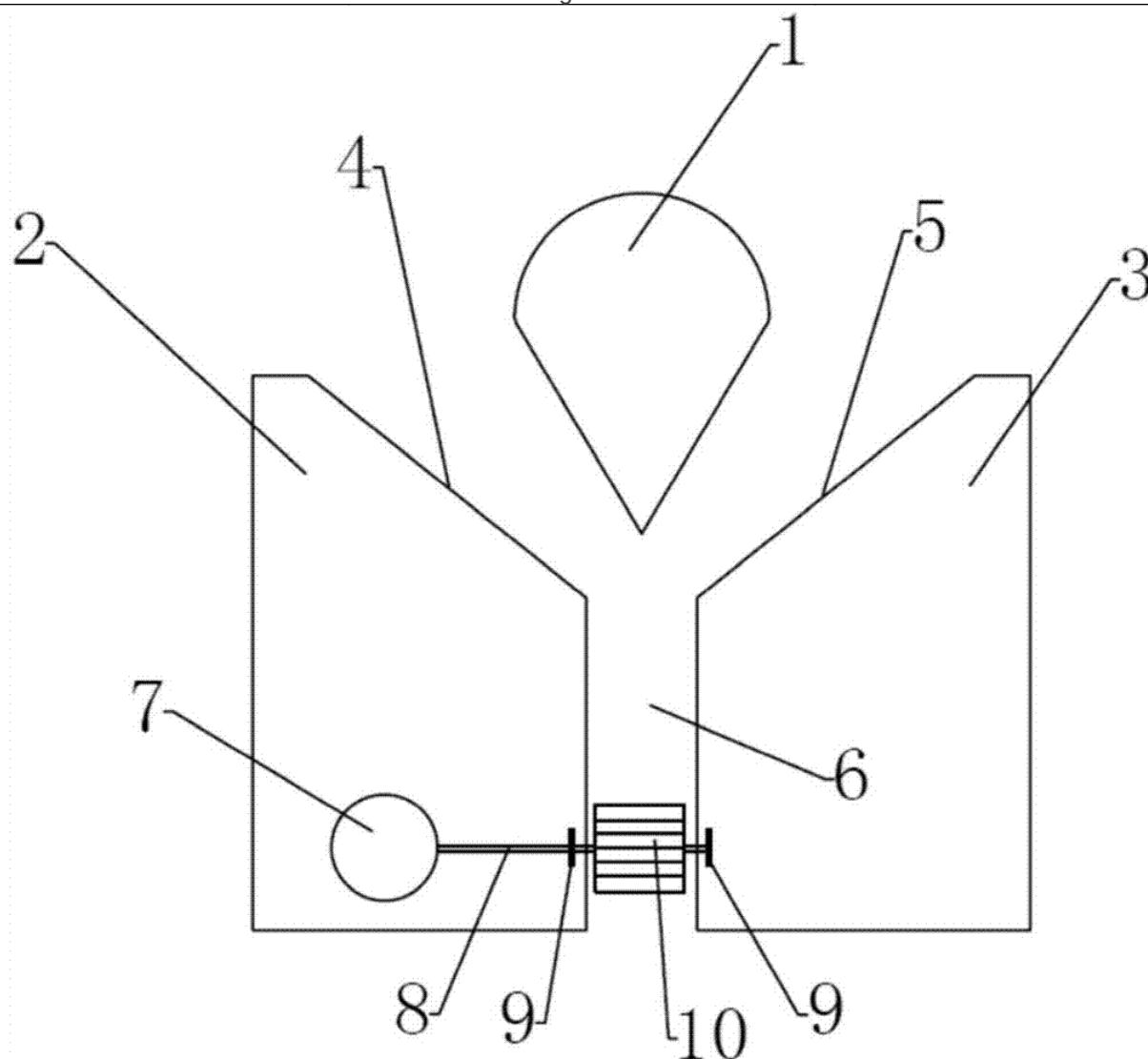
Family 152/200 - FAMPAT - ©Questel

Title

(CN207830029U)

Wave energy power supply beacon

Images

**Publication data including kind & date**

CN207830029

U

2018-09-07

CN207830029U

**Abstract**

(CN207830029U)

The utility model belongs to the technical field of the wave energy utilizes, concretely relates to wave energy power supply beacon. In prior art, the problem of the electric wire netting of usefulness of living is difficult to incorporate the electric energy of wave energy electricity generation conversion into, the utility model provides a: a wave energy power supply beacon, includes left dam body, right dam body, form the wave runner between left side dam body and the right dam body, be provided with wave power generator group on the left dam body, be provided with the transfer line in the wave power generator group, be connected with the wheel on the transfer line, the wheel is arranged in the wave runner, still be provided with the beacon on the dam body of a left side, the beacon top is provided with the navigation mark lamp, the inside battery that is provided with of beacon, and the charge interface and the wave power generator group link of battery, the power supply interface and the navigation mark lamp of battery are connected. The utility model is suitable for a comprehensive utilization of seashore energy.

Inventors

LU LINZE

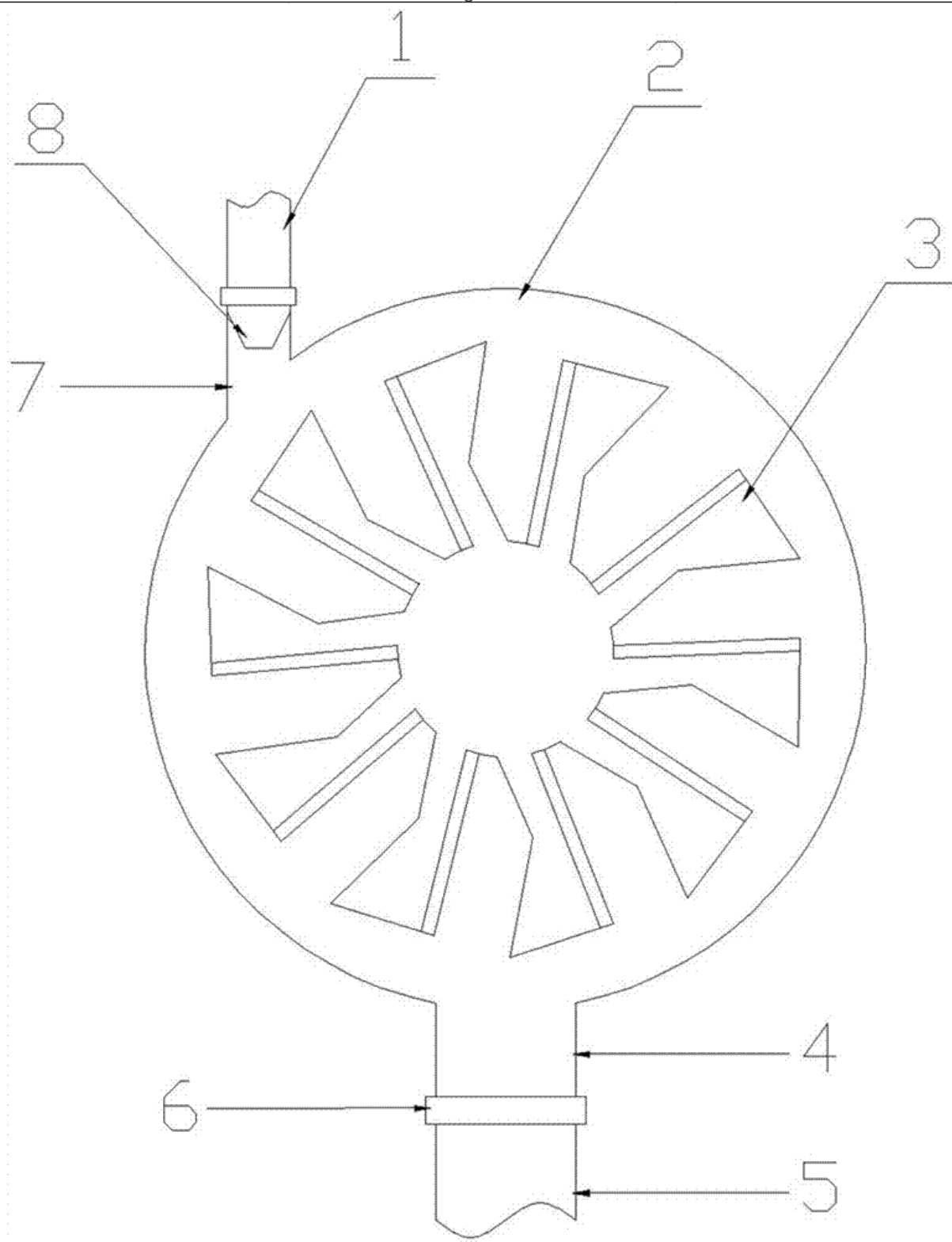
Family 153/200 - FAMPAT - ©Questel

Title

(CN108301958)

Super-high-rise building rainwater micro power generation system

Images

**Publication data including kind & date**[CN108301958](#)

A

2018-07-20

CN108301958

**Abstract**

(CN108301958)

The invention discloses a super-high-rise building rainwater micro power generation system. The system aims at achieving high-efficiency power generation of high-potential energy rainwater through low-cost equipment. The system comprises a rainwater collecting tank, a rainwater circulating pipeline and a power generation device which communicate with one another in sequence, wherein the rainwater collecting tank is fixed at the top of a building, the rainwater circulating pipeline is vertically arranged on the side wall of a building body, and extends to the bottom of the building, and a water outlet of the rainwater circulating pipeline is provided with a nozzle used for controlling the water flow speed; the power generation device comprises a power generator and a micro-turbine which are arranged in a coupling mode, a volute chamber of the

micro-turbine is spiral, and the micro-turbine is provided with a water inlet pipe and a water outlet pipe in the vertical direction, wherein the water inlet pipe is arranged in the direction far away from the central axis of the micro-turbine, and the water outlet pipe is arranged in the direction of the central axis of the micro-turbine; and the water inlet pipe communicates with the nozzle, and the water outlet pipe communicates with a water outlet guide pipe. According to the super-high-rise building rainwater micro power generation system, resistance of the turbine to water flow can be obviously reduced, the operation effect and the generating capacity of a water turbine are improved, and remarkable economic and social benefits are achieved.

Inventors

ZHOU ZHENMIN

XU SURONG

WANG XUECHAO

ZHOU KE

Latest standardized assignees - inventors removed

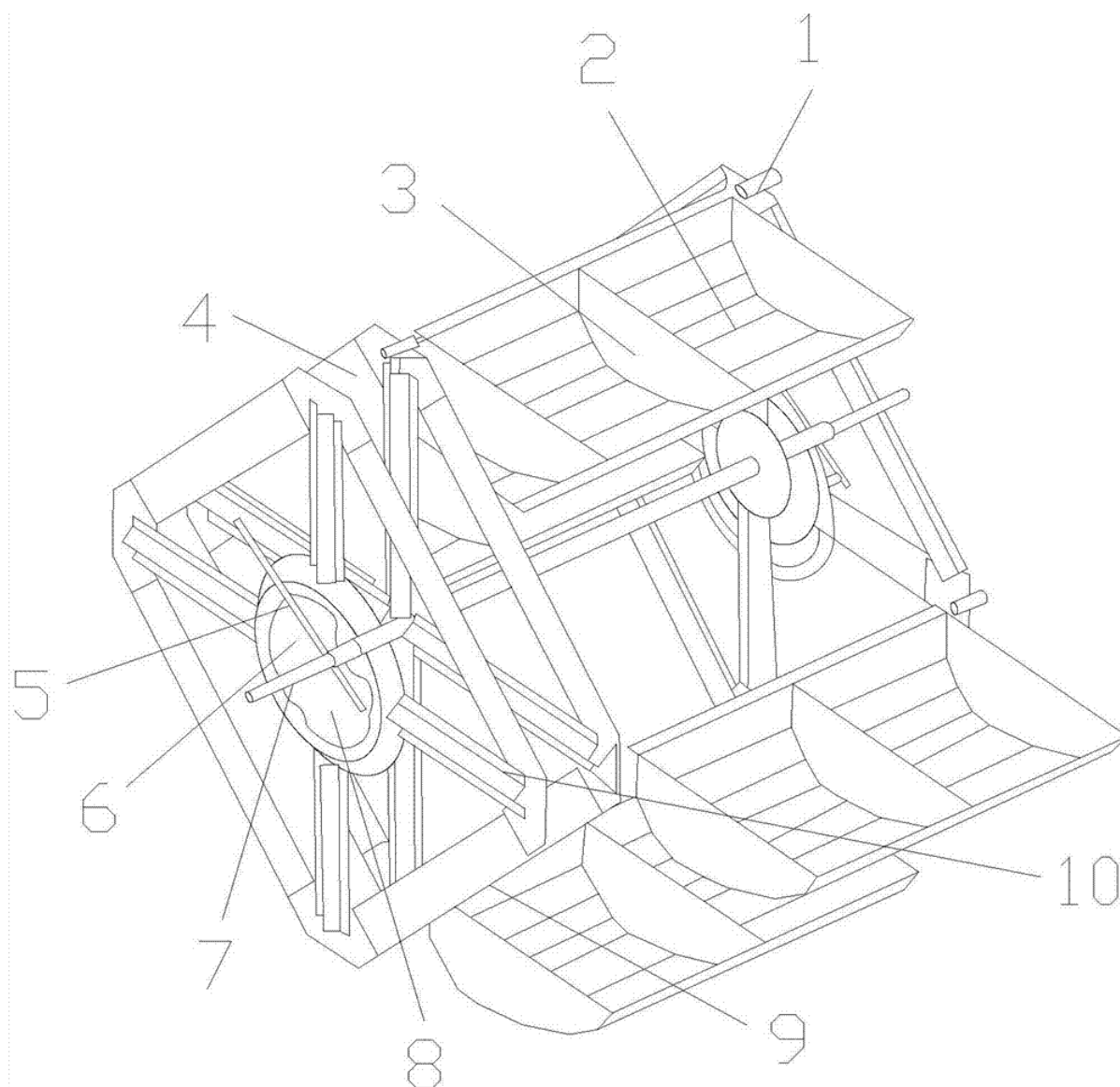
NORTH CHINA UNIVERSITY OF WATER CONSERVANCY AND ELECTRIC POWER

Family 154/200 - FAMPAT - ©Questel

Title

(CN206513491U)

Water wheel for hydroelectric generation device

Images

CN206513491

U 2017-09-22 CN206513491U

Abstract

(CN206513491U)

The utility model discloses a water wheel for hydroelectric generation device, its structure includes fastener, bucket, breakwater, separation carousel, horizontal pole, rotates firmware, main shaft, speed regulation device, water wheels main body frame, gusset plate, the fastener is connected with the bucket, the breakwater is connected with the separation carousel, the speed regulation device by waterproof seal box, power source block, converter, connecting rod, receiver, touch tube head, sensor group, be equipped with power source block on the waterproof seal box, the converter is connected with the connecting rod, the connecting rod is connected with the receiver, it is connected with the sensor to touch the tube head, it is connected with the main shaft to touch the tube head, water wheels main body frame is connected with the gusset plate. The utility model discloses be equipped with the speed regulation device, can have conversion power function when the rotational speed reaches a certain stable maximum value, reduce the mechanical friction loss who produces when the rotational speed rises.

Inventors

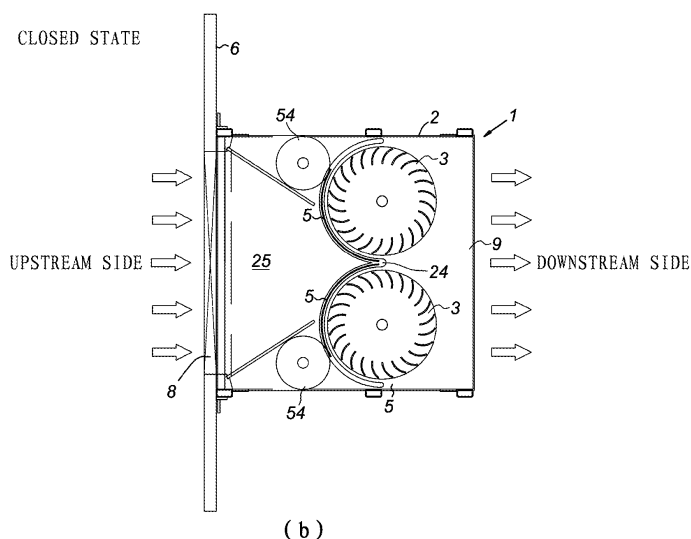
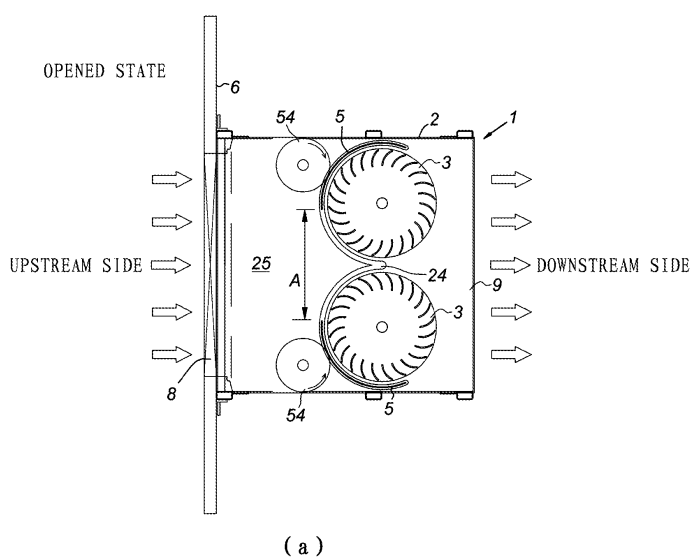
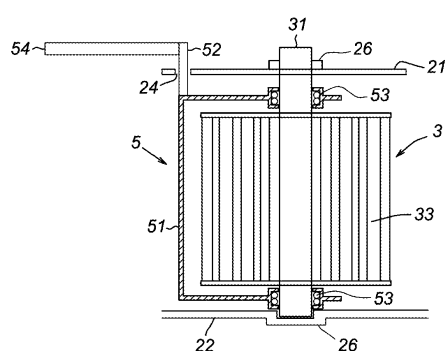
YANG LEI

Family 155/200 - FAMPAT - ©Questel

Title

(EP2711541)

Hydroelectric generator device

Images

Publication data including kind & date

JP4817471	B1	2011-09-09	JP4817471				
TW201221761	A	2012-06-01	TW201221761				
CA2770782	A1	2012-07-07	CA2770782				
KR101200458	B1	2012-11-12	KR101200458				
WO2012/157131	A1	2012-11-22	WO2012157131				
US20120294705	A1	2012-11-22	US20120294705				
AU2011292911	A1	2012-12-06	AU2011292911				
JP2012241602	A	2012-12-10	JP2012241602				
BR112012007068	A1	2012-12-18	BR112012007068				
MX2012003965	A	2013-01-10	MX2012003965				
CN102959232	A	2013-03-06	CN102959232				
PE04712013	A1	2013-04-27	PE201300471				
VN33584	A	2013-05-27	VN--33584				
CA2770782	C	2013-07-09	CA2770782				
TH126529	A	2013-08-22	TH-126529				
AU2011292911	B2	2013-08-29	AU2011292911				
RU2500916	C1	2013-12-10	RU2500916				
AP201307296	A0	2013-12-31	AP201307296				
AP201307296	D0	2013-12-31	AP201307296				
US8616830	B2	2013-12-31	US8616830				
CN102959232	B	2014-01-22	CN102959232B				
EP2711541	A1	2014-03-26	EP2711541				
EP2711541	A4	2014-03-26	EP2711541				
TWI472679	B	2015-02-11	TWI472679				
IN2560DEN2012	A	2015-08-28	IN2012DN02560				
EP2711541	B1	2015-11-04	EP2711541				
ES2560434	T3	2016-02-19	ES2560434				
SI2711541	T1	2016-02-29	SI2711541T				
BR112012007068	A2	2016-04-19	BR112012007068				
VN0017635	B	2017-11-27	VN--17635B				
MY168230	A	2018-10-15	MY-168230				

Abstract

(EP2711541)

The present invention provides a hydraulic power generating apparatus capable of adjusting a water level at the upstream side and supplying a stable power generation amount with easy maintenance. The hydraulic power generating apparatus 1 of the present invention includes a water collecting plate 6 which collects water into a water inflow opening 8 while intercepting and accumulating water flowing through a waterway, and a movable gate 5 which is capable of changing flow cross-sectional area of water flow acting to the top ends of rotor blades 33 of a vertical axis turbine 3 as inflowing from the water inflow opening 8. Here, owing to changing of flow cross-sectional area with opening and closing of the movable gate 5, a flow rate can be adjusted by changing a water level at the upstream side and opening area of an orifice hole and operation of the rotor blades 33 can be stopped by blocking water passing toward the vertical axis turbine 3.

Inventors

UNNO YUJI

Latest standardized assignees - inventors removed

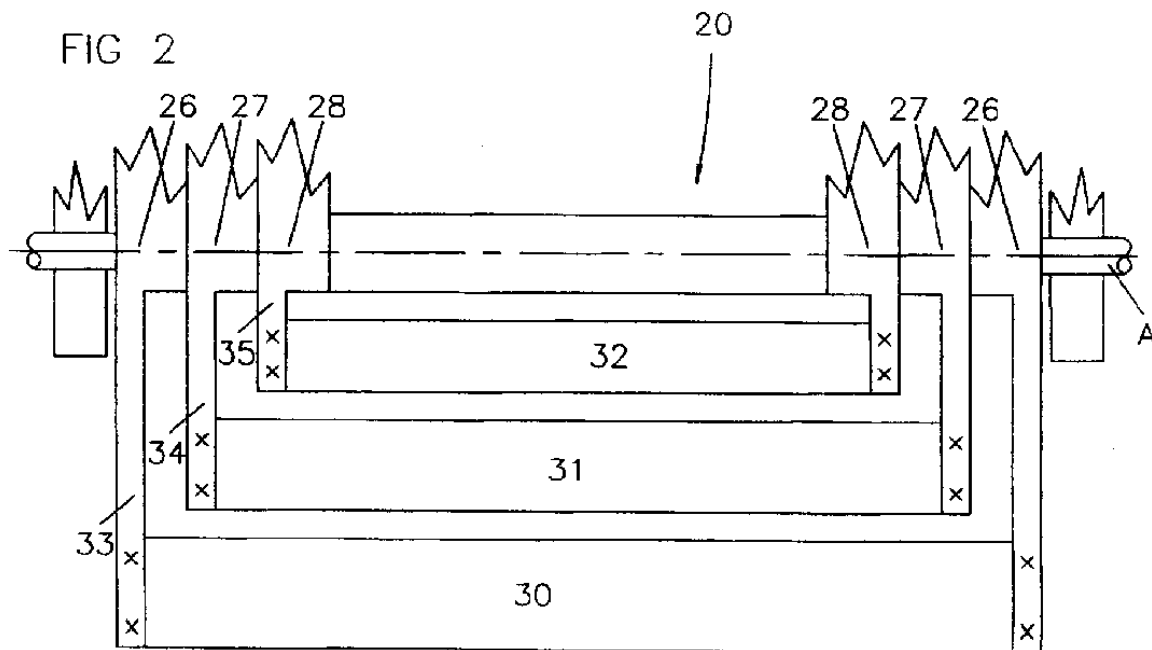
SEABELL INTERNATIONAL

Family 156/200 - FAMPAT - ©Questel

Title

(GB2447781)

Improvements in or relating to waterwheels

Images**Publication data including kind & date**

GB0805233	D0	2008-04-30	GB200805233
GB2447781	A	2008-09-24	GB2447781
GB2447781	B	2012-03-21	GB2447781

**Abstract**

(GB2447781)

A nested waterwheel 20 comprises a first set of paddles 30 located at a first radial distance from a hub 26 centred on an axis 21, and a second set of paddles 31 located at a second radial distance from a hub 27 centred on the axis 21, the first radial distance being greater than the second. The outer and inner sets of paddles are concentric, and are attached to the hub via legs 33-35 with the second set located within an aperture defined by the first set of paddles 30 and its legs 33. Each paddle, in use, rotates at a speed corresponding to the speed of the water. Differential gearing within the hubs accommodate the different speeds of the paddles. The water wheel is ideally used in a hydro-electric generator arrangement. The waterwheel may comprise pivotable paddles, and be located in a gas filled dome-shaped housing at a subsurface location.

Inventors

BELL HUGH MALCOLM IAN

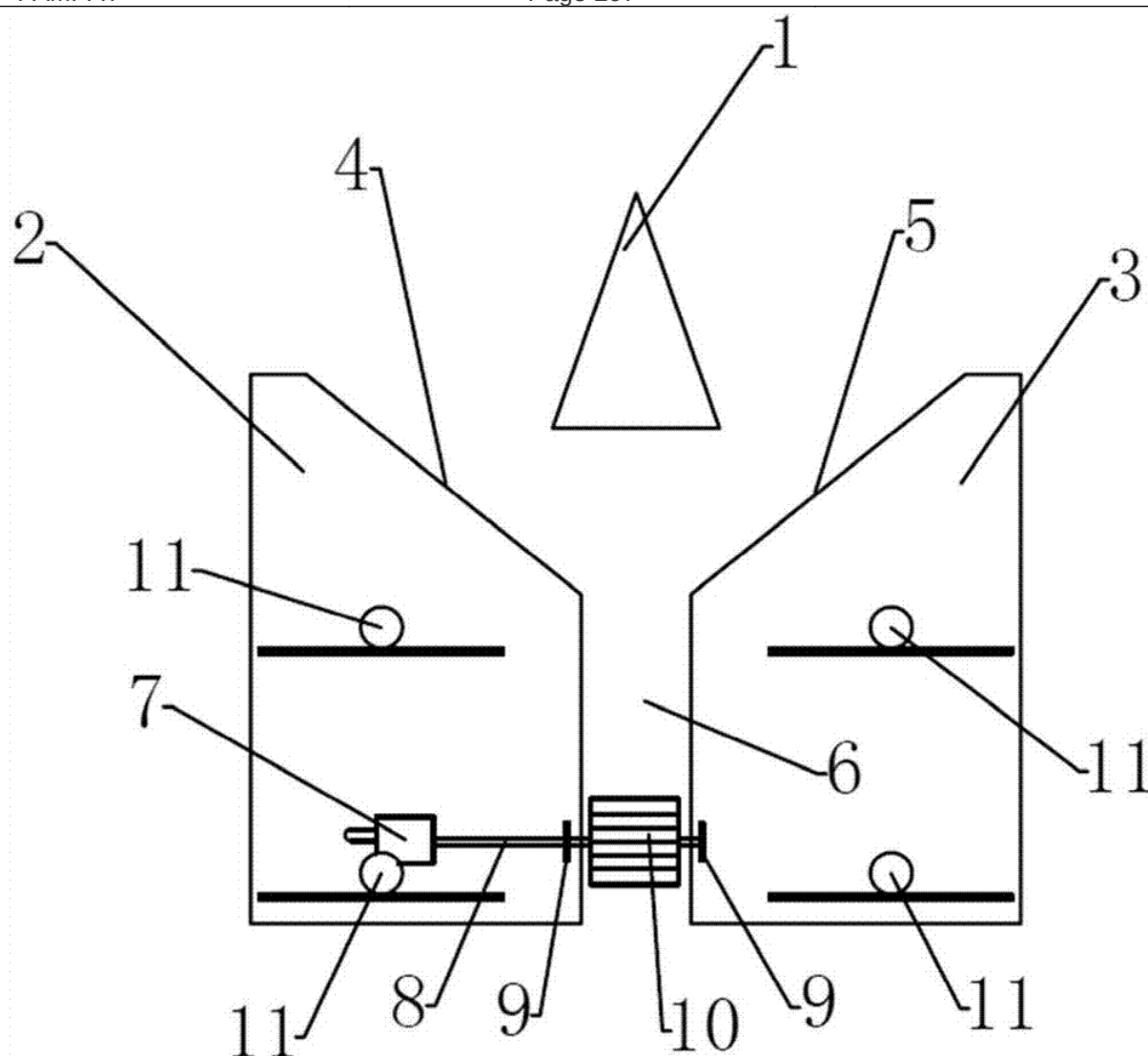
Family 157/200 - FAMPAT - ©Questel

Title

(CN207568766U)

Power station is synthesized to seashore

Images

**Publication data including kind & date**

CN207568766

U

2018-07-03

CN207568766U

**Abstract**

(CN207568766U)

The utility model belongs to the technical field of the wave energy utilizes, concretely relates to power station is synthesized to seashore. In prior art, can utilize the wave energy alone usually and but ignore the problem that also has huge wind energy to utilize when the wave produces, the utility model provides a: a power station is synthesized to seashore, includes left dam body, right dam body and cable passage, form the wave runner between left side dam body and the right dam body, be provided with wave power generator group on the left dam body, be provided with the transfer line in the wave power generator group, be connected with the wheel on the transfer line, the wheel is arranged in the wave runner, the cable passage sets up inside the dam body of left dam body and right dambody, and the cable passage passes the bottom of wave runner, still be provided with a plurality of aerogenerator on left side dam body and the right dam body, aerogenerator is incorporated into the power networks through the cable, and cable sets is in the cable passage. The utility model is suitable for a comprehensive utilization of seashore energy.

Inventors

FENG ZHANGNING

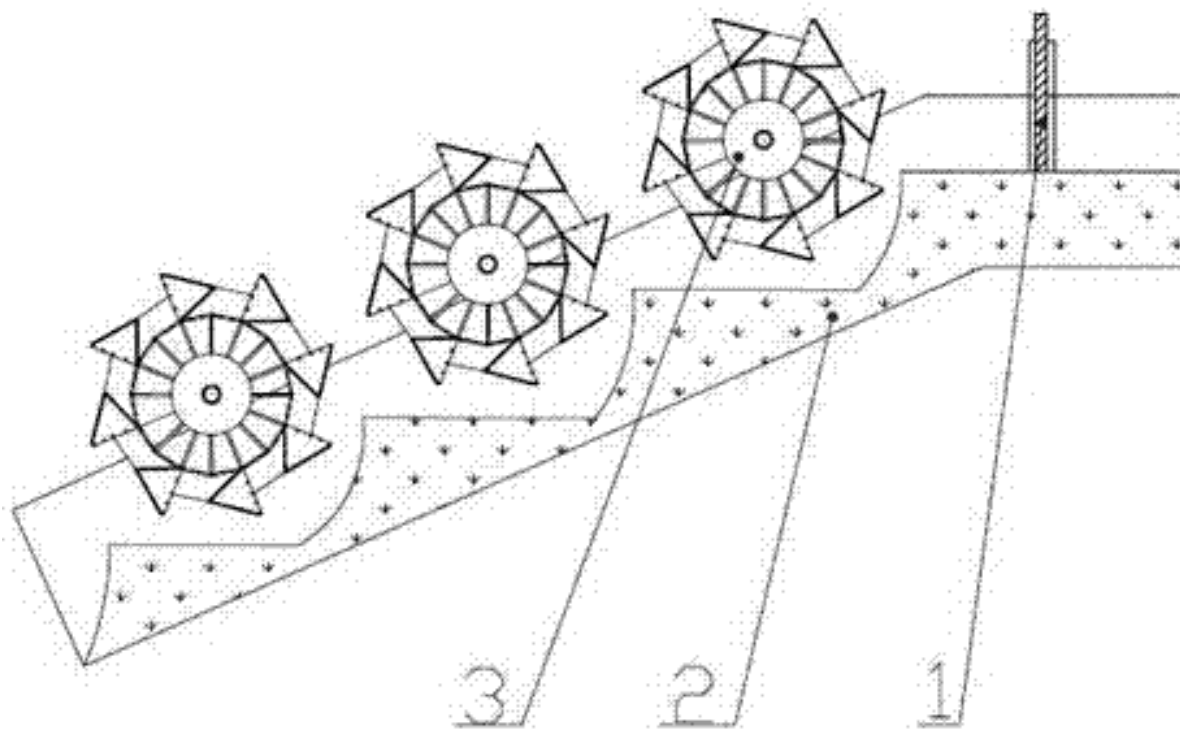
Family 158/200 - FAMPAT - ©Questel

Title

(CN106988956)

Efficient water wheel power generation device

Images

**Publication data including kind & date**

CN106988956

A

2017-07-28

CN106988956

**Abstract**

(CN106988956)

The invention provides an efficient water wheel power generation device. The device comprises a sluice valve, a water channel, several water turbines, a variator and an electric generator, wherein the several water turbines, the variator and the electric generator are installed on the water channel, and the bottom of the water channel is of a ladder structure; each water turbine comprises a main shaft, an H-shaped and wheel-like hub, spokes, water hoppers, and a baffle, wherein the hub is composed of a hollow cylinder and a wheel disc; one end of each spoke is fixed on one wheel disc of the hub, and the other end of the spoke extends out of the wheel disc; the two sides of each water hopper are fixed on the ends of the spokes separately, each side is fixed through two spokes, and the water hoppers can be increased or decreased according to water flow; the baffle is fixed between two adjacent water hoppers and presents a groove-shaped structure; the variator and the electric generator are installed at the end of the main shaft of the water turbine in sequence. The efficient water wheel power generation device is simple in structure, convenient to install and overhaul, and high in hydroenergy conversion rate; through the adoption of a method of three-machine linkage power generation, the amount of the generated electricity is large, and the power generation efficiency is high; damming and immigration are not needed, the efficient water wheel power generation device does small damage to ecology, is small in capital construction investment, high in power generation efficiency, suitable for various kinds of terrains, and has extensive applicability.

Inventors

MU WENXIONG

Latest standardized assignees - inventors removed

XISHUI WENXIONG WATER CONSERVANCY POWER TECHNOLOGY

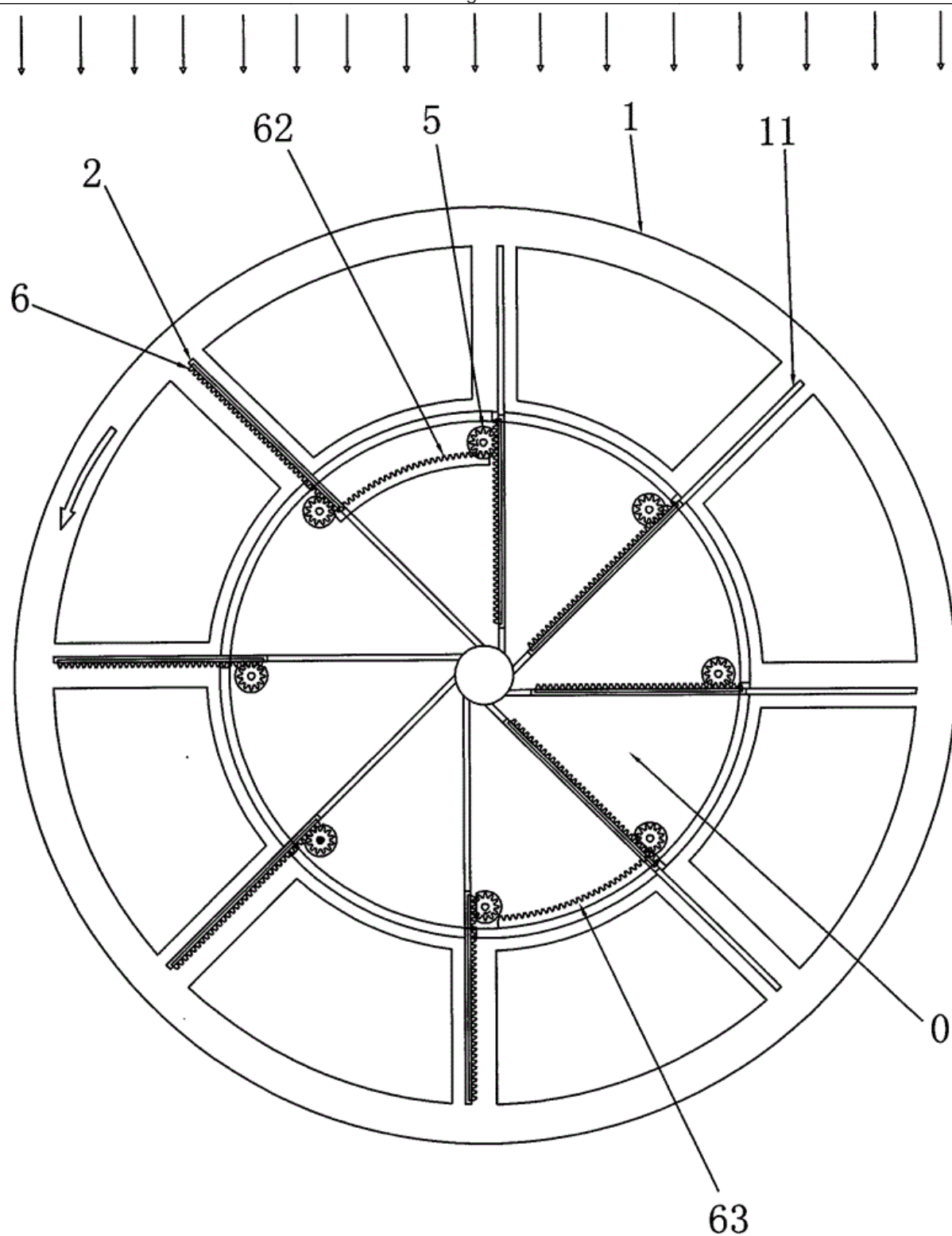
Family 159/200 - FAMPAT - ©Questel

Title

(CN106050532)

Wheel-oriented current force stretching plate water or wind wheel and power generation system

Images

**Publication data including kind & date**

CN106050532

A

2016-10-26

CN106050532

**Abstract**

(CN106050532)

The invention provides a wheel-oriented current force stretching plate water or wind wheel and a power generation system. The power generation system comprises a rotating wheel, a center shaft, stretching plates and power generating sets. The stretching plates are arranged on the rotating wheel in a sliding mode, the stretching plates on one side of the rotating wheel stretch out to be in a water blocking stress state under the action of water power and wind power, the stretching plates on the other side of the rotating wheel draw back to the rotating wheel, the thrust for the stretching plates is not generated by water current, and therefore the stress on the two sides of the rotating wheel is unbalanced, and the rotating wheel rotates to drive the power generating sets. A submersible type slow-current power generation scheme and large equipment are provided for ocean tides, river beds, water pipe wind channels, universal ocean current wind power and

universal wind power, and the wheel-oriented current force stretching plate water or wind wheel and the power generation system have the advantages of being high in power, high in resistance to destructive power and low in maintenance cost.

Inventors

MAO YONGBO

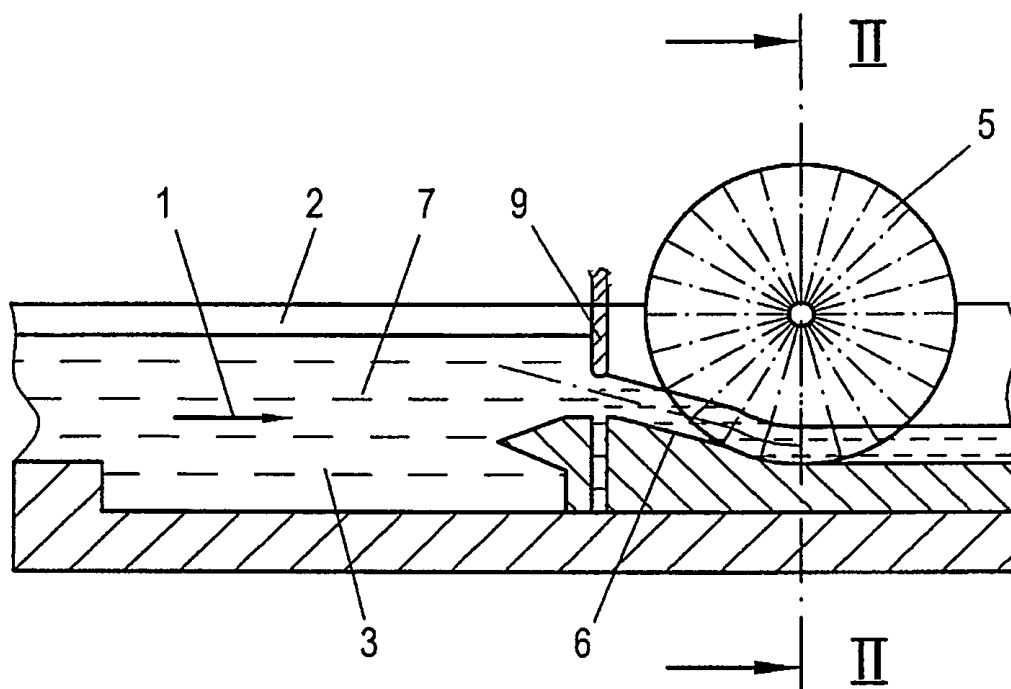
Family 160/200 - FAMPAT - ©Questel

Title

(WO201097204)

Water wheel

Images



Publication data including kind & date

WO2010/097204	A2	2010-09-02	WO201097204
CA2752343	A1	2010-09-02	CA2752343
AT507922	A1	2010-09-15	AT-507922
WO2010/097204	A3	2011-05-12	WO201097204
WO2010/097204	A4	2011-07-28	WO201097204
NO20111173	A1	2011-08-30	NO20111173
AU2010219135	A1	2011-09-08	AU2010219135
IL214598	A	2011-09-27	IL-214598
KR20110122201	A	2011-11-09	KR20110122201
US20110299988	A1	2011-12-08	US20110299988
EA201101091	A1	2012-02-28	EA201101091
CN102369351	A	2012-03-07	CN102369351
CO6420367	A2	2012-04-16	CO6420367
JP2012518749	A	2012-08-16	JP2012518749
RS20110370	A1	2012-08-31	RS201100370
BRPI1008728	A1	2012-11-27	BR201008728
BRPI1008728	A2	2016-03-15	BR201008728
IN6101/CHENP/2011	A	2016-08-31	IN2011CN06101



Abstract

(WO201097204)

The invention relates to a water wheel, preferably an undershot or breast-shot water wheel having a horizontal hub (21), wherein paddle arrangements (15) are provided along the wheel circumference (22) for converting the kinetic and optionally also potential energy of the water stream into a rotational motion of the water wheel, wherein the paddle arrangements (15) comprise at least two paddle blades and the paddle blades have different sizes, characterized in that the outer paddle blade (13) has a greater depth (23) than the further inner paddle blades (14, 16, 17) of the paddle arrangement. The invention further relates to a hydroelectric power plant comprising one or a plurality of such water wheels.

Inventors

RIEGERBAUER HERMANN

Latest standardized assignees - inventors removed

RIEGERBAUER HERMANN

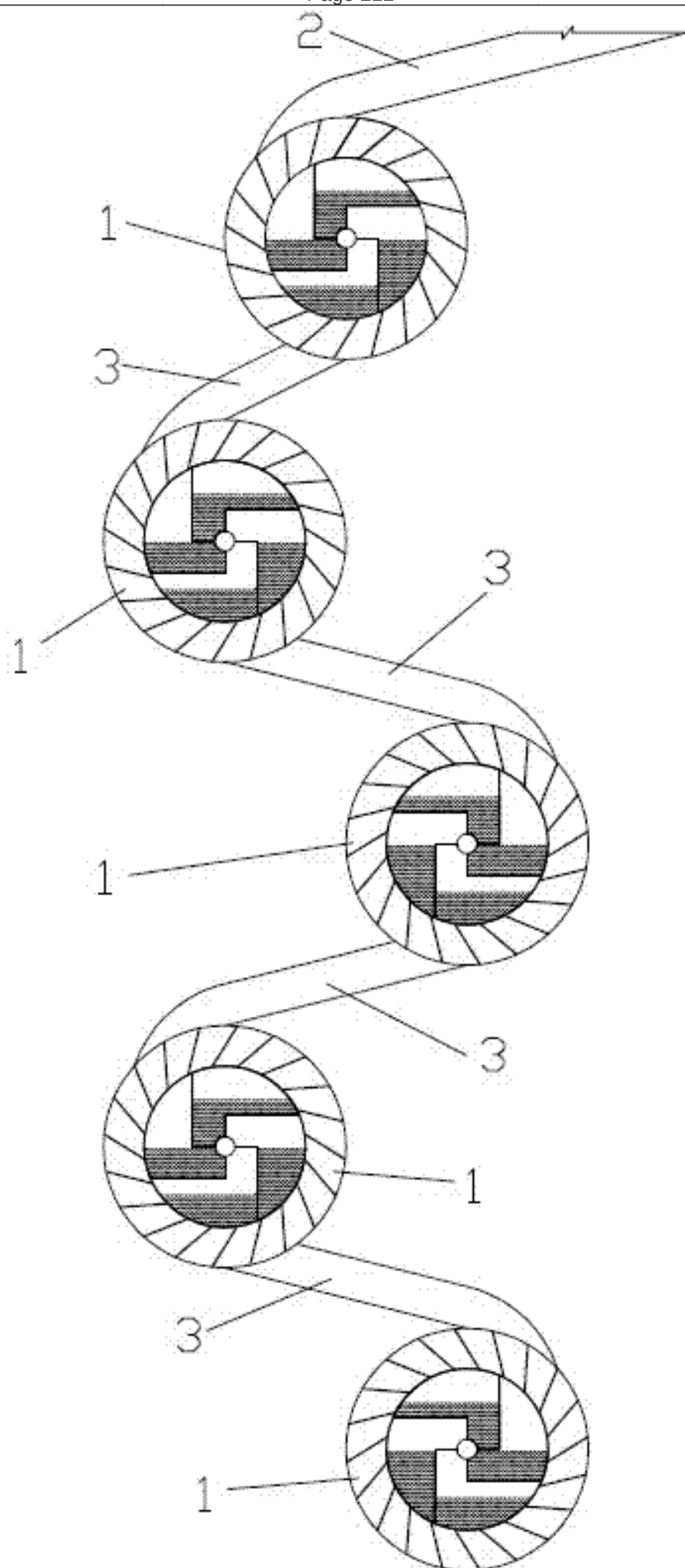
Family 161/200 - FAMPAT - ©Questel

Title

(CN207333083U)

Electricity generation waterwheel group

Images



Publication data including kind & date

CN207333083

U

2018-05-08

CN207333083U

**Abstract**

(CN207333083U)

The utility model discloses an electricity generation waterwheel group, including a plurality of waterwheels, each waterwheel is arranged to low by the height in proper order, and staggers behind the adjacent dragon's tongue, and the top that is located the waterwheel on top is equipped with the derivation, is equipped with the conduit pipe that the slope was arranged between the adjacent waterwheel, and conduit pipe is extended to the top of next waterwheel by the below of a last waterwheel. The utility model discloses a plurality of waterwheels are arranged to low by the height in proper order, but each section rivers electricity generation of make full use of high water head rivers, each section rivers promotes different waterwheels, and the waterwheel rotates and generates electricity, has promoted the utilization ratio of water resource greatly.

Inventors

CHEN GUOMING

Latest standardized assignees - inventors removed

QINGYUAN YUYOU SHANGDE ENERGY

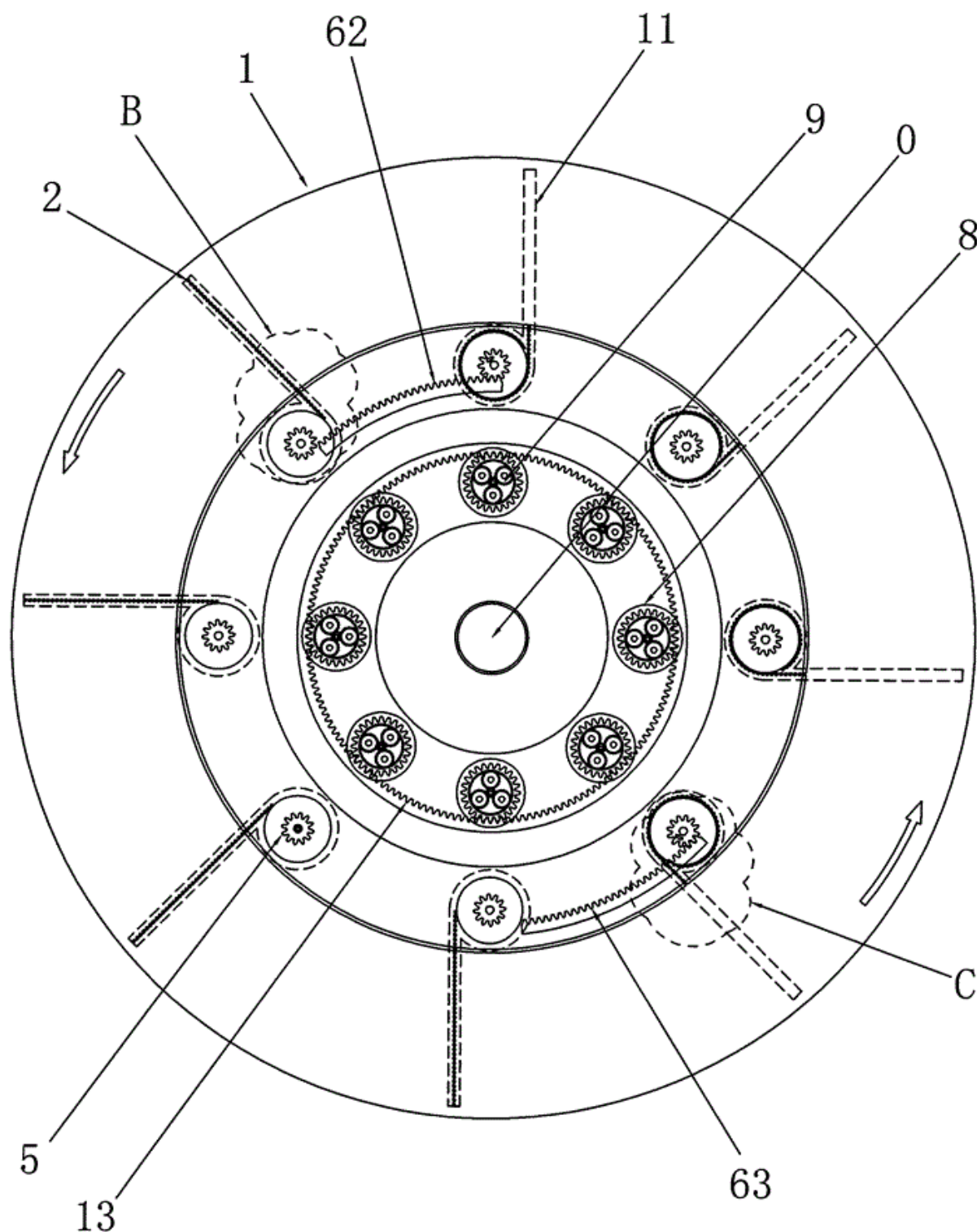
Family 162/200 - FAMPAT - ©Questel

Title

(CN106014838)

Wheel-direction flow force extension roller blind water wheel or wind wheel and power generation system

Images



Publication data including kind & date

[CN106014838](#)

A 2016-10-12 CN106014838



Abstract

(CN106014838)

The invention discloses a wheel-direction flow force extension roller blind water wheel or wind wheel and a wheel-direction flow force extension roller blind water wheel or wind wheel power generation system. The wheel-direction flow force extension roller blind water wheel or wind wheel power generation system comprises a rotating wheel, a central shaft, roller blinds, reels, elastic devices and one or more power generation sets. The roller blinds are slidingly arranged on the rotating

wheel; the extension devices are directly connected with the roller blinds or are connected with the reels to drive the roller blinds to be elastic on the rotating wheel; under the action of water power and wind power, the roller blinds at one side of the rotating wheel protrude by the effect of a flow force and is in a water retaining stressed state, the roller blinds at the other side of the rotating wheel automatically roll under the action of the elastic devices, and a water flow generates no thrust on the roller blinds. In this way, the two sides of the rotating wheel are stressed in an unbalanced manner, thus the rotating wheel rotationally drives the one or more power generation sets. Submerged slow flow power generation scheme and large scale equipment are provided for tides, riverbeds, water pipe air ducts, universal ocean current water power and universal wind power; and the wheel-direction flow force extension roller blind water wheel or wind wheel and the power generation system have the characteristics of high motive power, high resistance to damage, and low maintenance cost.

Inventors

MAO YONGBO

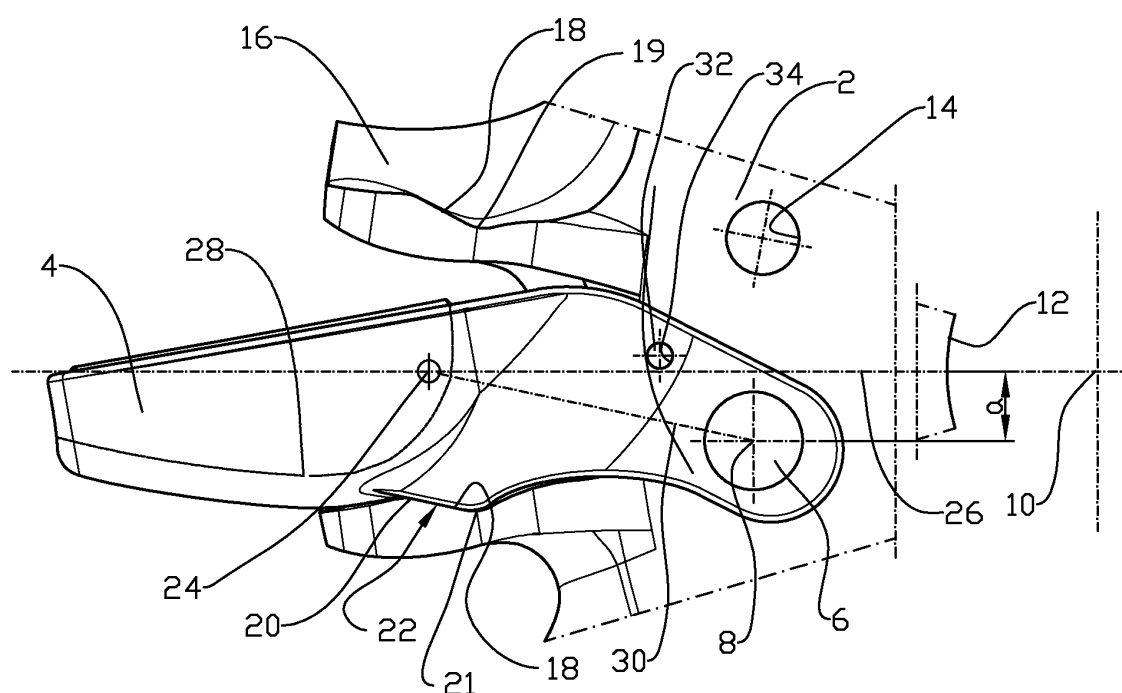
Family 163/200 - FAMPAT - ©Questel

Title

(EP2800897)

A bucket connection for a turbine runner

Images



Publication data including kind & date

NO20121084	A1	2013-04-05	NO20121084
WO2013/051942	A1	2013-04-11	WO201351942
NO333946	B1	2013-10-28	NO-333946
CO6930338	A2	2014-04-28	CO6930338
BR112014007860	A1	2014-05-27	BR112014007860
CN103842642	A	2014-06-04	CN103842642
CL2014000800	A1	2014-08-29	CL0800201400
US20140255195	A1	2014-09-11	US20140255195
EP2800897	A1	2014-11-12	EP2800897
PE19772014	A1	2014-12-06	PE201401977
IN2629/DELNP/2014	A	2015-02-20	IN2014DN02629
RU2014116100			



	A	2015-11-10	RU2014116100				
EP2800897	A4	2015-12-09	EP2800897				
US9488058	B2	2016-11-08	US9488058				
RU2607988	C2	2017-01-11	RU2607988				
EP2800897	B1	2017-03-15	EP2800897				
CN103842642	B	2017-03-22	CN103842642B				
BR112014007860	A2	2017-04-18	BR112014007860				

Abstract

(EP2800897)

A bucket connection for a turbine runner (1) where the turbine runner (1) includes a number of buckets (4) encircling a centre disk (2), where at least one bucket (4) is pivotably or hingedly connected to the centre disk (2), and where the position of the bucket (4) relatively the centre disk (2) under operation is set by an abutment (22) between the bucket (4) and a support (16), where the support (16) is connected to or constitutes a part of the centre disk (2), and where the abutment is constituted by an abutment surface 18 on the support 16 and an abutment surface 20 on the bucket 4, where the abutment surface 18 on the support 16 is non-planar, in that it is provided with a buckling 19, and that the abutment surface 20 of the bucket 4 is provided with a buckling 21 adapted to fit into the buckling 19 of the abutment surface 18 of the support 16, whereby the abutment 22 is adapted to accommodate forces acting both tangentially and radially of the bucket 4.

Inventors

JØRGENSEN HANS JØRGEN

SIMONSEN ARE JOHAN

Latest standardized assignees - inventors removed

DYNAVEC

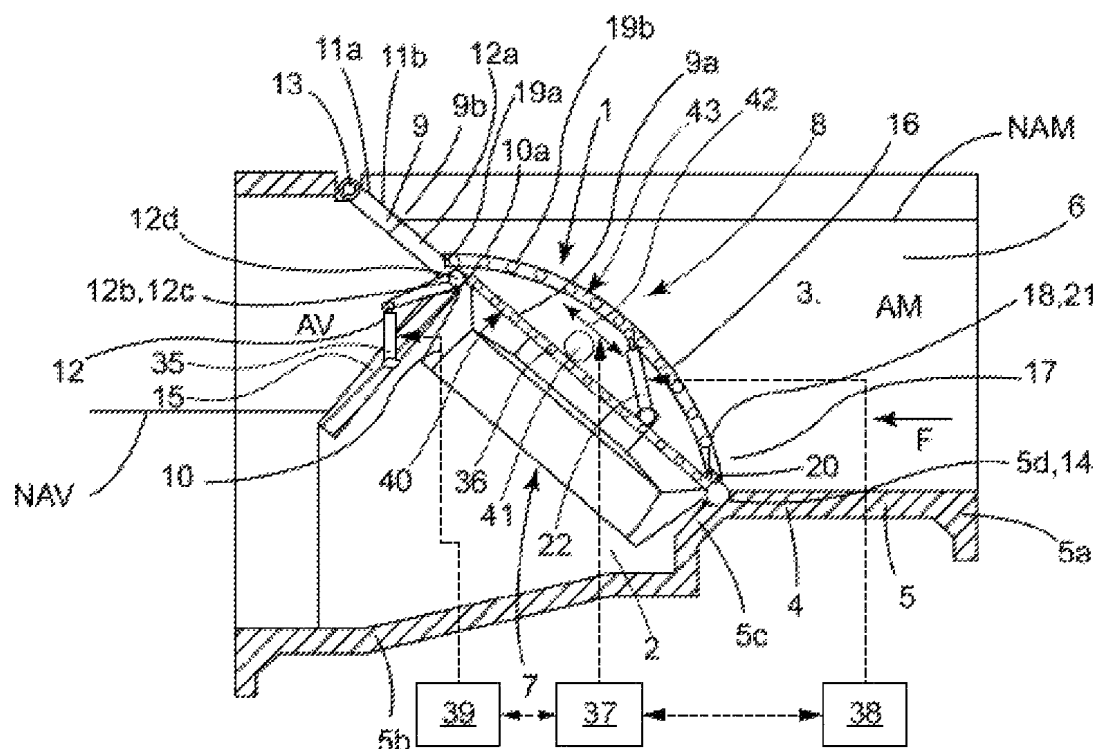
Family 164/200 - FAMPAT - ©Questel

Title

(EP2710255)

Hydro-electric power plant comprising a grating assembly for taking water into the turbine, which is designed to discharge floating debris stopped by the grating

Images



Publication data including kind & date

CA2836350	A1	2012-11-22	CA2836350
WO2012/156604	A1	2012-11-22	WO2012/156604
FR2975444	A1	2012-11-23	FR2975444
CN103688048	A	2014-03-26	CN103688048
EP2710255	A1	2014-03-26	EP2710255
US20140102989	A1	2014-04-17	US20140102989
JP2014513777	A	2014-06-05	JP2014513777
IN10566/DELNP/2013	A	2014-12-26	IN2013DN10566
JP5952389	B2	2016-06-17	JP5952389
EP2710255	B1	2016-10-26	EP2710255
FR2975444	B1	2016-12-23	FR2975444
BR112013029594	A1	2017-02-21	BR112013029594
CN103688048	B	2017-03-15	CN103688048B
BR112013029594	A2	2017-03-21	BR112013029594
US9611607	B2	2017-04-04	US9611607
CA2836350	C	2018-08-27	CA2836350



Abstract

(EP2710255)

The invention relates to a power plant which operationally combines a downstream turbine unit (7) and an upstream grating assembly (8), which includes a grating (16), a supporting structure (17), and a means (18) for associating the grating (16), which has a structure that enables movement of at least the upper portion of the grating (16) between an upright position for the debris-stopping function and a folded-down position for discharging the floating debris stopped by the grating (16).

Inventors

FONKENELL JACQUES

Latest standardized assignees - inventors removed

MJ2 TECHNOLOGIES

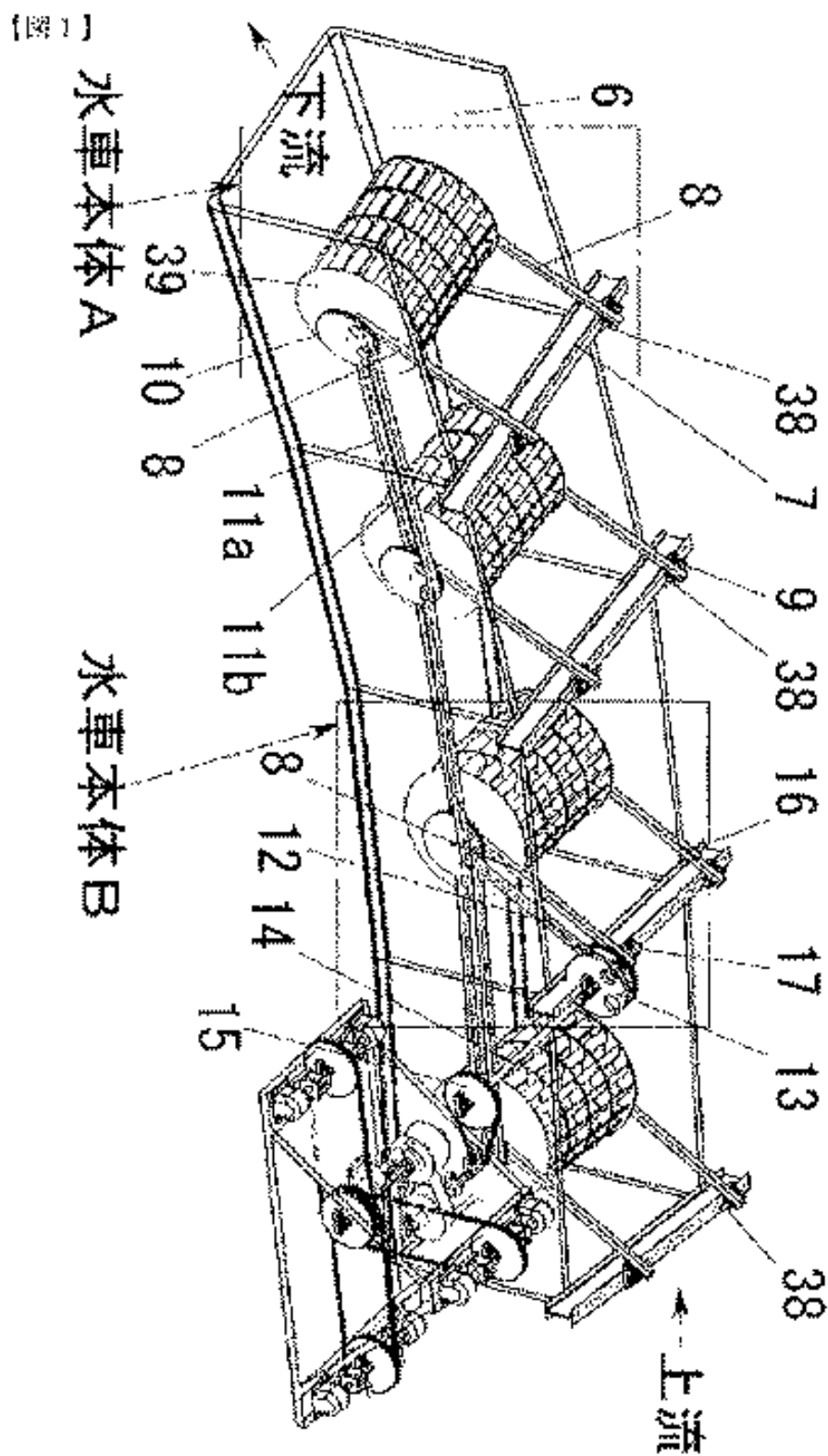
Family 165/200 - FAMPAT - ©Questel

Title

(JP2012225212)

Hydraulic turbine power generator

Images



Publication data including kind & date

[JP2012225212](#)

A 2012-11-15

JP2012225212

[JP5131610](#)

B2 2012-11-16

JP5131610



Abstract

(JP5131610)

PROBLEM TO BE SOLVED: To provide a hydraulic turbine power generator that efficiently utilizes the energy of the flowing water of an irrigation canal and a river for power generation even at a linear line and also at a curve. **SOLUTION:** The hydraulic turbine power generator comprises: hydraulic turbines containing floating bodies therein; both-side discs 39 having bearings; a flywheel 10 which makes a plurality of the hydraulic turbines connectively interlocked with one another; and a turnable connecting rod 11b. The hydraulic turbine power generator also comprises: an electric angle detector 16; a rotation number detecting small generator 17; a rotation number conversion device; and a variable generating set.

Inventors

ITO TADASHI

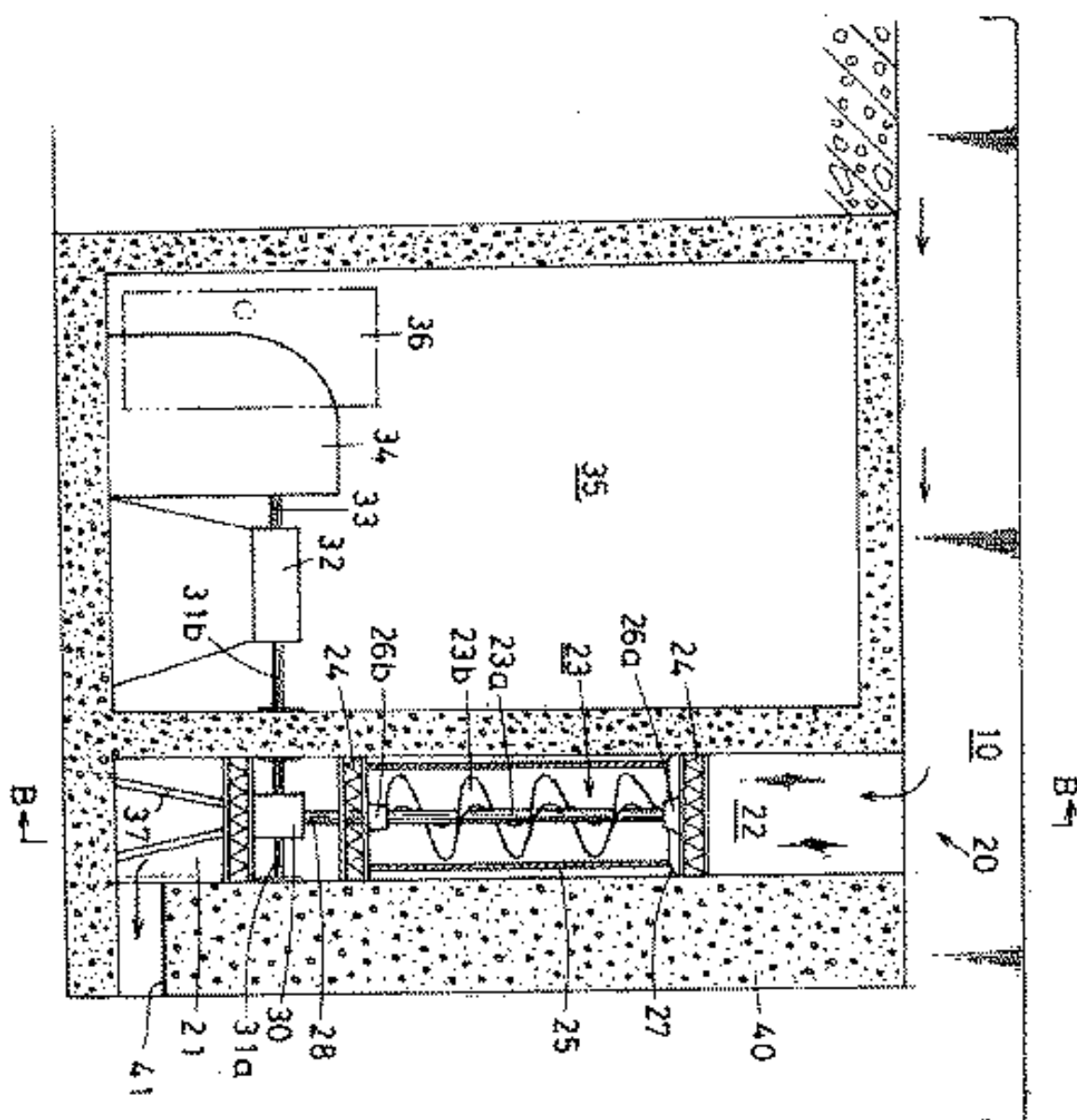
Keiko Ito

Family 166/200 - FAMPAT - ©Questel

Title

(JP3161062U)

Natural river and hydroelectric power generation apparatus

Images

Abstract

(JP3161062U)

PROBLEM TO BE SOLVED: Natural river bed of the river using the steps of substantially 100% of a water flow cannot be utilized for generation, even when a small amount of water river, allow the generator. **SOLUTION:** Natural river bed stepped to a lower portion of a river bed of the river, both river concrete ceiling portion which is fixed in the same plane as the upper portion of a river and hydroelectric power generation apparatus 10 and extends over both river installed, this hydroelectric 10 is, the center of the bottom to the waterfall path 21 waterfall has the waterfall V-shaped channel toward the inclined 22 waterfall unit formed 20 and, waterfall slope 22 and waterfall path 21 from the waterfall disposed between the inclined surface receives the waterfall the vertical rotation of the helical type water turbine 23 and, the helical type of turbine rotation wheel shaft end connected to the helical type 23 vertical rotational motion is converted into rotary motion of the rotating of the horizontal gear 30 and, waterfall unit 20 continuous with the upstream side of the gear portion rotating conversion 30 transmits the rotation movement of the power generation device for power 34 generating chamber installed 35 and, waterfall unit 20 a waterfall which is provided downstream of the water wheel type helical 23 waterfall path directing the lower 21 discharge path communicates with 41 guide block formed with a waterfall 40 is provided. **SELECTED**

DRAWING: FIG 1

Inventors

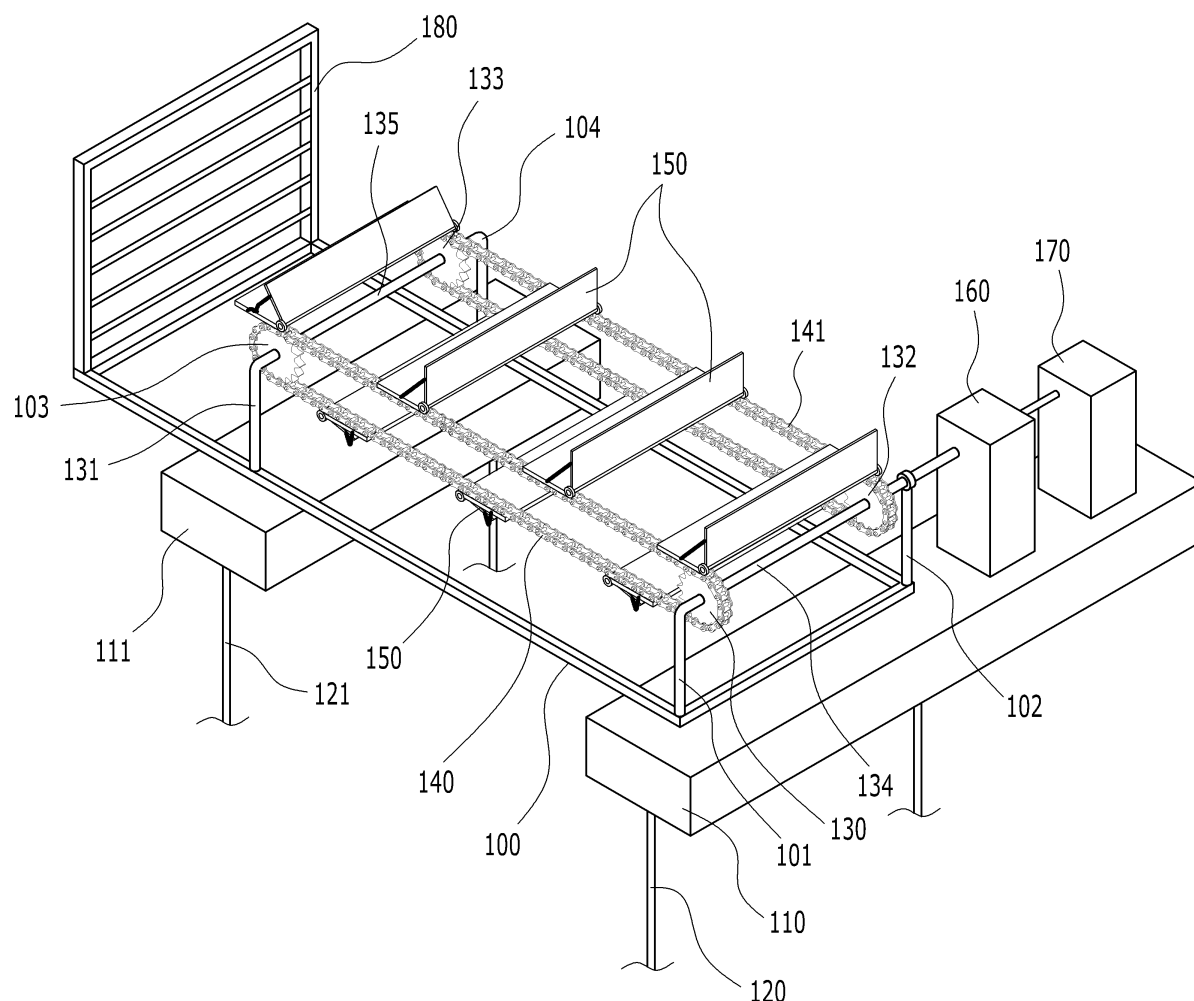
NAGAO OSAMU

Family 167/200 - FAMPAT - ©Questel

Title

(KR20110038882)

Power generation apparatus

Images

Publication data including kind & date

[KR20110038882](#)

A

2011-04-15

KR20110038882



Abstract

(KR20110038882)

PURPOSE: A power generating device is provided to enhance energy efficiency since a rotor with a bucket is installed on the water and the bucket receives the flow of wave or water to rotate the rotor. **CONSTITUTION:** A power generating device comprises a support frame(100), a generator(170), and a bucket(150). Rotors are located on the support frame at given intervals and are connected by a chain(140). The support frame supports the rotors and comprises a buoyant unit(110). The generator is connected to the rotary shaft of the rotor. The bucket moves forward from the lower part of a sprocket(130).

Inventors

RYOO, IN SANG

Latest standardized assignees - inventors removed

HOGUK & N G

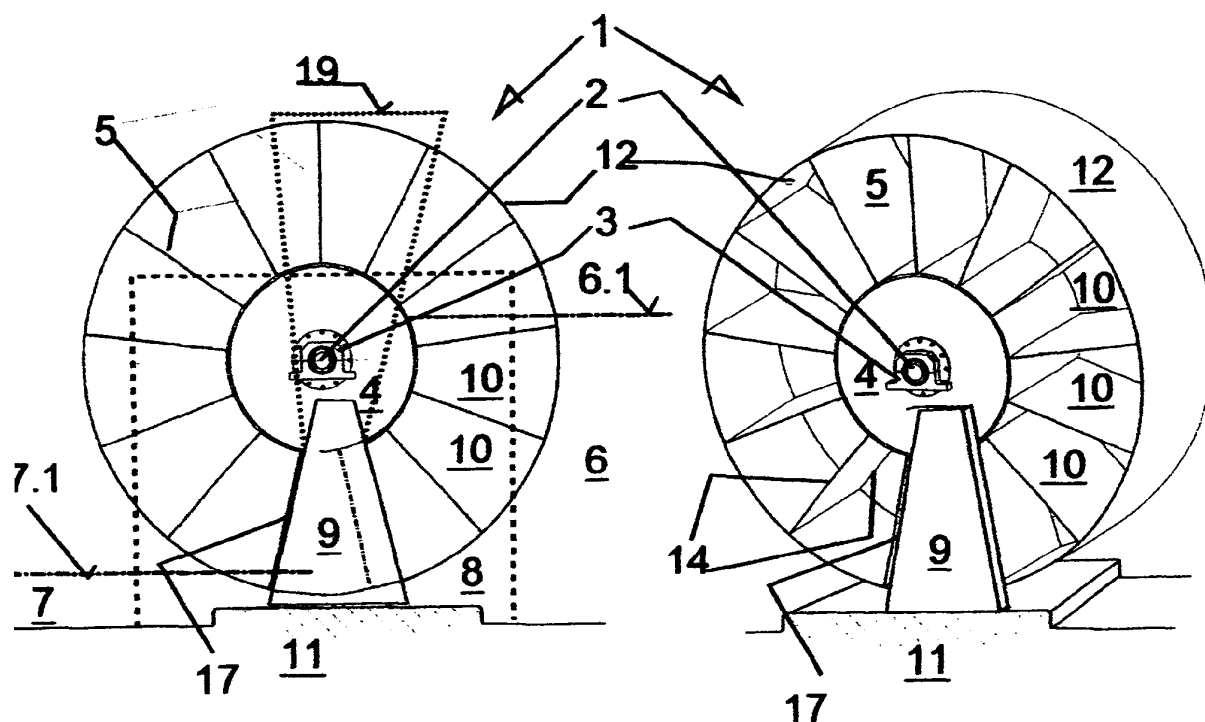
RYOO SANG

Family 168/200 - FAMPAT - ©Questel

Title

(DE102009025531)

Waterwheel for recovering potential energy between head water and bottom water of retaining dam, has vanes arranged on periphery of hub, where base of passage forms gap of desired breadth relative to hub for limiting free flow rate

Images**Publication data including kind & date**[DE102009025531](#)

A1 2010-01-14

DE102009025531

**Abstract**

(DE102009025531)

The waterwheel (1) has vanes (5) formed by chambers (10) and arranged on a periphery of a hub (4). The waterwheel is surrounded by a closed, circular cylindrical shell (12) such that the shell is radially continued on the periphery between the chambers and is enclosed in a region of a lower angular point of the waterwheel by a sidewall (9). Each chamber found in the region of the lower angular point is opened into bottom water (7) on both sides. A base (11) of a passage (8) forms a gap of desired breadth relative to the hub for limiting a free flow rate.

Inventors

HERMESMEIER CHRISTOPH

PRESENTIN DIETER

Family 169/200 - FAMPAT - ©Questel

Title

(CN201412263U)

Device for generating power by self-pressurizing circulated water

Publication data including kind & date

[CN201412263](#)

Y

2010-02-24

CN201412263U

**Abstract**

(CN201412263U)

The utility model provides a device for generating power by self-pressurizing circulated water. The structure of the device is characterized in that the bottom of a water accumulator filled with water is provided with a water pump; a platform is arranged above the water accumulator; the platform is fixed with a bracket; the bracket is supported by a power shaft by a roller bearing; the power shaft is fixed with a plurality of water wheels with equal distances; the end of the power shaft is connected with a power generator; a water storage box is fixed above the bracket; a cylinder dipped in water is fixed in the water storage box; the bottom of the cylinder is provided with a water injection nozzle which aims at the vanes of the water wheel; and the cylinder is internally provided with a piston which is controlled by a hydraulic system and can move upwards and downwards in the cylinder. After the water pump is started and the water storage box is filled with water, the hydraulic system works so that the piston reciprocates in the cylinder and generates the high-pressure water which is sprayed out of the water injection nozzle and impacts the water wheel to rotate at a high speed, thus driving the power generator to generate power. The device needs only little water resource and needs no high fall to lead the power generator to generate power, thus meeting the production requirement; and the device has simple structure, small investment, short installation period and low cost, and is applicable to self-establishment of middle and small power enterprises.

Inventors

PU SHUZHU

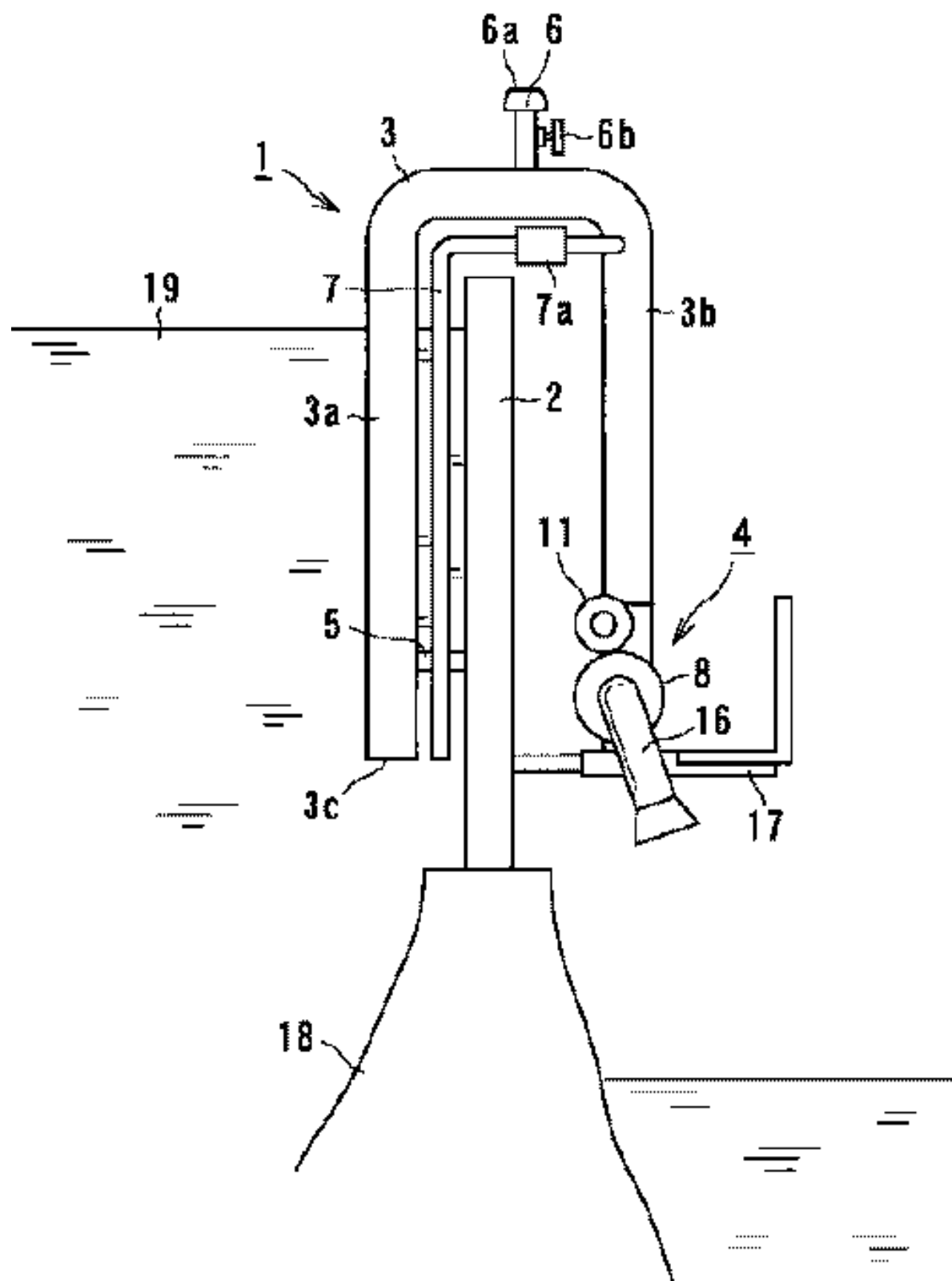
Family 170/200 - FAMPAT - ©Questel

Title

(JP2003021041)

Hydraulic power generating device

Images



Publication data including kind & date

[JP2003021041](#)

A

2003-01-24

JP2003021041



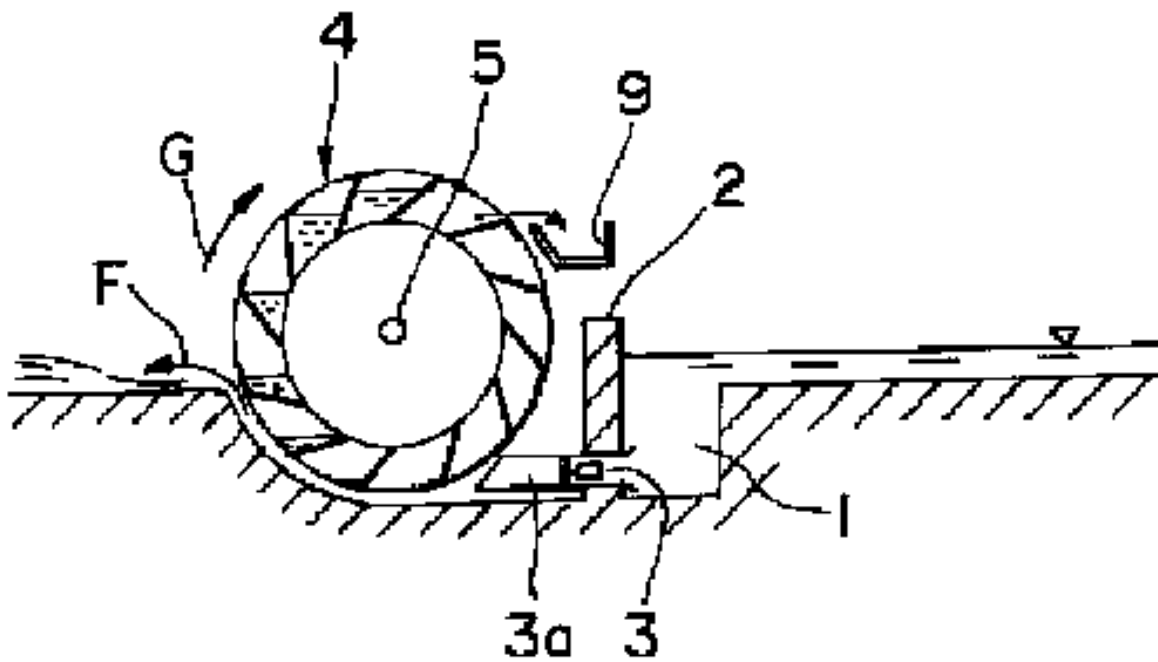
Abstract

(JP2003021041)

PROBLEM TO BE SOLVED: To provide a hydraulic power generating device capable of continuously generating power even when raising and opening a movable gate such as a dam and a water gate. **SOLUTION:** This hydraulic power generating device is capable of raising the movable gate 2, continuing power generation, by installing an axial flow water turbine generator 4 on a downstream side surface of the elevatable/ lowerable movable gate 2 openably/closably partitioning a water storage region 19, constituting a water turbine shaft 10 to be horizontal at this time, and supplying water of the water storage region 19 to the axial flow water turbine power generator 4 via water conduit pipes 3 and 31.

TOSHIBA ENGINEERING

Images



Publication data including kind & date[JPH07151048](#)

A 1995-06-13 JP07151048

**Abstract**

(JP07151048)

PURPOSE:To provide a power generation pumping device for a river which can efficiently generate power by the river of a comparably low head. **CONSTITUTION:**A pit 1 is formed by drilling the bottom of the river. A dam 2 is provided on a downstream side of the pit 1. An axial turbine generator 3 is arranged on a bottom side wall of the dam 2. An undershot wheel 4 is arranged on the water discharge side of the axial turbine generator 3. A generator is connected to a support shaft 5 of the undershot wheel 4.

Inventors

Hidenori Maeda

Latest standardized assignees - inventors removed

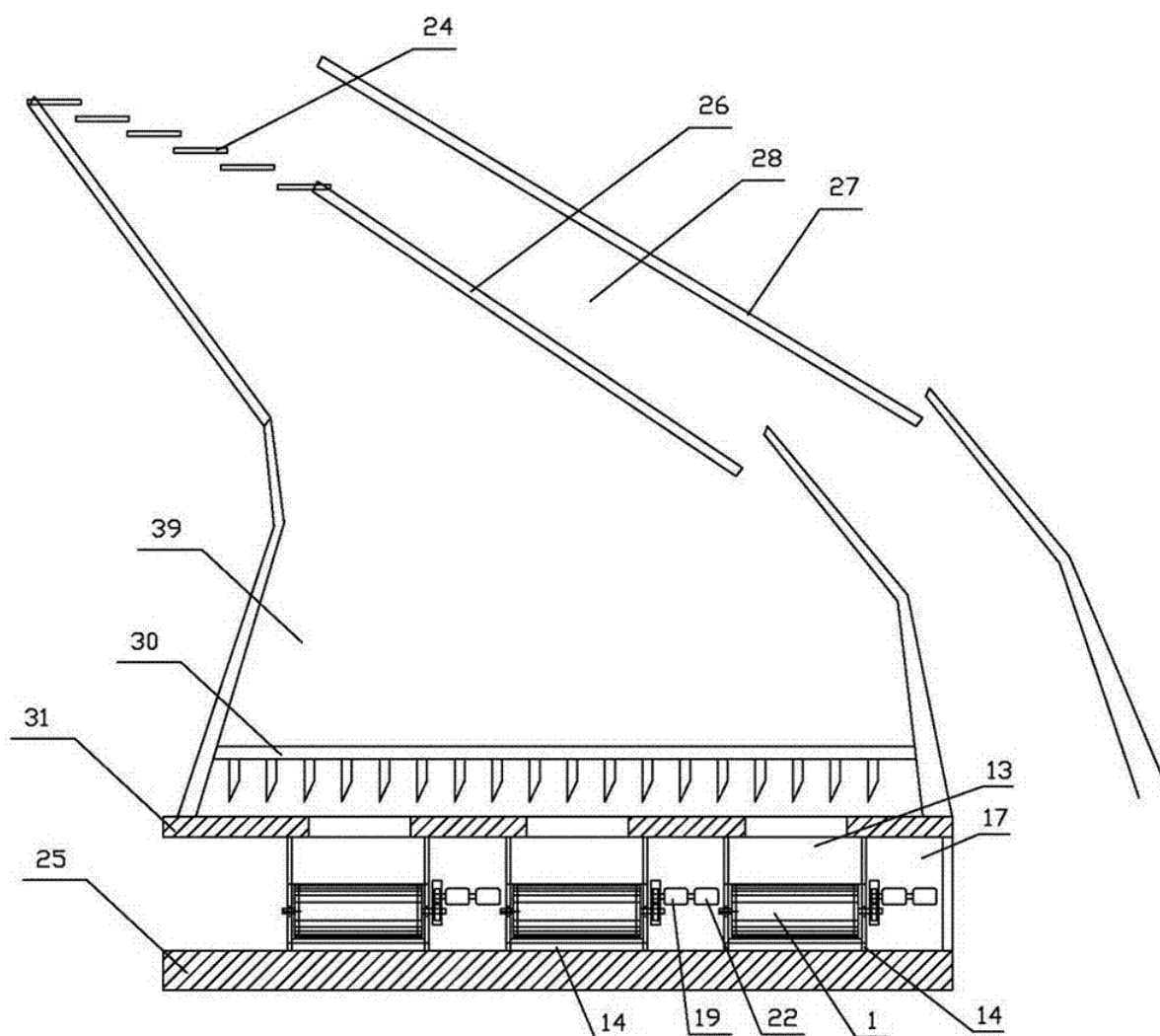
MAEDA

Family 172/200 - FAMPAT - ©Questel

Title

(CN106837663)

Low-water-level river generating set

Images**Publication data including kind & date**[CN106837663](#)

A 2017-06-13 CN106837663

[CN106837663](#)

B 2018-10-26 CN106837663B

**Abstract**

(CN106837663B)

The invention relates to a hydroelectric generation device, in particular to a low-water-level river generating set. The low-water-level river generating set comprises a retaining dam, a hydraulic generator mounted on the retaining dam, wherein the hydraulic generator comprises water wheels mounted in water wheel chambers and generators mounted in generation chambers, and the generators are in drive connection with the water wheels; each water wheel comprises a water wheel shaft, water wheel fixing plates, water wheel end plates and water wheel movable bottom plates. The generating set is simple and compact in structure, small in construction work, remarkable in economic benefit and environment-friendly, can generate power no matter how much the river water quantity is and is not limited by water flow.

Inventors

GUO FANGQIN

GUO BAOTIAN

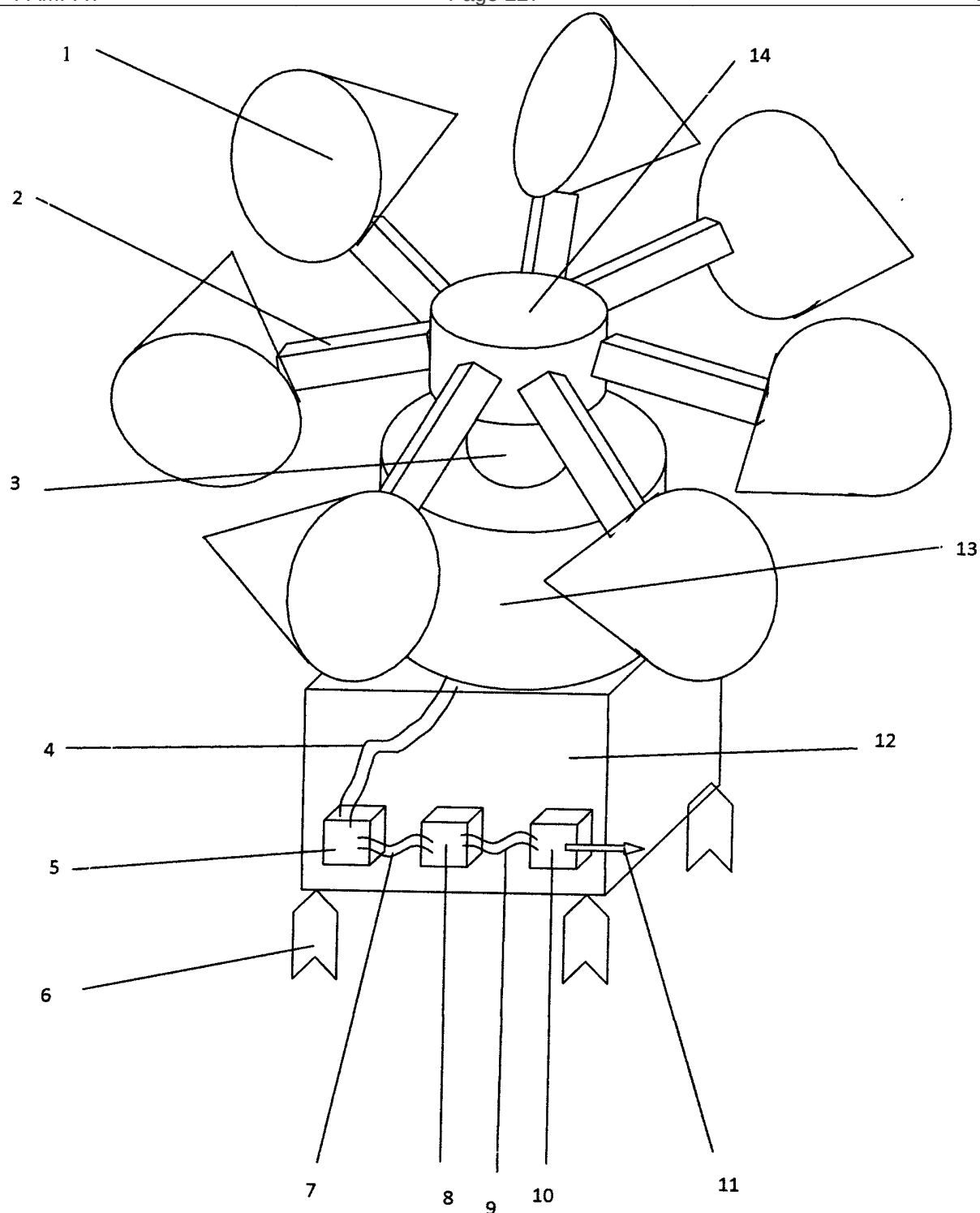
Family 173/200 - FAMPAT - ©Questel

Title

(CN104819092)

Seven-bucket type whirligig-shaped sea wave generator

Images



Publication data including kind & date

[CN104819092](#)

A 2015-08-05 CN104819092



Abstract

(CN104819092)

The invention discloses a seven-bucket type whirligig-shaped sea wave generator. The seven-bucket type whirligig-shaped sea wave generator is provided with a water storage bucket firmly connected with a hub through revolving wood, the water storage bucket is rigidly connected with the revolving wood, the revolving wood is connected with the hub through a bearing, and the hub is connected with a motor shaft. The seawater fluctuates to impact the water storage bucket to enable the water storage bucket to rotate so as to drive the generator shaft to rotate through the hub to enable the generator to generate electricity, the electricity is conveyed to a rectifier through a cable I, after passing the rectifier, the electricity is conveyed to an accumulator jar through a cable II to store and output to an inverter through a cable III, after being inverted, electric energy is output through an output cable IV.

Inventors

WANG TAO

ZAN ZHANHUA

WANG YANG

GAO CHAO

WANG TIANZE

Latest standardized assignees - inventors removed

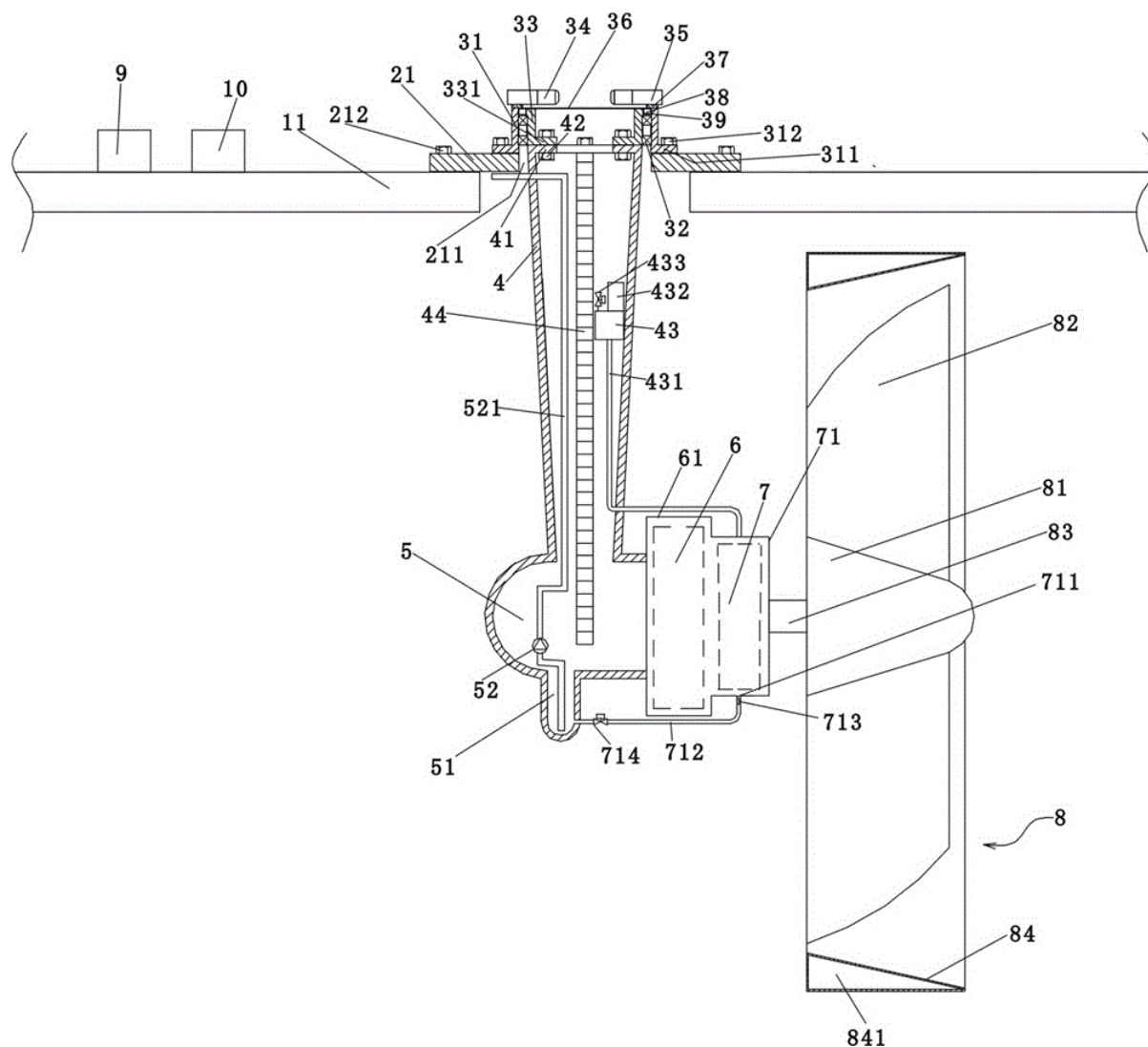
HEBEI UNIVERSITY OF TECHNOLOGY

Family 174/200 - FAMPAT - ©Questel

Title

(CN104329205)

Water flow power generating device

Images**Publication data including kind & date**

CN104329205	A	2015-02-04	CN104329205
CN104329205	B	2017-01-11	CN104329205B

**Abstract**

(CN104329205B)

The invention provides a water flow power generating device, which comprises an installing platform, a rotating mechanism, a tower tube, a machine cabin, a power generator, a gearbox and an impeller, wherein the installing platform is positioned on the water surface, the rotating mechanism is arranged on the installing platform, the tower tube, the machine cabin, the power generator, the gearbox and the impeller are positioned in the water, the upper end part of the tower tube is fixedly arranged on the rotating mechanism, the power generator and the gearbox are arranged at one side of

the machine cabin, the impeller consists of a wheel hub and a plurality of blades, a center shaft of the wheel hub is connected with the power generator through the gearbox, the telecentric ends, far away from the center of the wheel hub, of the blades are provided with a wheel ring in a sleeving way, the wheel ring is of a cylindrical structure with the hollow side wall, and through the hollow structure of the wheel ring, the buoyancy obtained by the impeller in water counteracts the self weight of the impeller, so the impeller becomes a zero-weight impeller, the installing platform is fixedly arranged on a suspension framework consisting of a floating tube, and the suspension framework is fixed and floats on the water surface through pull ropes and ground anchors. The water flow power generating device has the advantages that the impeller can fast rotate under the water flow impact without overcoming the self weight, and the work obtained through the fast rotation is completely converted into the power generating power, so the power generating efficiency is greatly improved.

Inventors

WANG CHENGHUI

WANG SHIQUAN

WANG SHIYI

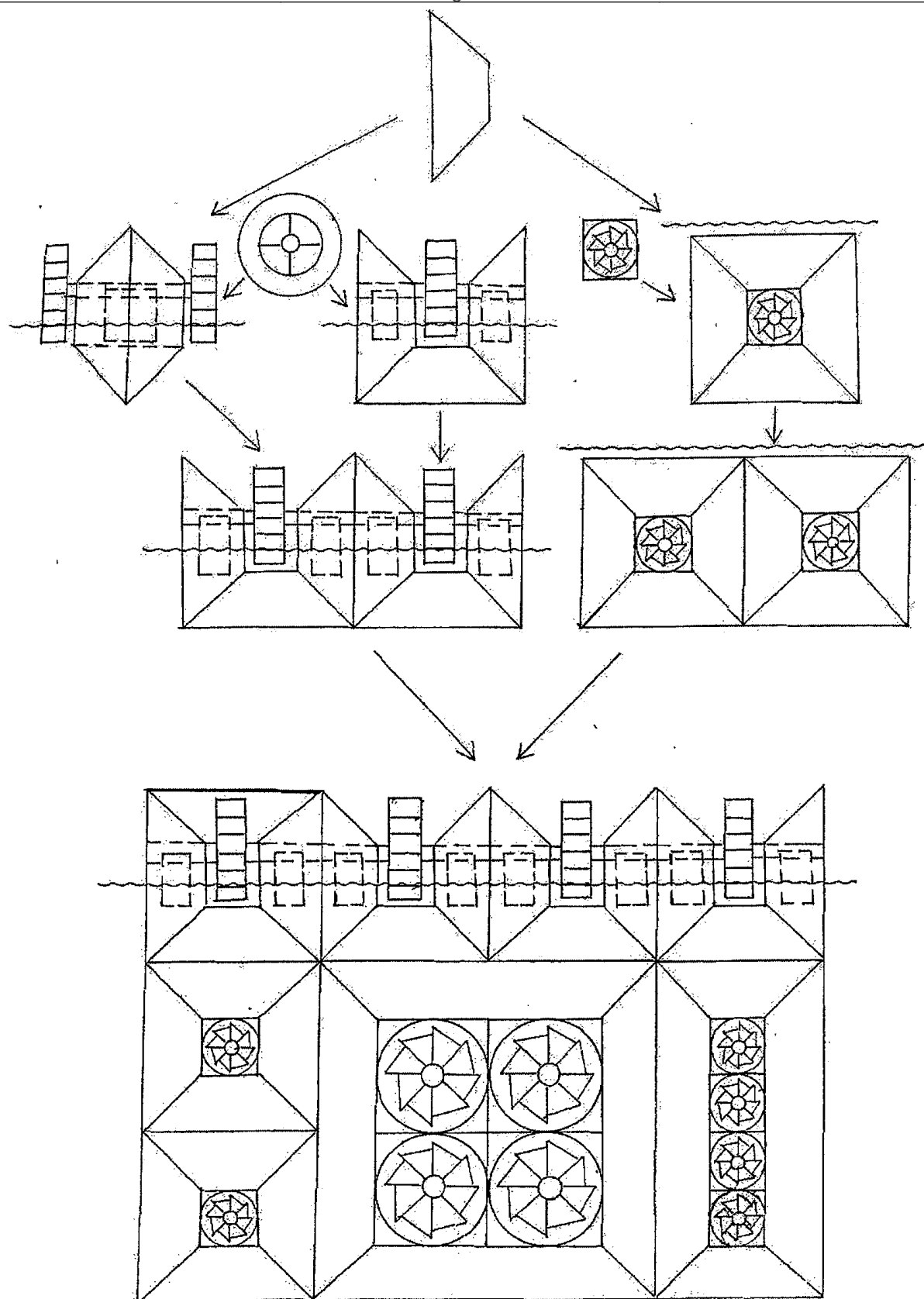
Family 175/200 - FAMPAT - ©Questel

Title

(CN101975134B)

Horizontal type hydroelectric generator system

Images



Publication data including kind & date

CN101975134	A	2011-02-16	CN101975134
CN101975134	B	2013-07-10	CN101975134B



Abstract

(CN101975134B)

The patent refers to the field of 'machines or engines for liquids'. This invention has disclosed a kind of horizontal hydroelectric generator system, including outer cover, water conservancy receiver and generator, the stated outer cover includes two or more prismoids put together, is used for regulating depth of water and compensating sump in the stated outer cover, several generator erection are in the stated outer cover, several stated water conservancy receivers are

mounted on stated outer cover. The systematic technical requirement of horizontal hydroelectric generator that this invention offers is low, it is made, apt to assemble, with low costs, sturdy and durable and guaranteeing simple and easy, decayed difference, consuming energy, no emission that simple in construction, easy, suitable for there are water areas of waterflow in river and sea, can try hard to utilize natural resource and space effectively, regard resource sharing of water and environmental protection of various fields as primary principle, does not need totally taking up and cutting off the water source, do not influence the normal operation of the channel.

Inventors

LÜ QIWEI

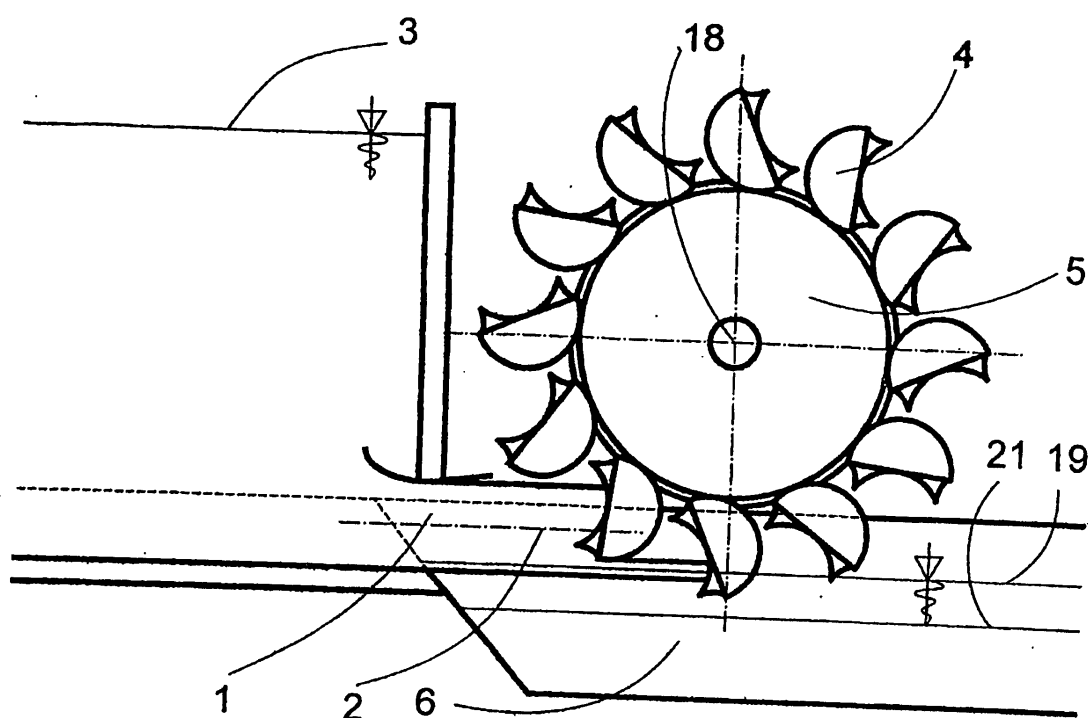
Family 176/200 - FAMPAT - ©Questel

Title

(EP1629192)

Water wheel motor

Images



Publication data including kind & date

WO2004/097211	A1	2004-11-11	WO200497211
CA2526925	A1	2004-11-11	CA2526925
AU2004235278	A1	2004-11-11	AU2004235278
WO2004/097211	A8	2004-12-29	WO200497211
WO2004/097211	A9	2005-04-28	WO200497211
NO20055628	D0	2005-11-29	NO200505628
NO20055628	L	2006-01-12	NO20055628
KR20060008935	A	2006-01-27	KR20060008935
EP1629192	A1	2006-03-01	EP1629192
IL171301	A	2006-03-12	IL-171301
MXPA05011551	A	2006-05-04	MX2005PA011551
BRPI0409800	A	2006-05-09	BR200409800
BRPI0409800	A1	2006-05-09	BR200409800



CN1777749	A	2006-05-24	CN1777749				
EA200501709	A1	2006-06-30	EA200501709				
US20060245919	A1	2006-11-02	US20060245919				
JP2006525469	A	2006-11-09	JP2006525469				
OA13305	A	2007-04-13	OA--13305				
EA008918	B1	2007-08-31	EA---8918				
IN5577/DELNP/2005	A	2007-11-30	IN2005DN05577				
VN0006974	B	2008-05-26	VN---6974B				
RS20050817	A	2008-11-28	RS200500817				
IN234279	B	2009-06-19	IN-234279				
BRPI0409800	A2	2012-05-22	BR200409800				

Abstract

(EP1629192)

The invention relates to a water wheel motor consisting of a discharge device arranged prior to a wheel and an out-flowing device arranged under the wheel which is rotationally mounted on an axis and to which constant pressure scoop (4) are fixed. All points of the wheel (5) and of the constant pressure shoves (4) are situated at a distance greater or zero with respect to plane (21) which is identical or lower and at the same time parallel to a plane (19) placing an upper limit of the water-containing space (6) of the out-flowing device. The axis (2) of the discharge device (1) leads to the constant pressure shoves (4), and the wheel (5) has the vertical, horizontal or inclined axis of rotation thereof.

Inventors

KRIZIK VLADISLAV

MACEK JAN

Latest standardized assignees - inventors removed

BOTEK PETER

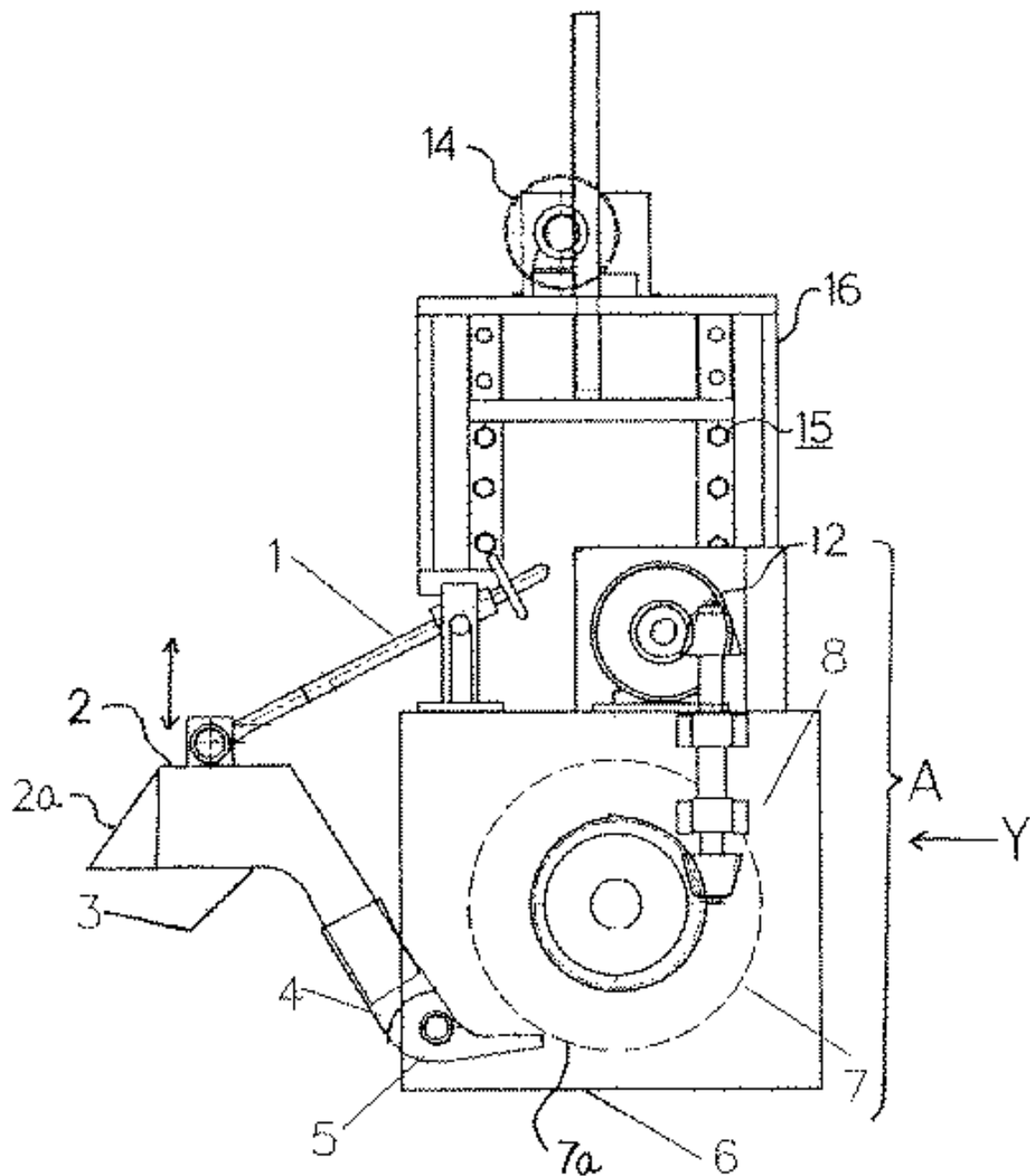
Family 177/200 - FAMPAT - ©Questel

Title

(JP2004068655)

Constant-water open type water wheel generation device

Images

**Publication data including kind & date**

JP2004068655

A 2004-03-04 JP2004068655

**Abstract**

(JP2004068655)

PROBLEM TO BE SOLVED: To provide a water wheel generation device allowing the use of water flowing in a channel, discharge channel or low-head river, not utilized so far, for electric power only by constructing a simple foundation in the existing channel, discharge channel from a generation plant or river.

SOLUTION: The water wheel generation device has a suction port 2a adjustable into a constant flow rate. Water flowing in the existing channel, discharge channel from the generation plant or low-head river are introduced via the suction port 2a and a constant flow rate of water is guided to a water wheel runner (a portion of a rotary vane 7a of a water wheel 7) without using control equipment. A first mechanism part (a constant position adjuster 1) capable of adjusting the suction port 2a at least upward and downward and a second mechanism part (an up-and-down moving motor and an up-and-down moving manual handle 14) capable of adjusting a water depth with the up-and-down movement of the whole water wheel are provided for controlling water power energy to be introduced corresponding to the shape of a water stream and the water depth. A support frame 1 to be fixed on the foundation of both sides of channel and supporting the whole water wheel

in free up-and-down movement is provided for simple installation on various places.

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Inventors

SUGA SO

AJIKI HIROSHI

TAKEUCHI ATSUSHI

KITAZAWA YOSHINORI

OIKE RYUICHI

Latest standardized assignees - inventors removed

TANAKA SUIRYOKU KIKAI SEISAKUS

CHUBU ELECTRIC POWER

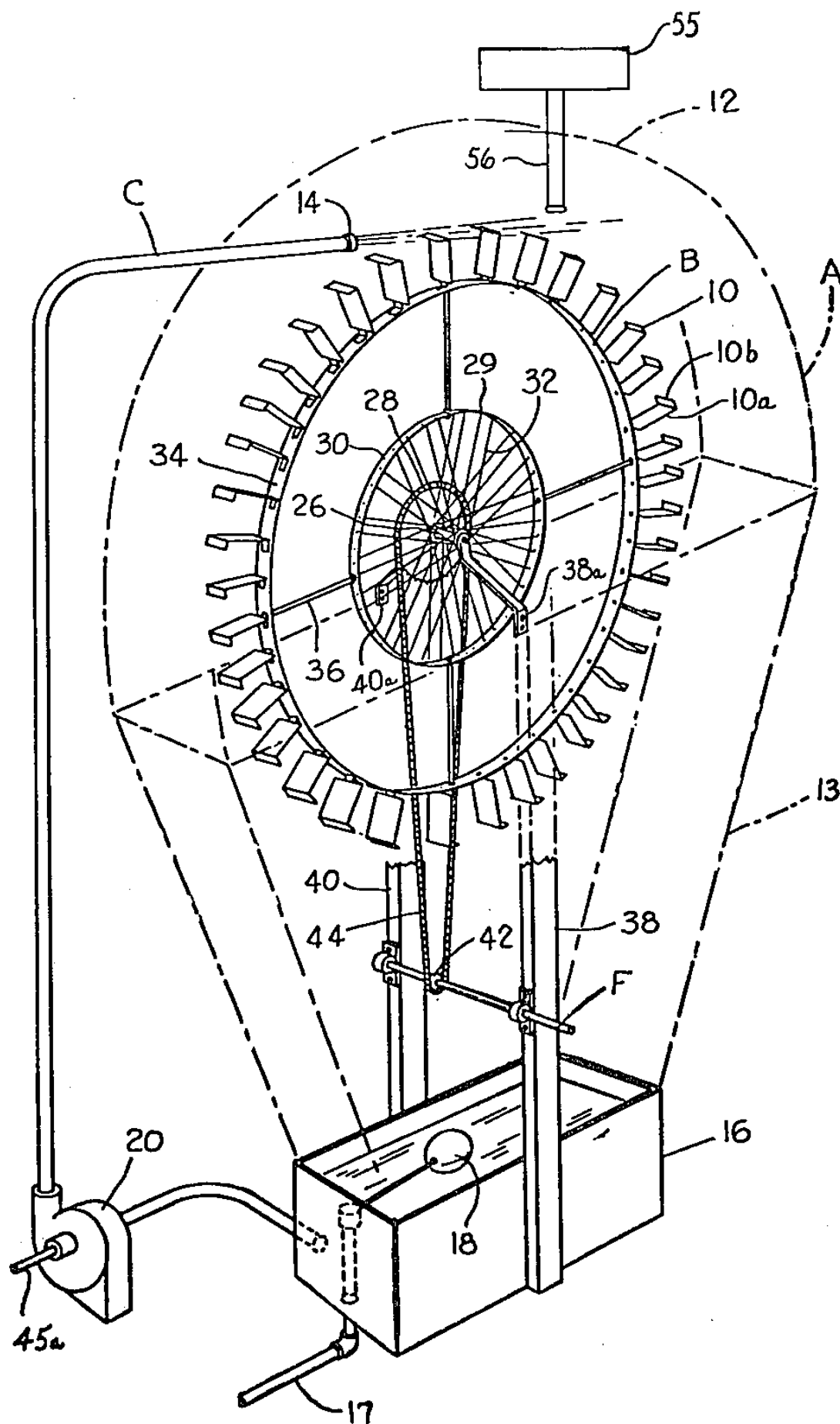
Family 178/200 - FAMPAT - ©Questel

Title

(US4345160)

Waterwheel power generator

Images



(US4345160)

An electrical power generation system includes a waterwheel contained within a housing enclosure above a water collection compartment, a water discharge nozzle in alignment with said waterwheel, means for delivering water to said discharge nozzle including a pump for returning water from the collection compartment, a portion of the output of the waterwheel being used to drive the pump, wherein the waterwheel includes fin elements having inclined water entrapping flange portions and is supported by means of an adjustable support to maintain the waterwheel dynamically balanced and in alignment with the discharge nozzle.

Inventors

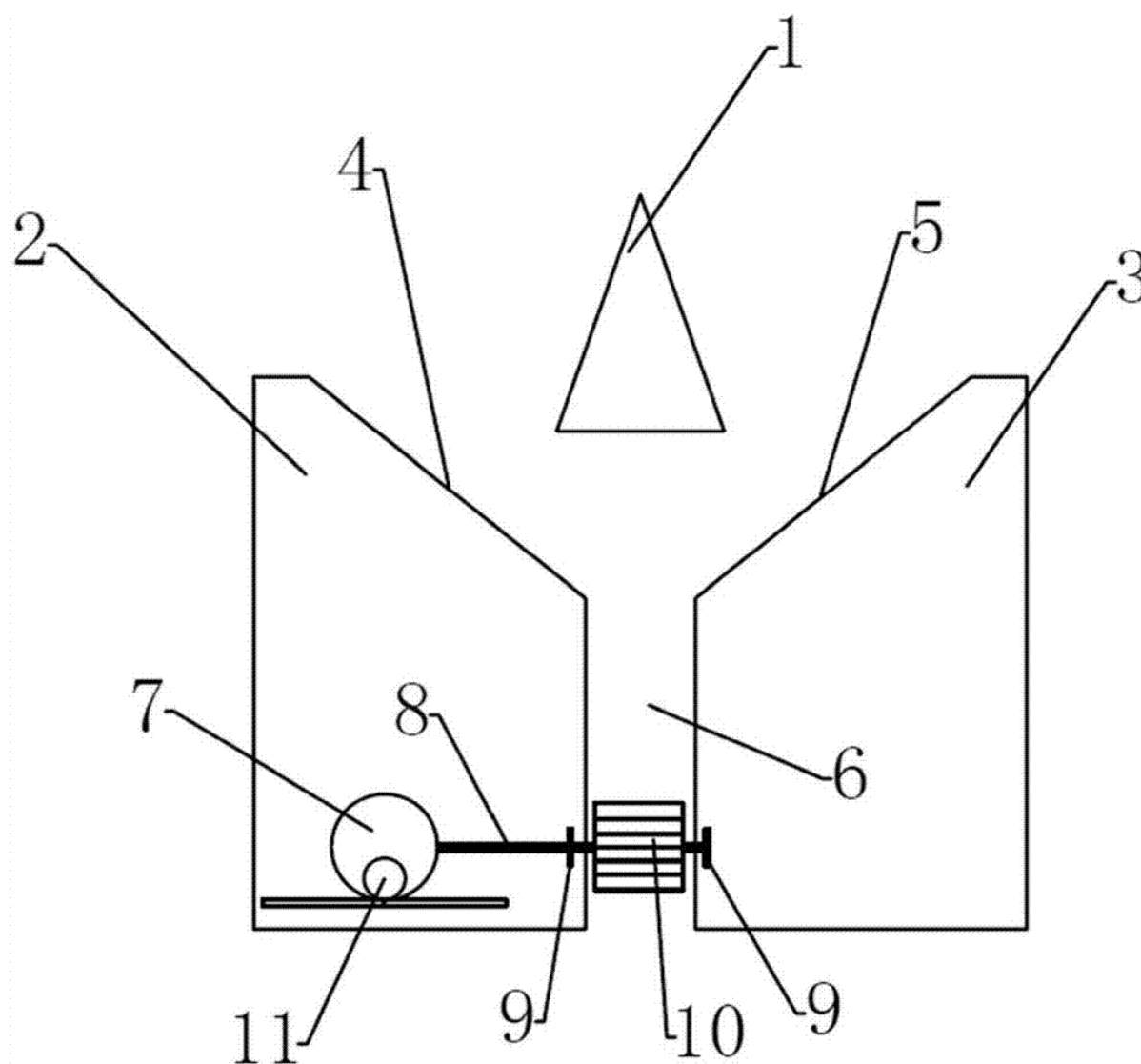
SMITH J T

Family 179/200 - FAMPAT - ©Questel

Title

(CN207761873U)

Wave energy power supply system with buffering wave impact function

Images**Publication data including kind & date**[CN207761873](#)

U

2018-08-24

CN207761873U

**Abstract**

(CN207761873U)

The utility model belongs to the technical field of the wave energy utilizes, concretely relates to wave energy power supply system with buffering wave impact function. In prior art, problem that waveenergy power generating equipment damaged at the impact in -process that bears intermittent type nature for a long time very easily, the utility model provides a: including

left dam body, right dam body, form the wave runner between left side dam body and the right dam body, be provided with wave power generater group on the left dam body, be provided with the transfer line in the wave power generater group, be connected with the wheel on the transfer line, the wheel is arranged in the wave runner, the front end of left side dam body and right dam body is provided with left cushion faces andright cushion faces respectively, left side cushion faces, right cushion faces form the opening that loudspeaker were described with the wave runner. The utility model is suitable for a comprehensiveutilization of seashore energy.

Inventors

YU QIN

HUANG YANQIN

Latest standardized assignees - inventors removed

NANCHANG POWER SUPPLY BRANCH JIANGXI ELECTRIC POWER

STATE GRID CORPORATION OF CHINA (SGCC)

STATE GRID JIANGXI ELECTRIC POWER

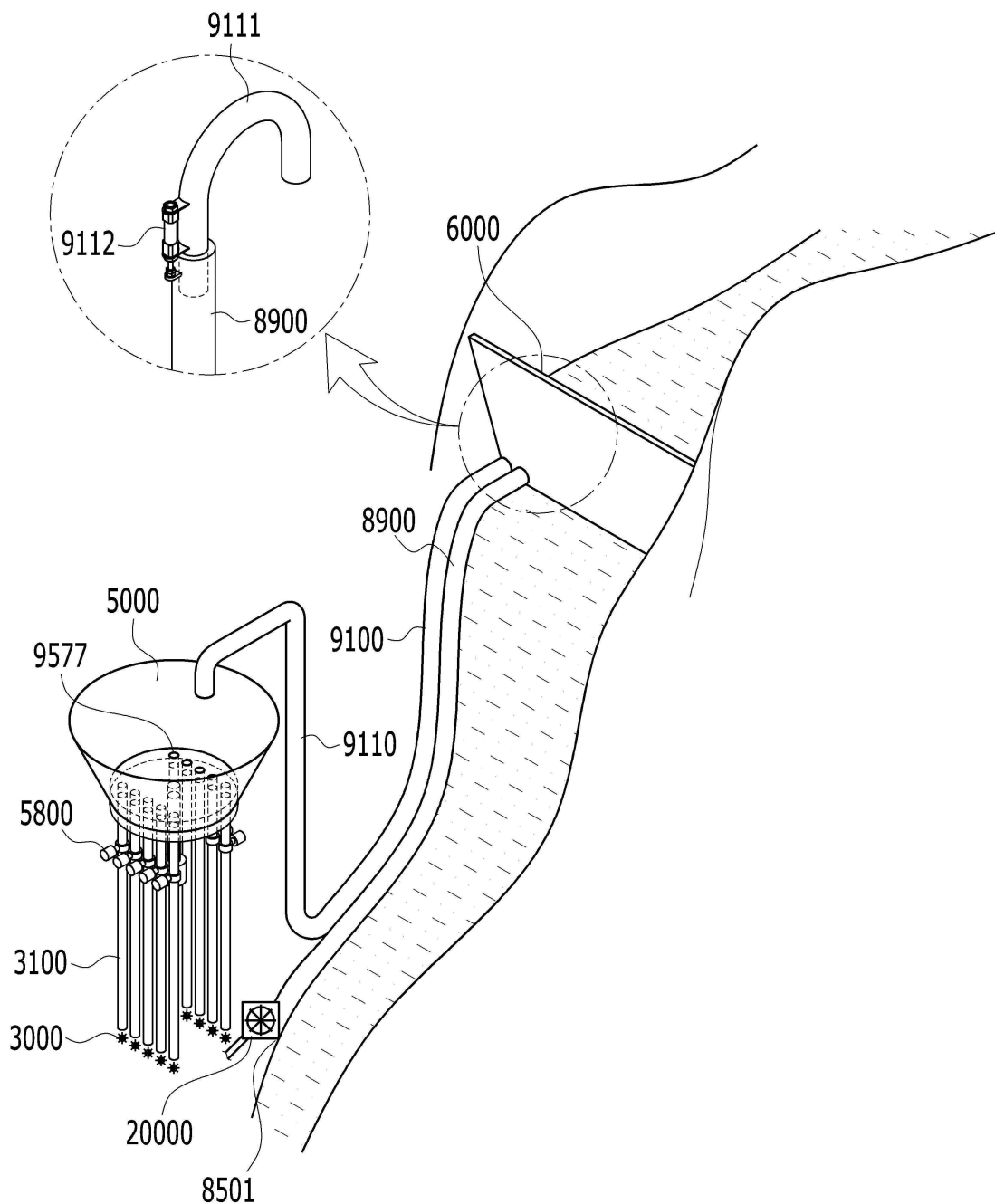
Family 180/200 - FAMPAT - ©Questel

Title

(KR20180057584)

A technique to produce electricity continuously using a water drop power plant designed to nal acceleration actions

Images

**Publication data including kind & date**

KR20180057584

A

2018-05-30

KR20180057584

**Abstract**

(KR20180057584)

The present invention relates to an eco-friendly power generation method to continuously produce electricity using a water drop power generation plant formed to generate gravity acceleration action and, more specifically, relates to an eco-friendly power generation method, which can effectively produce high efficiency electricity after installing a water storage device in a valley among the mountains having a high altitude, a river, a stream, or the like to circulate the water storage device with altitude difference in accordance with a right angle head of water.

Inventors

HAN, SANG-KWAN

Family 181/200 - FAMPAT - ©Questel

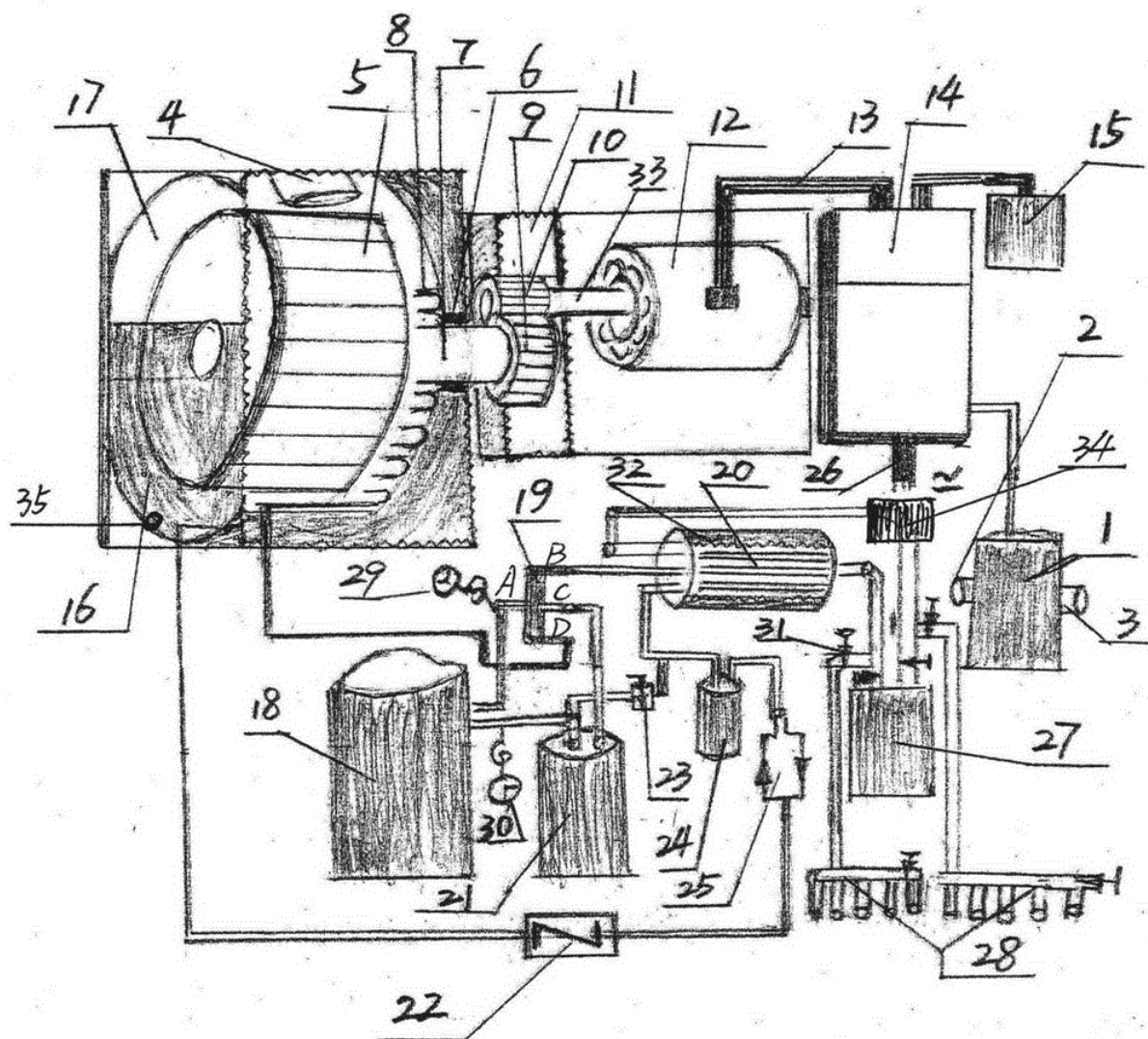
Title

(WO201139406)

Device for producing energy by hydropower

Water energy cold and hot air blower set and power generation device thereof

Images



Publication data including kind & date

CN106257047

A 2016-12-28

CN106257047



Abstract

(CN106257047)

The invention provides a water energy cold and hot air blower set and a power generation device thereof. Operation is conducted by means of a heat pump with low power as far as possible, a water pump is driven by inverter voltage to pump water so as to generate impact force through stored electricity energy of a storage battery, impulse drives a mechanical water wheel to run, the mechanical energy is turned into the electric energy by means of a generator, the heat pump is driven by the electric energy to work, and cold water and hot water are generated and supplied to a cold water air blower set and a floor heating water separator respectively and then led to a warming pipe or the like for cooling and heating and household electricity. According to the water energy cold and hot air blower set and the power generation device thereof, the energy-saving and environmental protection effects are obvious.

Inventors

ZHAN PINGZHI

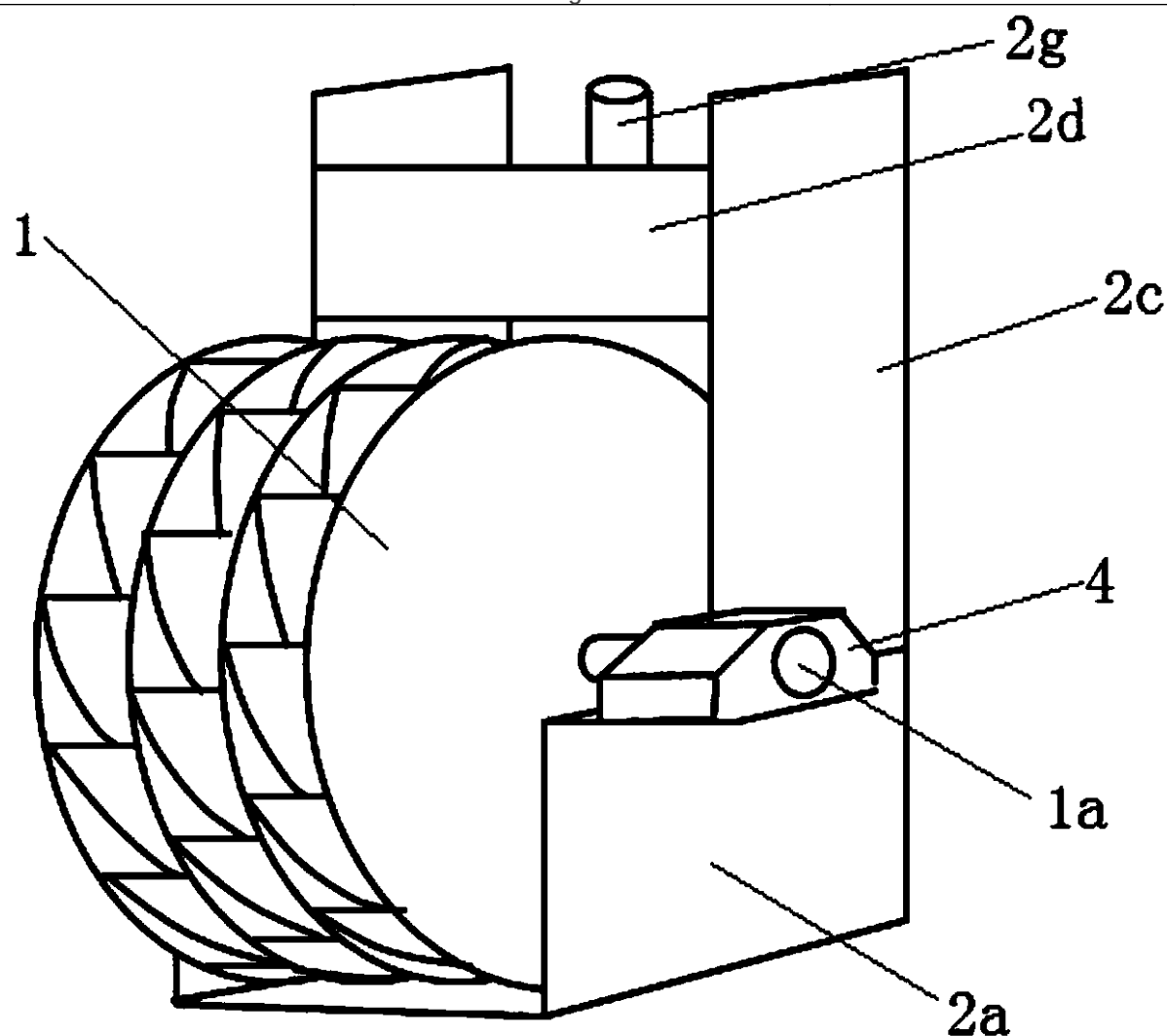
Family 183/200 - FAMPAT - ©Questel

Title

(CN105386922)

Upper rear drainage-type waterwheel of waterwheel type hydraulic generator

Images

**Publication data including kind & date**

CN105386922

A 2016-03-09

CN105386922

**Abstract**

(CN105386922)

Disclosed is an upper rear drainage-type waterwheel of a waterwheel type hydraulic generator. The upper rear drainage-type waterwheel of the waterwheel type hydraulic generator comprises a waterwheel body (1) and a water diversion and flow guiding body. The water diversion and flow guiding body comprises a water diversion and flow guiding trench and an upper water diversion and flow guiding box. The water diversion and flow guiding trench comprises two trench body side baffles (2a), a bottom plate (2b) and an arc flow guiding baffle (2f) which guides water flow to a water bucket of the lower part of the water inlet side of the waterwheel body. The water diversion and flow guiding box comprises two upper side baffles (2c) and a flow baffle (2d) which is connected between the front ends of both the upper side baffles. An L-shaped anti-back-pressure water diversion and flow guiding plate (2e) of which the inner angle faces the waterwheel body is disposed in the water diversion and flow guiding box. The lower half part of the water inlet side of the waterwheel body is disposed in the water diversion and flow guiding trench and the upper half part of the water inlet side of the waterwheel body is disposed in the water diversion and flow guiding box. The water flow enters water buckets of both the upper part and lower part of the water inlet side of the waterwheel body respectively along a transverse plate of the anti-back-pressure water diversion and flow guiding plate and the arc flow guiding baffle of the back of the water diversion and flow guiding trench, and the waterwheel is driven to rotate through joint forces. According to the upper rear drainage-type waterwheel of the waterwheel type hydraulic generator, hydraulic energy can be efficiently utilized, and the power generation capacity of the waterwheel type hydraulic generator is substantially improved.

Inventors

LUO FUQIANG

Latest standardized assignees - inventors removed

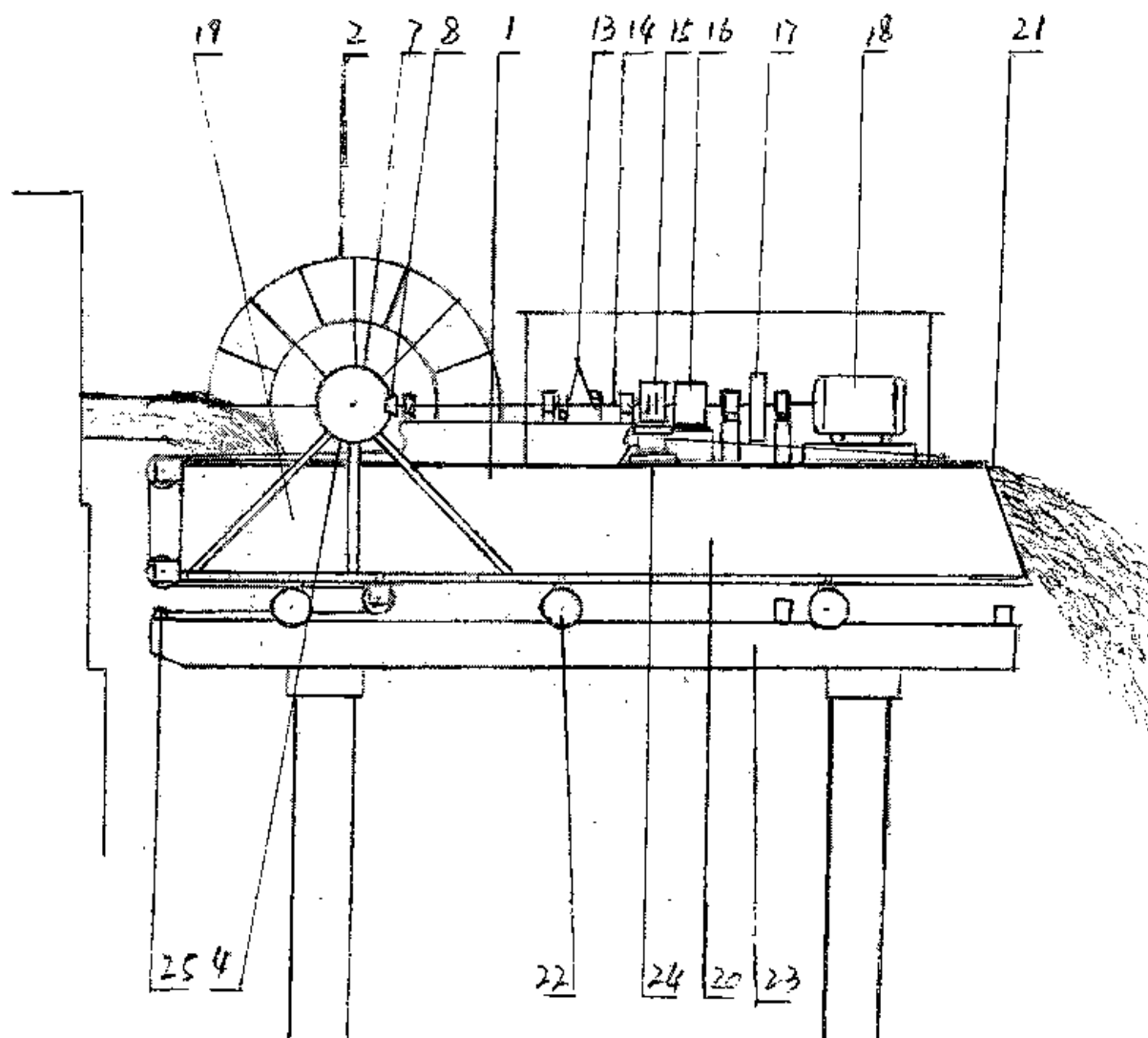
LUO FUQIANG

Family 184/200 - FAMPAT - ©Questel

Title

(CN204226089U)

Electricity-generating device for trolley with water wheel and water tank

Images**Publication data including kind & date**

CN204226089

U

2015-03-25

CN204226089U

**Abstract**

(CN204226089U)

The utility model relates to an electricity-generating device for a trolley with a water wheel and a water tank by using untapped water flow discharged by a hydroelectric power plant as a power source to generate electricity. The device comprises a trolley with the water wheel and the water tank, the water wheel with two ends used for outputting power, bevel gear discs, bevel gears, transmission shafts, a transverse transmission shaft, ratchet gears for unidirectional transmission of power, a central main power transmission shaft, bidirectional winches, a clutch, a step-up gear box, an inertial flywheel and an electric generator. The transmission shafts are arranged at left and right sides in the same direction. By utilizing the trolley with the water wheel and the water tank to enter and retreat from a working area, an optimal acting point of the water wheel is adjusted, power is transmitted and the electric generator is dragged for generating electricity. Due to the fact that water flow power for long-term discharge is utilized, energy-saving, clean, eco-friendly and pollution-free electric energy with emission reduction and stable electric energy can be provided for a long period of time to benefit grid connection. The method of utilizing discharged water flow to generate electricity for a long time is beneficial for ecological construction. Economic benefits are produced by long-term supply of electric energy.

Inventors

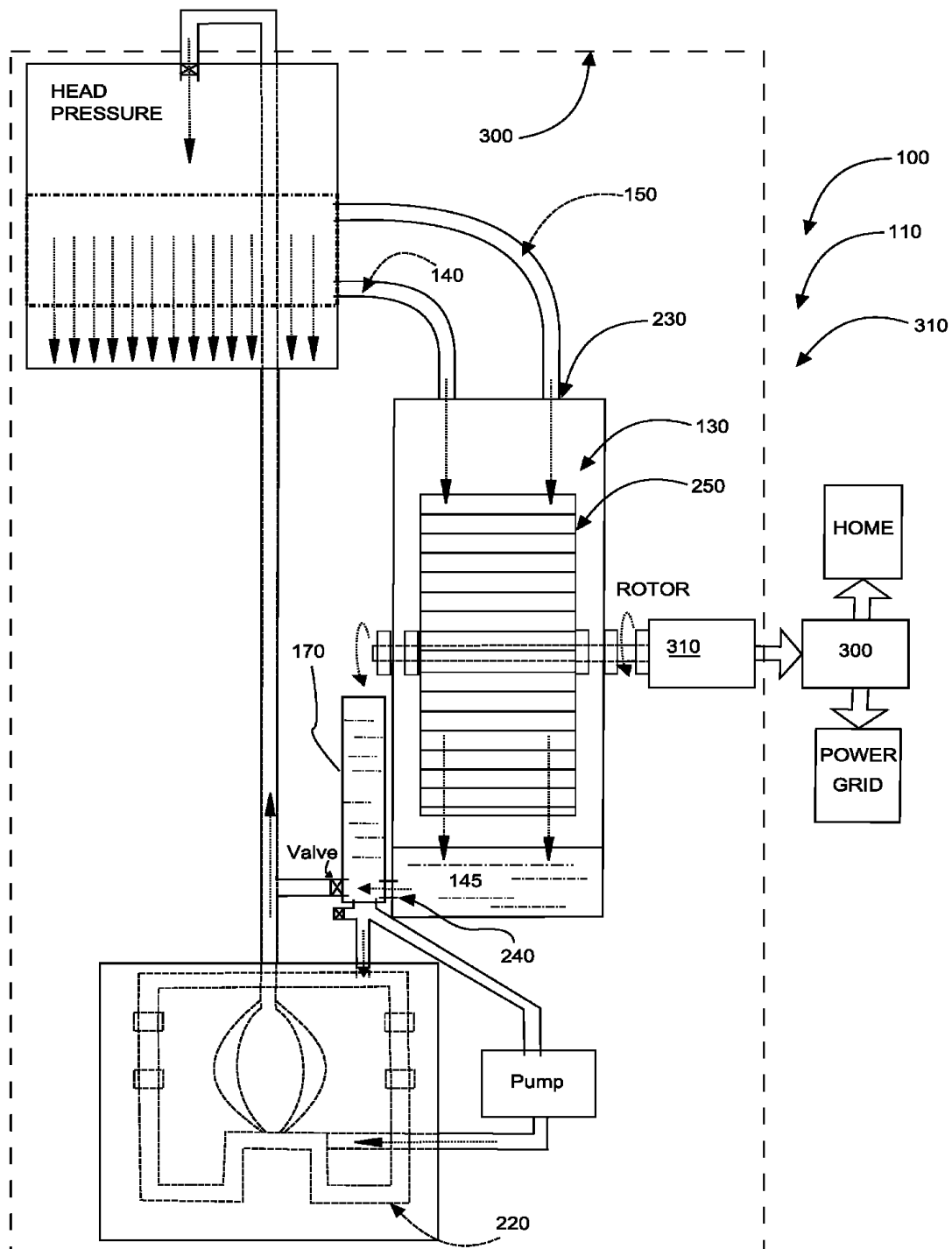
DENG XIANGHUA

Family 185/200 - FAMPAT - ©Questel

Title

(US20110266804)

Ancient hydroelectric company

Images**Publication data including kind & date**[US20110266804](#)

A1 2011-11-03

US20110266804

**Abstract**

(US20110266804)

Ancient Hydroelectric Company comprises a portable hydroelectricity producing system. Consumers are provided with a cost-effective and reliable system for providing substantially clean electricity generation without obstructing the water source or negatively affecting the environment. The high efficiency portable hydro-electric producing system is for use with a moving water source. The system uses antifreeze with water to provide a more thermally efficient working fluid as used to improve the system's pressure and volume capacity in use.

Inventors

DOLCIMASCOLO JOSEPH

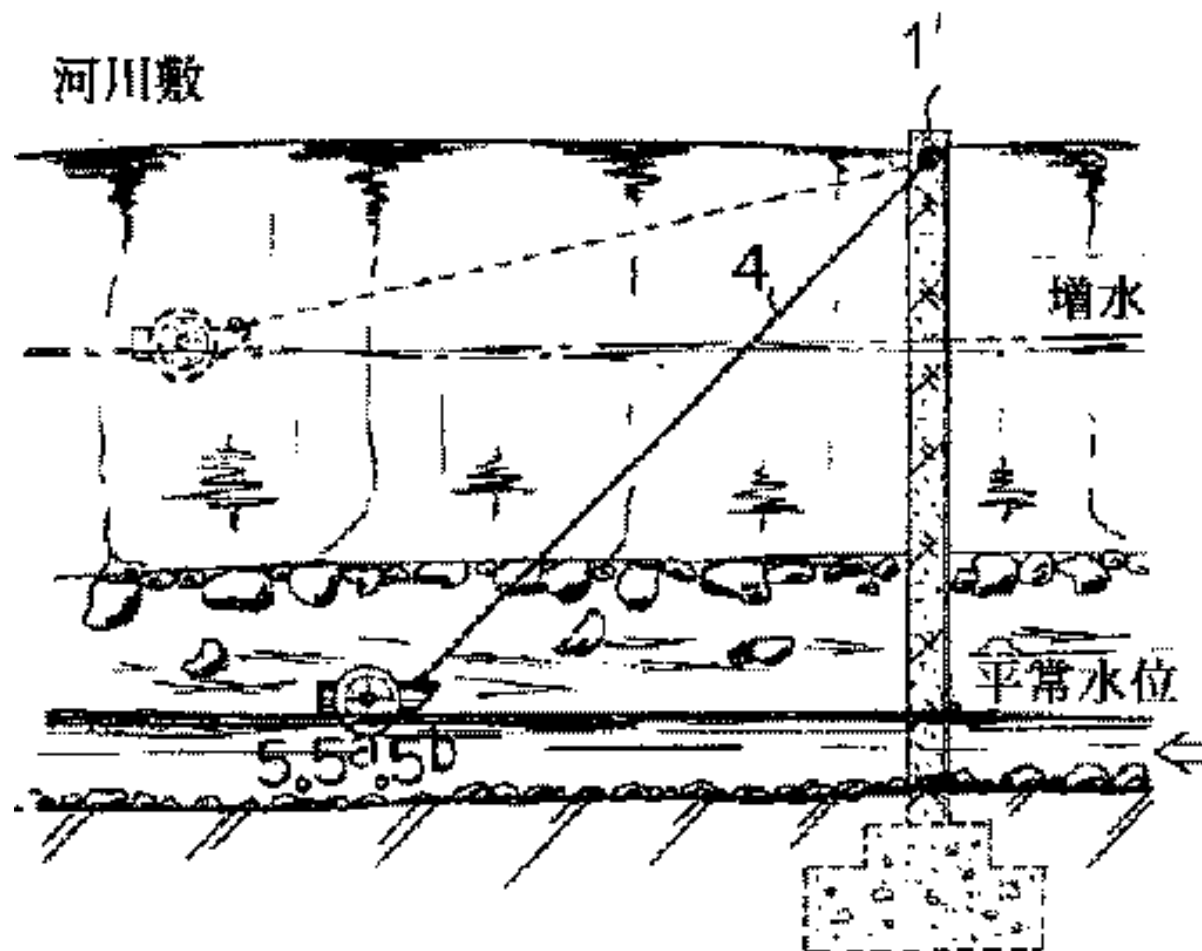
Family 186/200 - FAMPAT - ©Questel

Title

(JP2003172242)

Hydraulic turbine

Images



Publication data including kind & date

[JP2003172242](#)

A 2003-06-20 JP2003172242



Abstract

(JP2003172242)

PROBLEM TO BE SOLVED: To mass-produce hydrogen by producing clean energy symbiotic with nature by developing large hydraulic turbines 2, 2^a and 2^b used in the main stream of a river and using the output of the hydraulic turbines 2, 2^a and 2^b with small environmental loads for the electrolysis, and to reduce emission of carbon dioxide by supplying the produced hydrogen as the fuel of a fuel cell or a hydrogen internal combustion engine.

SOLUTION: A float body 5 or a ship body 5^a and a catamaran ship body 5^b are moored to an

upstream anchorage or foundation 1, etc., against the stream of a river, and floated in the stationary state according to the surface of the river with increased/decreased water. Hydraulic turbine shafts 12 and 12^a are pivotally supported as orthogonally crossing the stream, and the hydraulic turbines 2 and 2^a are attached to the center or left and right ends of the hydraulic turbine shafts 12 and 12^a to rotate the float body 5 or the ship body 5^a. The float body 5 or the ship body 5^a and the hydraulic turbine shaft 12^b in series with the stream are sunk underwater below the catamaran ship body 5^b, so that the float body 5 or the ship body 5^a and the catamaran ship body 5^b, receiving the stream in the helical hydraulic turbine or axial-flow hydraulic turbine 2^b, are rotated to obtain the output.

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Inventors

FUJISAKI MASANORI

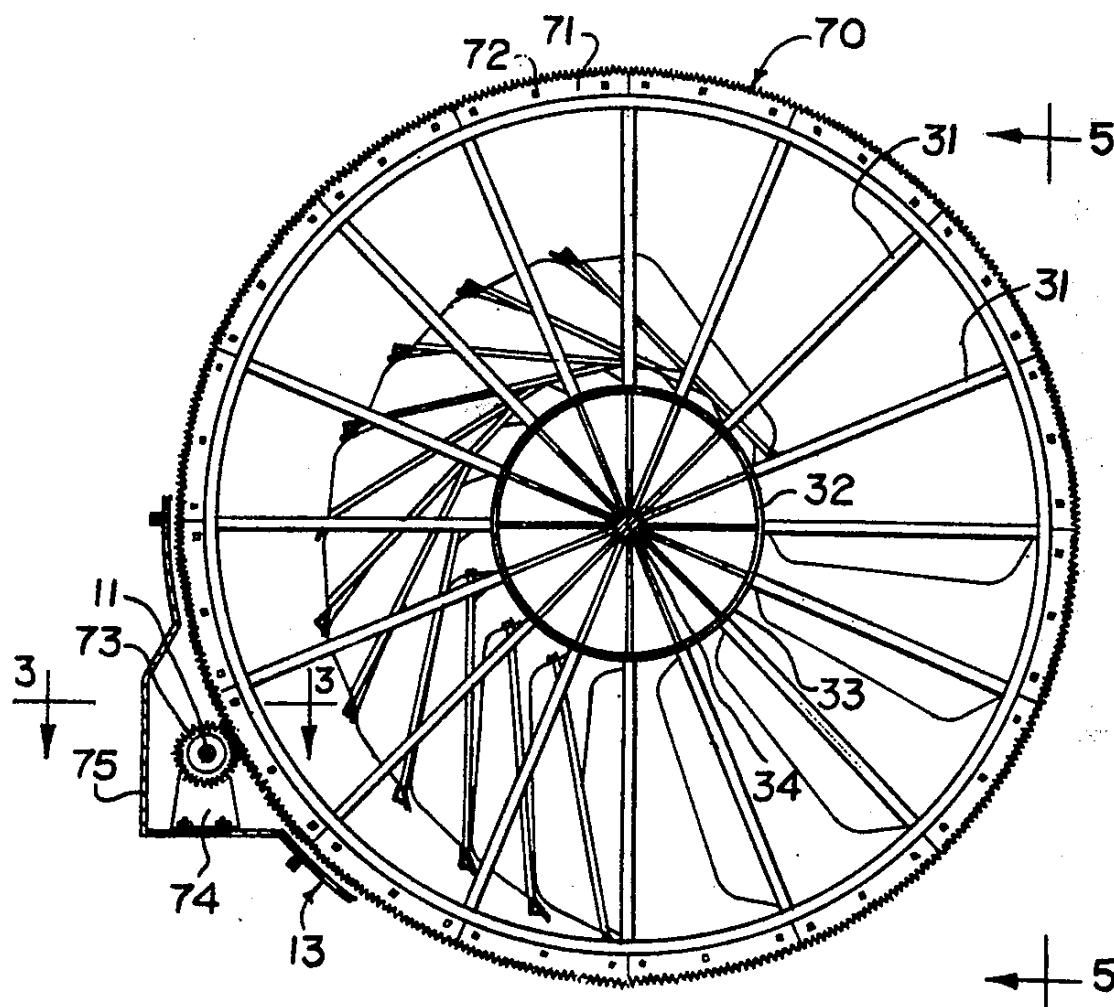
Family 187/200 - FAMPAT - ©Questel

Title

(US3984698)

Waterwheel driven electrical generator

Images



Publication data including kind & date

[US3984698](#)

A 1976-10-05 US3984698



Abstract

(US3984698)

An electrical generator system including a waterwheel apparatus as a prime mover. The waterwheel apparatus as a plurality of pivoted buckets mounted in circumferentially spaced relation around a central hub and having an outer rim

provided with a ring gear driving a pinion gear on the generator shaft for obtaining a high rotational speed in a generator from a relatively slow turning waterwheel. The waterwheel buckets each fold outwardly to hold a maximum quantity of water as the bucket reaches approximately the horizontal center line of the wheel on the downwardly moving side of the wheel while each bucket empties at the vertical center line of the wheel as the bucket passes the bottom side and thereafter folds inwardly as the bucket moves upwardly and over the top of the wheel.

Inventors

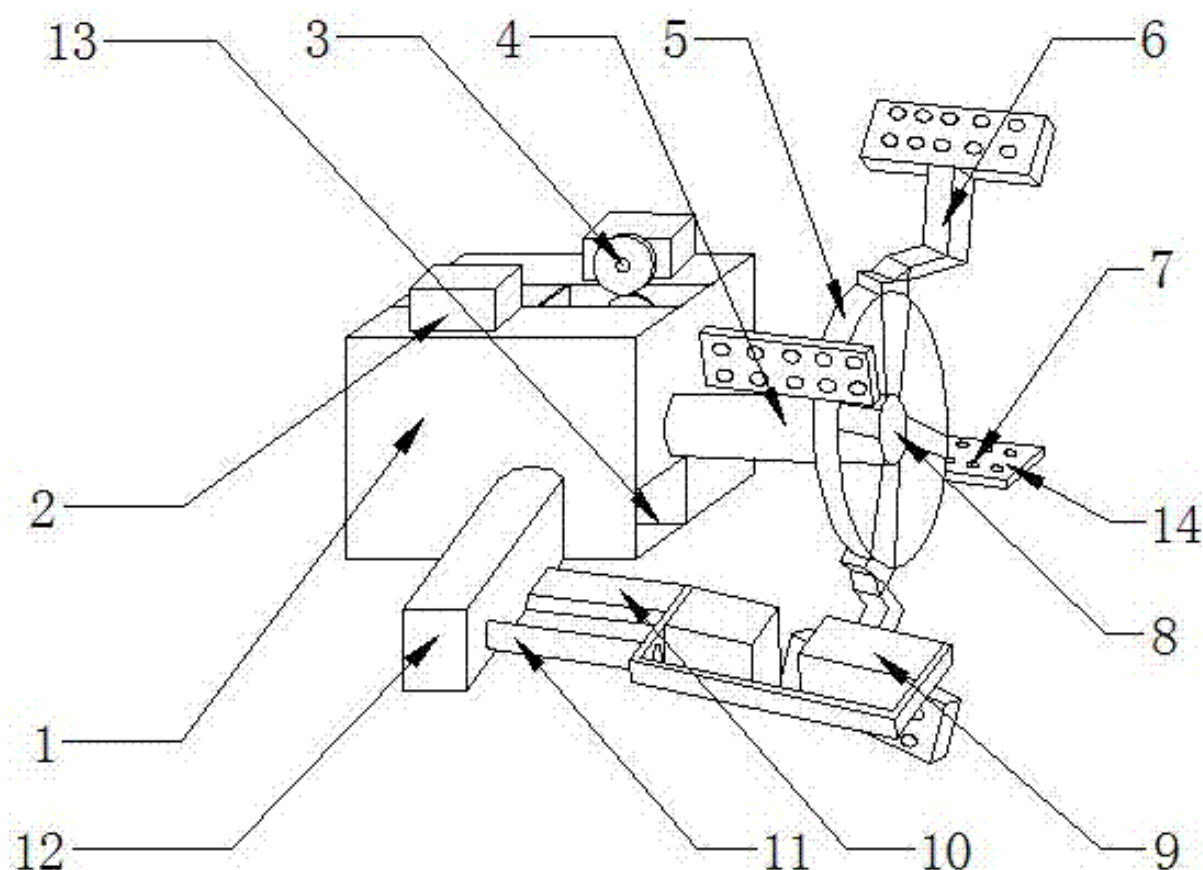
BREWER JACK J

Family 188/200 - FAMPAT - ©Questel

Title

(CN107740745)

Durable micro hydroelectric generation device

Images**Publication data including kind & date**[CN107740745](#)

A

2018-02-27

CN107740745

**Abstract**

(CN107740745)

The invention discloses a durable micro hydroelectric generation device. The durable micro hydroelectric generation device comprises a device main body and a water beating wheel, wherein a transmission gear and a linkage gear are arranged inside the device main body; one side of the transmission gear is connected with a transmission rod; one end of the transmission rod is connected with a revolving shaft; a plurality of axle support rods are fixed to an outer surface of the revolving shaft; water beating plates are arranged on the tops of the axle support rods; an outer surface of the water beating plate is provided with water outlet through holes. According to the durable micro hydroelectric generation device, a guide plate is arranged, an outer surface of the guide plate is provided with a T-shaped notch, the size of the notch is matched with that of the water beating plate, the water beating plate passes by the T-shaped notch once the water beating plate comes into contact with vertically-dropping water, water on the water beating plate is guided into a water pipe and is guided into a water collector through the water pipe, and the linkage gear is driven to rotate under the action of flowing water, so that a generator is driven to generate power, and residual hydraulic power can be utilized to generate power once

again.

Inventors

ZHANG GUANGSHAN

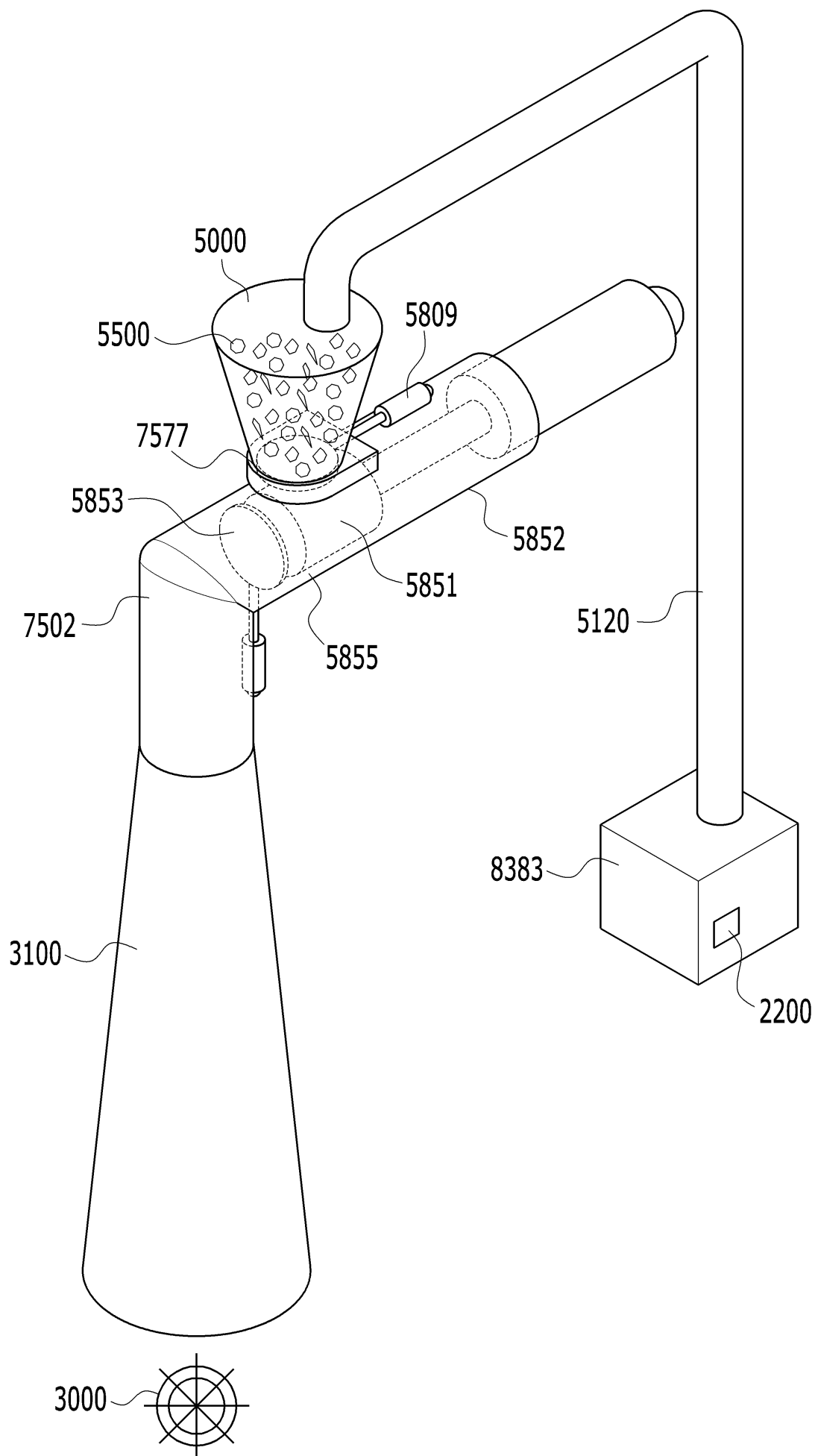
Family 189/200 - FAMPAT - ©Questel

Title

(KR20180017065)

Eco-friendly power generation method continuously generating electricity using gravity acceleration action generator combined with right angle falling power plant that increases power generation efficiency

Images



KR20180017065

A 2018-02-20 KR20180017065

Abstract

(KR20180017065)

The present invention relates to an eco-friendly power generation method continuously generating electricity by using a gravity acceleration action generator combined with a right angle falling power plant that increases power generation efficiency. The present invention implements an eco-friendly pumping-up power generation method configured such that a first water storage apparatus such as a reservoir or a dam is installed at the upstream of deep mountain valleys to store water and then a second water storage apparatus such as a reservoir or a dam is installed at the downstream of low places to store water so as to generate electricity by generating gravity action and gravity acceleration action between the first water storage and the second water storage. Therefore, high-efficiency electricity is permanently generated by the generated high water pressure, and thus, it is possible to be self-sufficient in the most of energy that is lacking.

Inventors

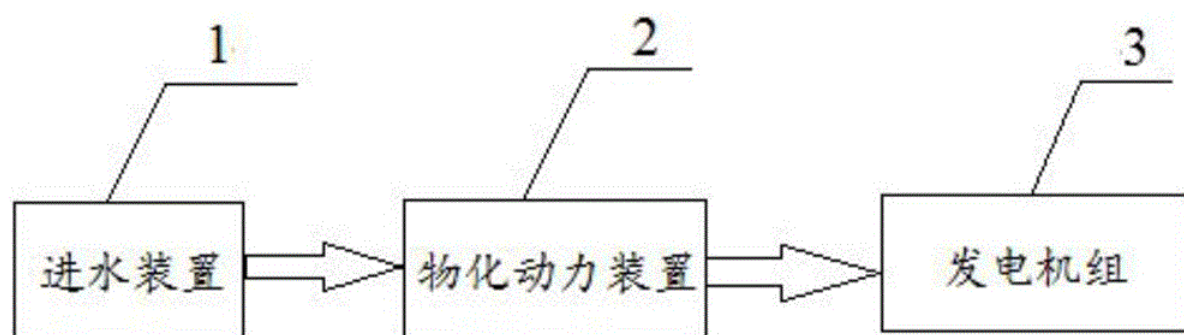
HAN, SANG-KWAN

Family 190/200 - FAMPAT - ©Questel

Title

(CN104179626)

Multi-power hydrodynamically-driven generator set device

Images**Publication data including kind & date**

CN104179626

A 2014-12-03

CN104179626

CN104179626

B 2016-09-28

CN104179626B

**Abstract**

(CN104179626B)

The invention discloses a multi-power hydrodynamically-driven generator set device. A water inflow device is arranged above a physical power device which is connected with a generator set through a bearing; the water inflow device is provided with water channels; the physical power device is a waterwheel with a plurality of groups of concentric circular rings mounted thereon; a circle of water skips are embedded into the same group of circular rings; the water skips on the sides, slightly close to the axes, of the tops of the circular rings correspond to one of the water channels; a torque force resolved from the gravity of water in the water skips pushes the waterwheel to rotate around the bearing; by virtue of the water viscosity and the rotation inertia of the waterwheel, the waterwheel is forced to continually rotate in an accelerated manner; the physical power device drives the generator set to work in a coaxial manner or through a gear so as to realize output of electric energy. According to the invention, as the water skips are mounted on the different groups of circular rings, different electric power outputs are realized, and different-power electric energy output can be achieved on the same physical power device through position change of the water skips.

Inventors

WANG SHENG

HUANG MEIYUAN

Latest standardized assignees - inventors removed

XIAMEN TIANSHENG ENERGY TECHNOLOGY

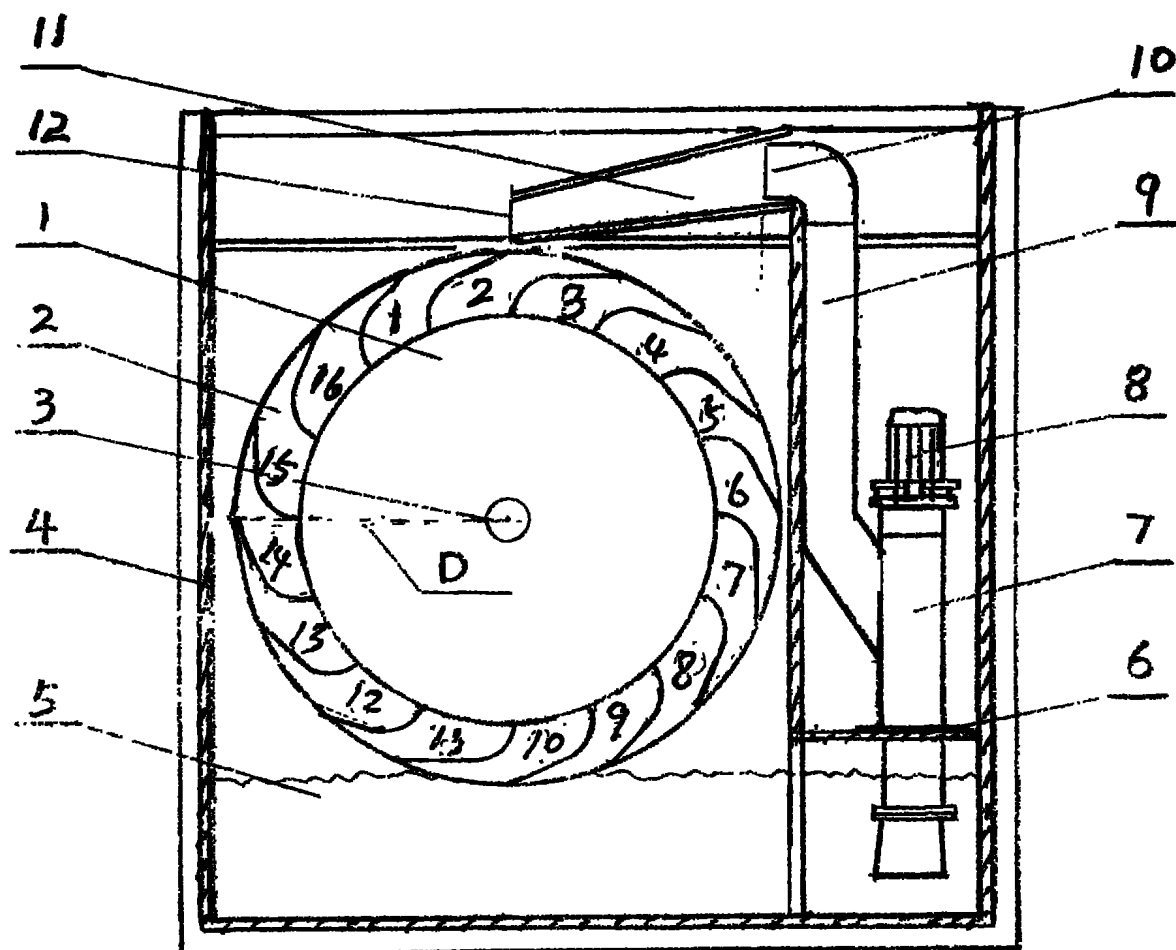
Family 191/200 - FAMPAT - ©Questel

Title

(CN101975136)

Automatic cycle hydroelectric power generating device

Images



Publication data including kind & date

CN101975136

A 2011-02-16 CN101975136



Abstract

(CN101975136)

The invention relates to an automatic cycle hydroelectric power generating device. In a tank body with over 0.6 meter of water at the bottom, the water is pumped to the top of a special arc box water wheel by using low electrical energy and is poured into the water wheel downwards to make the water generate gravity to overlap in a water tank and fall; the arc box water wheel is driven to rotate so as to drive a generator to generate electric energy; and the pumped water falls back into the water tank and is automatically recycled.

Inventors

FU DELI

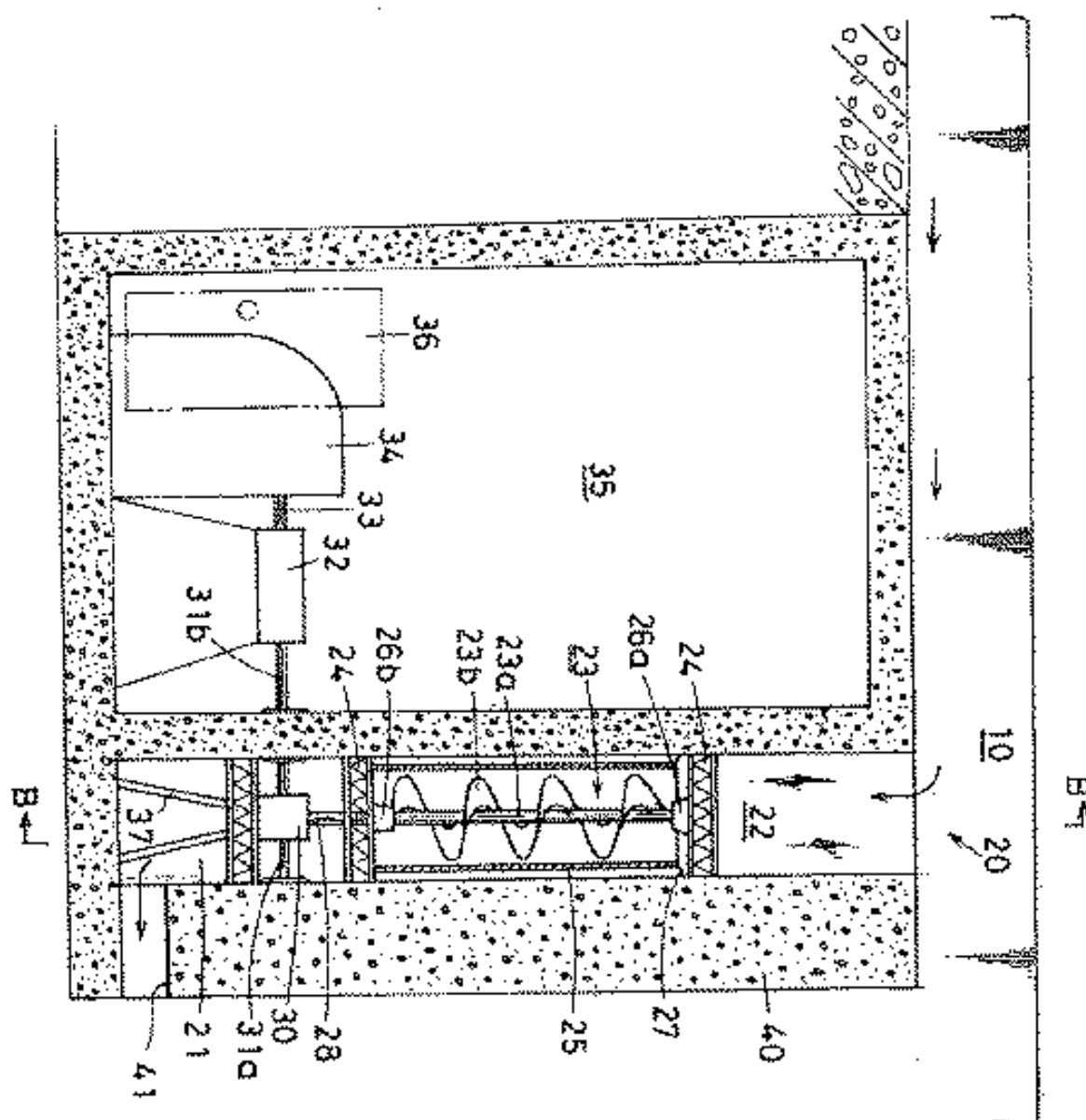
Family 192/200 - FAMPAT - ©Questel

Title

(JP2011122577)

Natural river power generation system

Images



Publication data including kind & date

JP2011122577

A 2011-06-23 JP2011122577



Abstract

(JP2011122577)

PROBLEM TO BE SOLVED: To generate electricity even when the water quantity of a natural river is small by utilizing difference in level on the riverbed of the river to use almost 100% of water flow for the power generation.

SOLUTION: A hydroelectric generation device 10 is set on the riverbed of the lower step portion of the natural river with uneven riverbed to extend over both river sides fixed by concrete of the river, the device 10 having a ceiling section substantially flushed with the upper step portion of the river. The device includes a water falling section 20 having a water falling channel 21 formed at the center of the bottom and a V-shaped water falling slope 22 toward the water falling channel; a spiral waterwheel 23 which is vertically rotated by receiving water fallen from the water falling slope; a rotation conversion gear section 30 which is connected to a rotating shaft end of the waterwheel to convert vertical rotational motion to horizontal rotational motion; a power generation chamber 35 continued to the upstream side of the water falling section 20, in which a power generation device 34 is set to generate power by transmitting the rotational motion of the gear section 30 thereto; and a fallen water guide block wall 40 continued to the downstream side of the water falling section 20 and having a discharge channel 41 formed at a lower portion thereof to communicate with the water falling passage 21, the discharge channel 41 guiding the fallen water to the waterwheel 23 in cooperation with the outer wall of the power generation chamber 35.

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Inventors

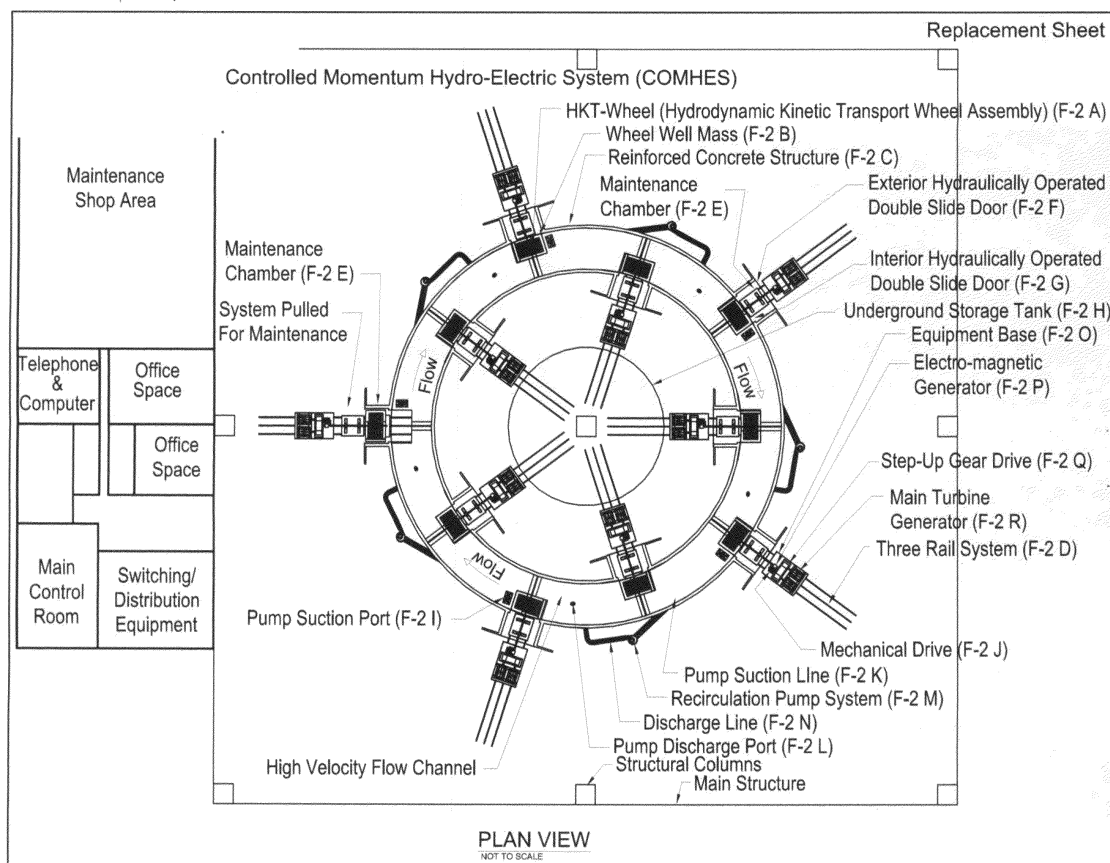
NAGAO OSAMU

Family 193/200 - FAMPAT - ©Questel

Title

(US20110080002)

Controlled momentum hydro-electric system

Images**Publication data including kind & date**

US20110080002

A1 2011-04-07

US20110080002

**Abstract**

(US20110080002)

A hydroelectric system in which by using a controlled environment within a large container filled with fluids, with means for controlling the dynamic velocity of the complete volume of fluids within the container. This is accomplished by moving the stagnant fluid from a plurality of regions through a plurality of thrust regions where the fluid is discharged to a plurality of regions of the dynamic surface of the same container. The dynamic surface accelerates the complete volume of fluid within the container to proximate the velocity produced by the layers of accelerated fluid from the stagnant regions through the thrust regions. A plurality of waterwheels properly distributed within the container, harvest the kinetic energy within the moving fluids, converting the energy to mechanical energy and transferring the torque created to other components that amplifies the designed revolutions per minutes (RPM) achieved within the container, to a designed RPM for the generation of green electric power. A secondary electrical generating system dependent of the velocity of the drives shafts, supply the electrical current needed for the thrust sources.

Inventors

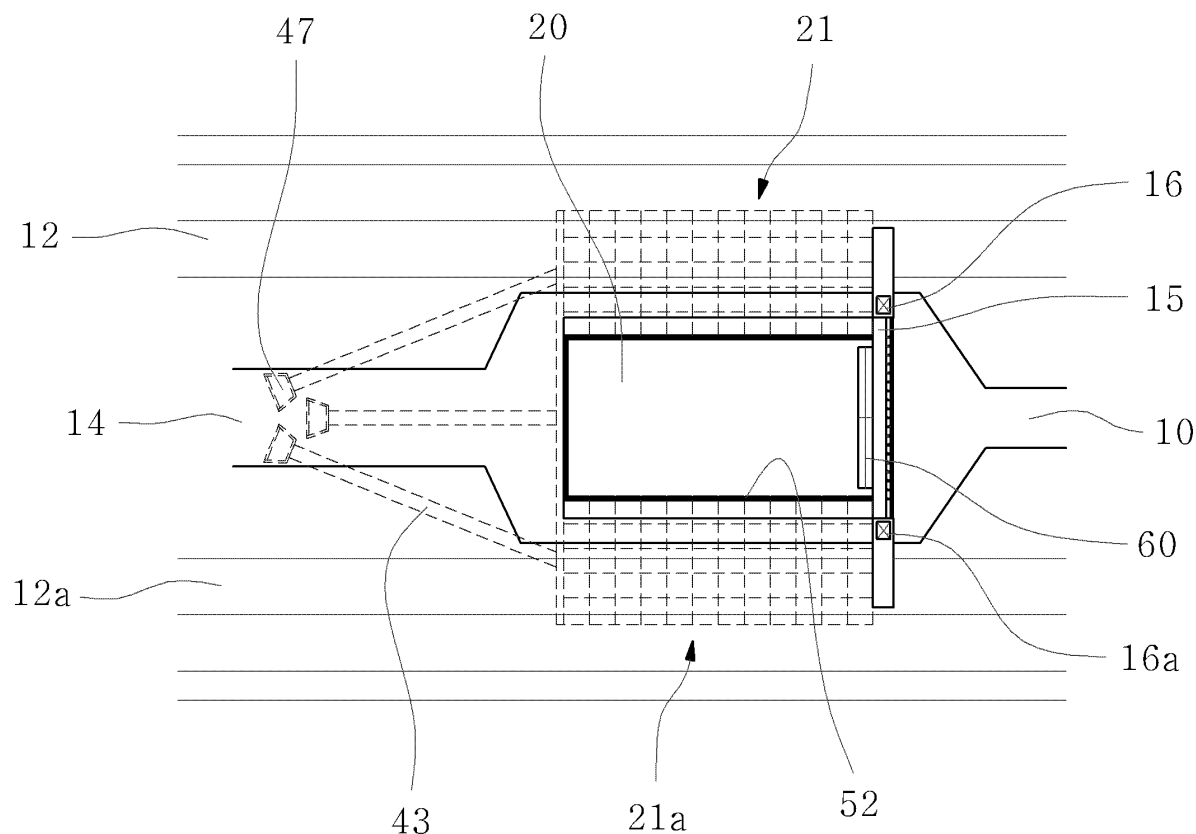
SANTANA JOSE RAMON

Family 194/200 - FAMPAT - ©Questel

Title

(KR100957070)

Underground storage for small hydropower generation controlling a water level and a flood

Images**Publication data including kind & date**[KR20090103469](#)

A

2009-10-01

KR20090103469

[KR100957070](#)

B1

2010-05-13

KR100957070

**Abstract**

(KR100957070)

PURPOSE: An underground storage for small hydropower generation controlling a water level and a flood is provided to discharge water to prevent flood by mounting a center water tank with fixed depth.

CONSTITUTION: An underground storage for small hydropower generation comprises a center water tank(20), underground water tanks(21,21a) and an inland waterway. The center water tank digs the river bed floor and be mounted. A dam(15) is installed in the center water tank. The underground water tank is located in both sides of the center water tank and has fixed size. The underground water tank stores the water. The inland waterway opens a water gate(16,16a) to discharge the water to both side of the dam and joins the water at a drainage(14).

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Inventors

LEE, SEUNG-YOUNG

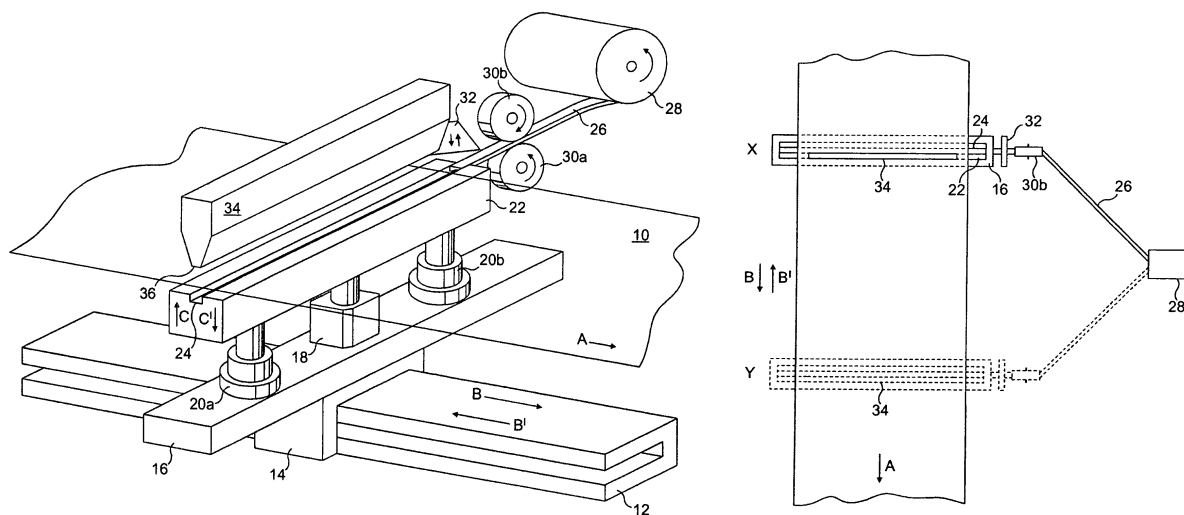
Family 195/200 - FAMPAT - ©Questel

Title

(EP1711337)

Application of zippers to a moving film material

Images



Publication data including kind & date

GB0401500	D0	2004-02-25	GB200401500
GB0415004	D0	2004-08-04	GB200415004
WO2005/070661	A1	2005-08-04	WO200570661
CA2554175	A1	2005-08-04	CA2554175
AU2005205963	A1	2005-08-04	AU2005205963
GB2415748	A	2006-01-04	GB2415748
EP1711337	A1	2006-10-18	EP1711337
IN4217/DELNP/2006	A	2007-06-22	IN2006DN04217
JP2007518606	A	2007-07-12	JP2007518606
US20070283664	A1	2007-12-13	US20070283664
US7455636	B2	2008-11-25	US7455636
AU2005205963	B2	2008-12-11	AU2005205963
CA2554175	C	2010-05-11	CA2554175
IN244482	B	2010-12-10	IN-244482
JP4763619	B2	2011-06-17	JP4763619
EP1711337	B1	2016-12-21	EP1711337



Abstract

(EP1711337)

An apparatus for application of zippers to film material (10) comprises an applicator bar (22) for presenting pre-cut lengths of zipper (25) to the film and a heated sealing bar (34) for sealing the pre-cut lengths to the film. The applicator bar, the sealing bar, feed rollers (30a, 30b) and a zipper cutter (32) are mounted for movement with the film on a linear motor (14). A pneumatic cylinder (18) raised the application bar towards the film (10). The applicator bar moves in direction C to apply the zipper to the film (10) moving in direction A, then moves with the sealing bar and the film in direction B, away from the film in direction C', back to its starting position in direction B', then towards the film again in direction C. A further length of zipper may be fed to the applicator bar at any time after the bar has moved away from the film in direction C' and therefore during an end portion of the forward stroke of the motor, or during its return stroke.

Inventors

LEIGHTON MURRAY EDWARD BRUCE

Latest standardized assignees - inventors removed

ITW - ILLINOIS TOOL WORKS

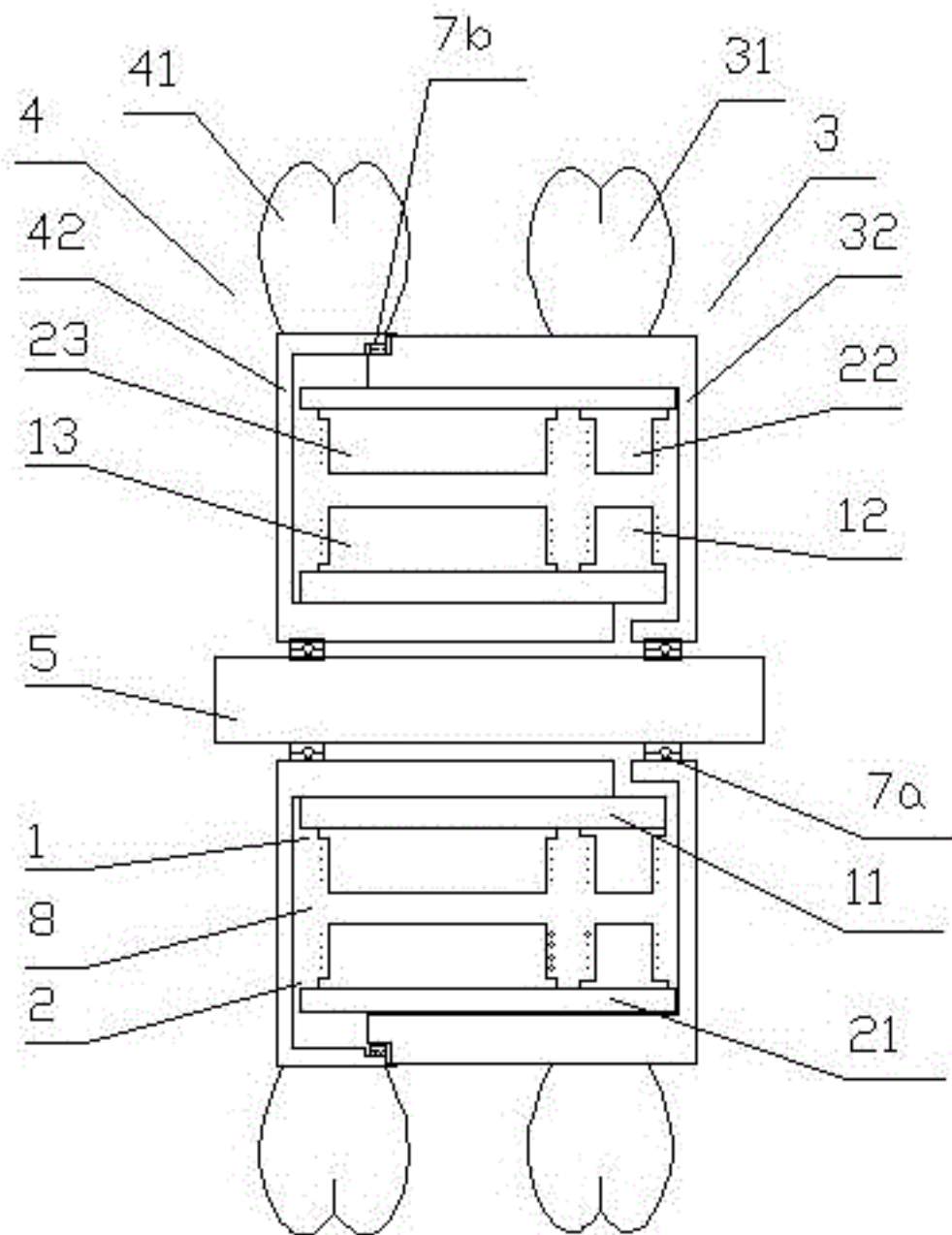
Family 196/200 - FAMPAT - ©Questel

Title

(CN106026573)

Efficiently inverted pelton-type hydrogenerator with double rotors

Images



Publication data including kind & date

CN106026573

A 2016-10-12 CN106026573



Abstract

(CN106026573)

The invention discloses an efficiently inverted pelton-type hydrogenerator with double rotors. The efficiently inverted pelton-type hydrogenerator with double rotors comprises a first rotor mechanism, a second rotor mechanism, runner mechanisms, a fixed main shaft and spray pipes, wherein each runner mechanism comprises peltons and a wheel disc; the wheel discs are hollow; the peltons are distributed on the outer circumference of each wheel disc; the outer circumference of the first rotor mechanism is fixedly arranged on the inner circumference of the corresponding wheel disc; the second rotor mechanism is internally and externally spaced from the first rotor mechanism coaxially; the center of the second rotor mechanism is fixedly arranged on the fixed main shaft; and the spray pipes are arranged on the radial outer sides of the peltons. According to the efficiently inverted pelton-type hydrogenerator with double rotors, a ventilation system or a cooling water system is not needed; the required consumed materials are few; the universality is good; the volume is small; the material requirement is low; and the service lifetime is long.

Inventors

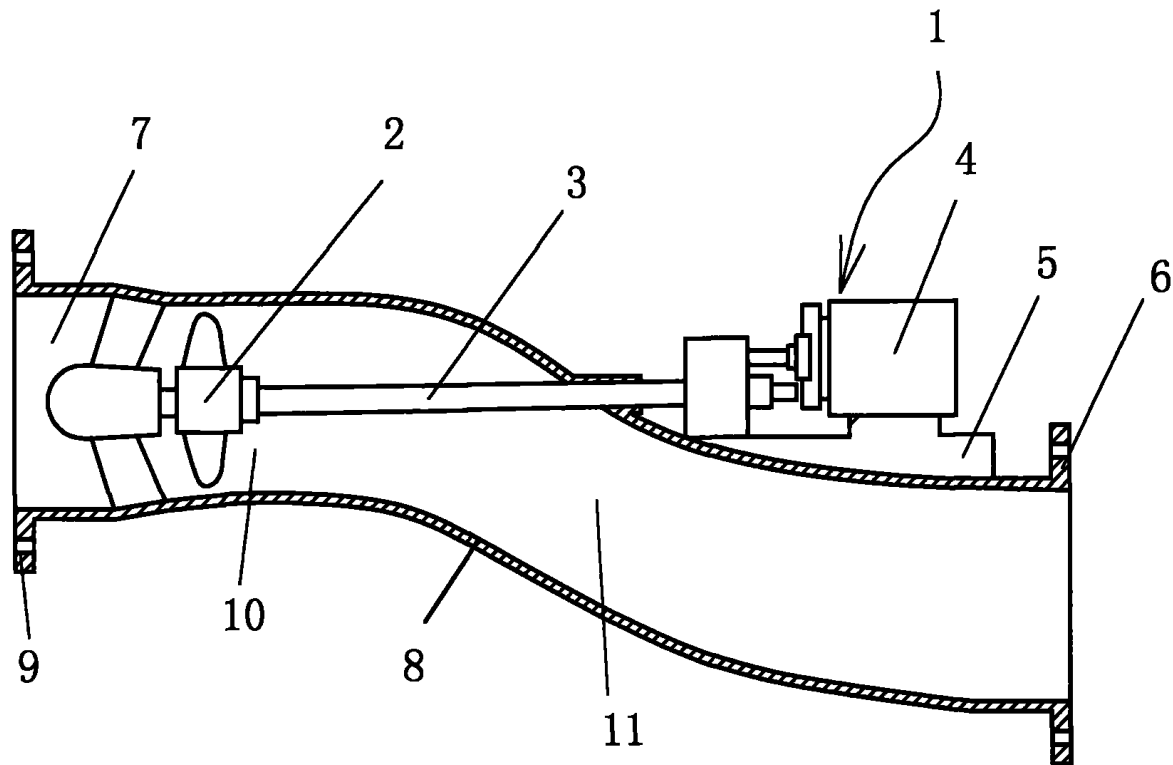
GUO YUANJUN

Family 197/200 - FAMPAT - ©Questel

Title

(CN201778944U)

Graded cascading hydro-power generating unit

Images**Publication data including kind & date**[CN201778944](#)

U

2011-03-30

CN201778944U

**Abstract**

(CN201778944U)

The utility model relates to a graded cascading hydro-power generating unit, which comprises a water turbine, a casing and a power generator. A water-through casing of the impulse water turbine of each power generating unit is a pipeline or a pipeline with a water turbine cavity inside; connecting flanges are arranged at two ends of the pipeline; the water turbine is arranged inside the pipeline or the water turbine cavity; a water outlet of the water turbine cavity is directly communicated with a water outlet pipeline or smoothly connected with the water outlet pipeline in a curved manner; and the power generating units can be mutually cascaded or independently connected with a graded power station dam of a river channel. As the water-through casing of the impulse water turbine of each power generating unit is arranged into the pipeline, the graded cascading hydro-power generating unit is more convenient in processing and installation and facilitates maintenance. As the flanges are arranged at the two ends of the pipeline, cascading or dam building connection is convenient and rapid. As the power generating units can be cascaded, potential energy of water can still function in a next step when the water passes through a previous water turbine pipeline, and the graded cascading hydro-power generating unit more sufficiently uses hydroelectric resources and has the advantages of simple structure, low cost and convenience for installation and construction.

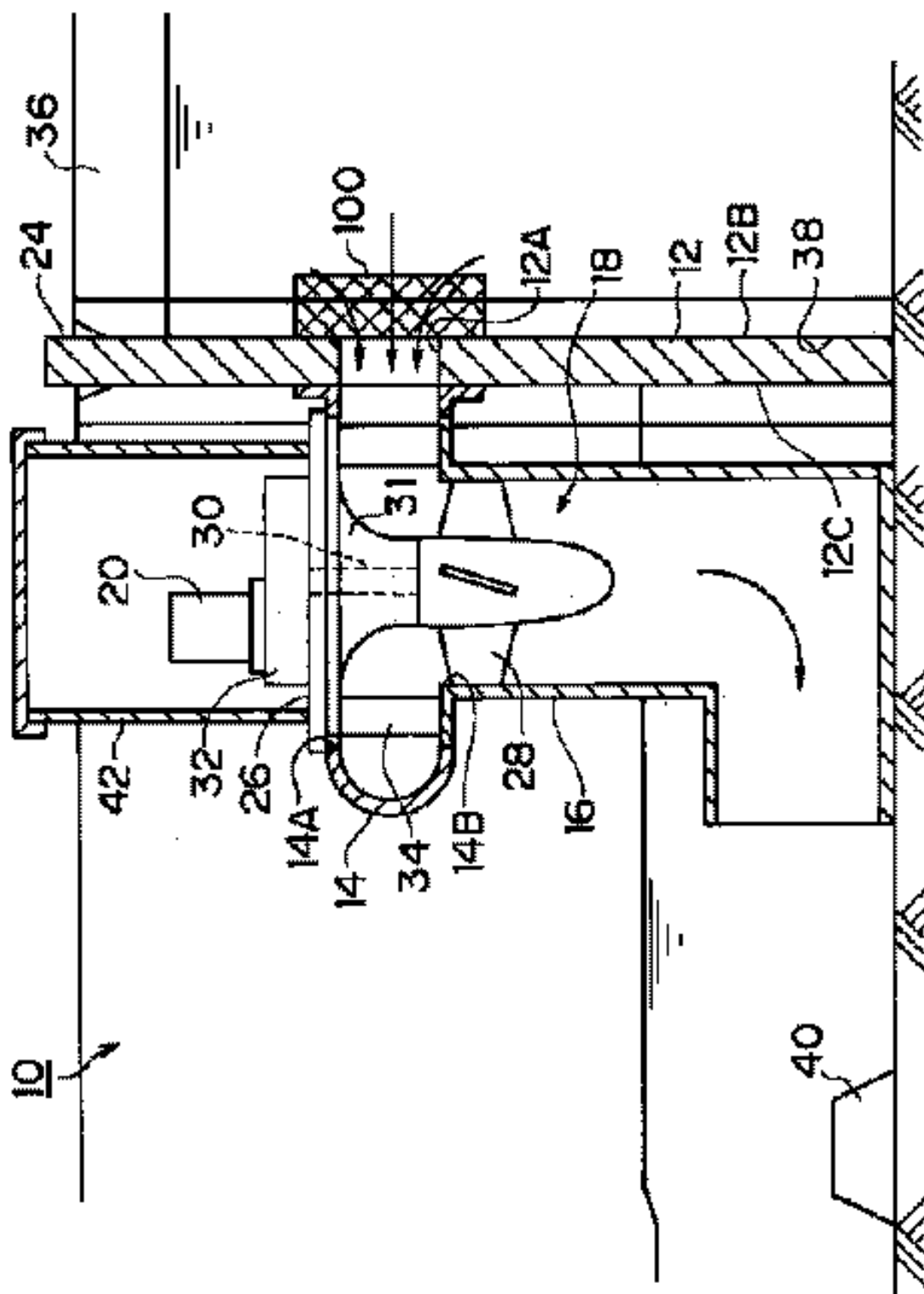
Inventors

HU LIANGXUAN

Family 198/200 - FAMPAT - ©Questel

Title

(JP2001153021)



JP2001153021

A 2001-06-05 JP2001153021



(JP2001153021)

PROBLEM TO BE SOLVED: To provide a hydraulic power generating equipment for a low head having a compact constitution, simply installed, and easily maintained. SOLUTION: A sheathing board 12 installed in a channel 36 is formed with an intake 12A, and a guide tube 16 is arranged in the downstream side of the sheathing board 12 and communicated

with the intake 12A via a easing 14. A hydraulic turbine 18 is arranged in the guide tube 16. The sheathing board 12 is installed in the channel 36 to stop the water current and generate the head so that the water flows from the intake 12A formed in the sheathing board 12 to the downstream side of the sheathing board 12 via the guide tube 16. The water flowing in the guide tube 16 rotates the hydraulic turbine 18 so as to actuate a generator 20.

Inventors

OGAWA MASAKATSU

Latest standardized assignees - inventors removed

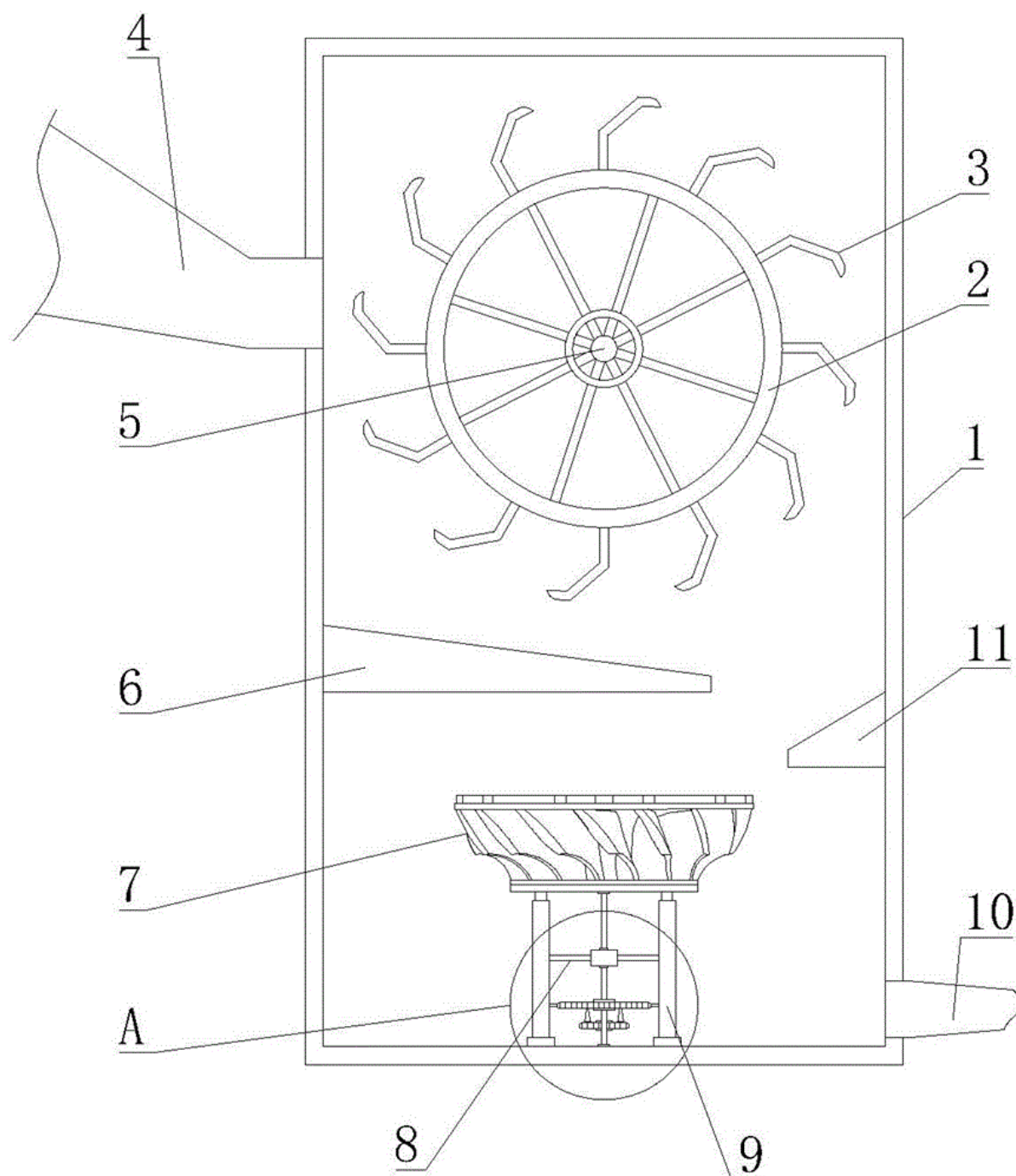
TONE

Family 199/200 - FAMPAT - ©Questel

Title

(CN109185019)

Hydroelectric generator

Images**Publication data including kind & date**

CN109185019

A

2019-01-11

CN109185019



Abstract

(CN109185019)

The invention discloses a hydroelectric generator. The hydroelectric generator comprises a shell, a power generator I and a power generator II; the power generator I and the power generator II are fixedly mounted at the top of the shell; a water wheel and an impeller seat are arranged in the shell; a water wheel rotating shaft fixedly connected with the water wheel drives a rotating shaft II through a bevel gear; the rotating shaft II is rotationally connected with a rotating column and slidingly connected with the rotating column; the rotating shaft II is fixedly connected with a supporting spring I through a sliding plate; the rotating column is fixedly connected with a rotating shaft I; the rotating shaft I is in transmission connection with the power generator I through a bevel gear, a gearbox and a shaft coupling; a rotating shaft III fixedly mounted on a rotating impeller of the impeller seat is in engaged connection with a rotating shaft V through a gear; the rotating shaft V is in transmission connection with the power generator II; the rotating shaft III is in engaged connection with a gear IV through a gear I; wheel tooth grooves are formed in the lower end surface of the gear IV to be in engaged connection with triangular wheel teeth on a gear II; and a T-shaped sliding rod, a fixing column, a supporting spring II and a shock absorbing spring are arranged on the upper side of the gear IV. According to the hydroelectric generator, the water flow utilization rate of the power generator is high, and safety fault protection can be carried out on the power generator.

Inventors

LIU CHUNYUAN

DENG YONGYE

LIU CHUNLONG

FENG FAN

CHEN SHENG

Latest standardized assignees - inventors removed

SHAOGUAN GUANGQIAN HYDROPOWER EQUIPMENT

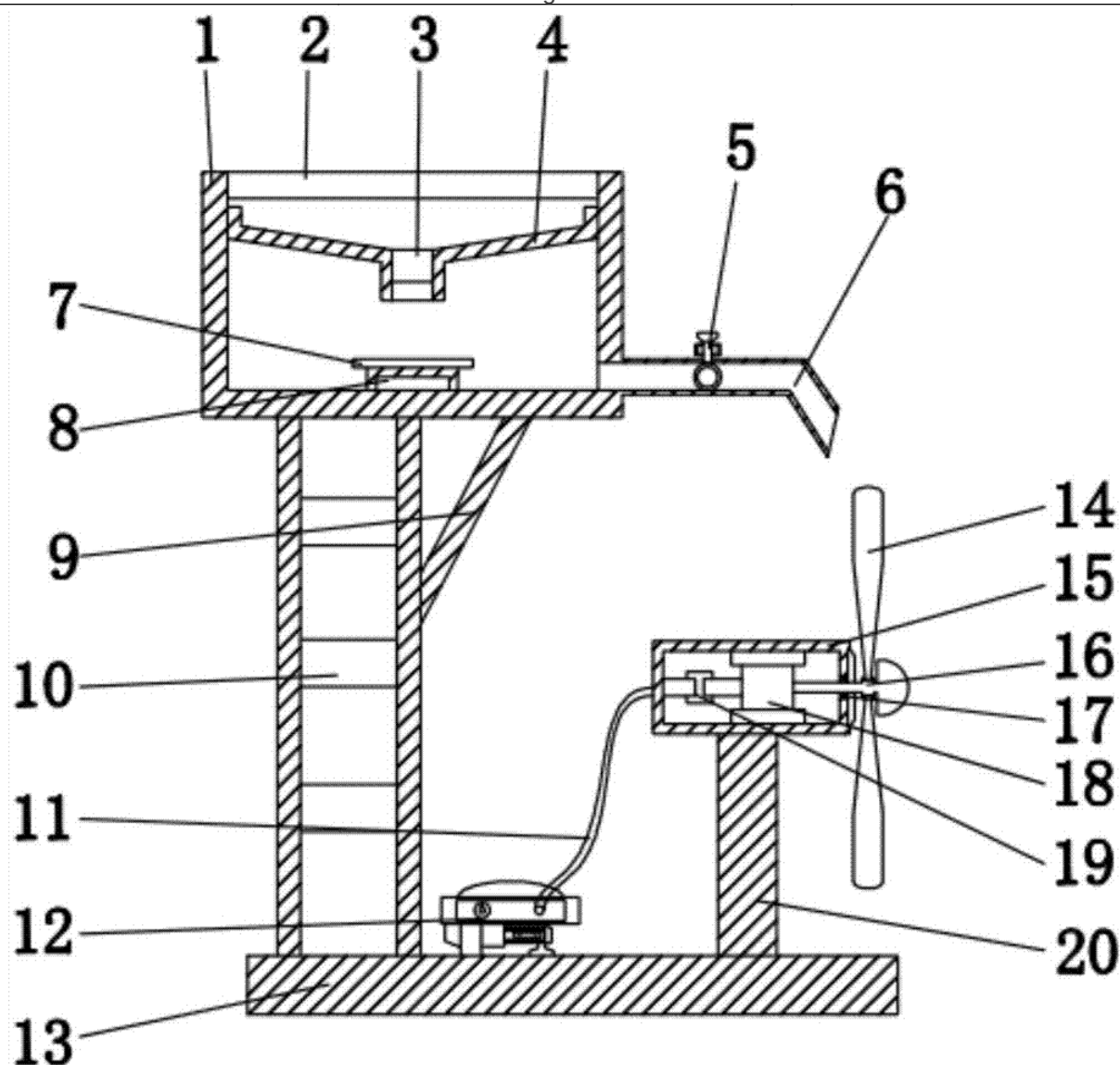
Family 200/200 - FAMPAT - ©Questel

Title

(CN106762416)

Novel energy power generation device

Images



Publication data including kind & date

CN106762416	A	2017-05-31	CN106762416
CN106762416	B	2019-01-29	CN106762416B



Abstract

(CN106762416B)

The invention discloses a novel energy power generation device which comprises a base plate, wherein a storage battery is mounted in the center of the top end of the base plate; rotating paddles are mounted on the outer side of a rotating shaft roller; a gear set is mounted on the left side of the rotating shaft roller; a power generation combined device is mounted on the left side of the gear set; a top water collection tank is mounted at the top end of a left support rack; an impacting water discharge tube is mounted on the right side of the top water collection tank. By adopting the novel energy power generation device, with the combination of the power generation combined device, the top water collection tank and the impacting water discharge tube, the rotating paddles are blown by natural wind to rotate inside an outer shell, power generated by rotation of a rotor winding and a stator winding is transferred into the storage battery through a conductive wire and is stored, and after the valve is opened, water inside flows out of the impacting water discharge tube and impacts the rotating paddles to cause the rotating paddles to rotate, then power can be also generated by using natural substances in weather without wind, the utilization effect of natural energy can be improved, and the novel energy power generation device can still work in areas with insufficient wind energy.

Inventors

GUAN WEI